# Private Life Insurance Companies A Long Way to Go... 

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#### Abstract

The Indian insurance industry was thrown open to competition from the private sector in the year 2000. The opening up of the industry has helped insurance customers in general and the private insurers in particular. The private insurers have been growing on an average of $77 \%$ since its inception. People purchased private sector's insurance products mainly because of their professional approach and better service. Yet, their customers are not ready to recommend them to others. This is because of lack of confidence and trustworthiness. So, the author is of the opinion that, private insurers have taken off but still have a long way to go...


## Introduction

The year 2000 was a defining moment in the history of Indian Insurance. For the first time the sector was opened up to private sector. Today, Insurance happens to be a mega business in India. It is a business growing at the rate of 15 to 20 percent annually, together with banking services it adds about $7 \%$ of the GDP. Yet nearly $80 \%$ of the population is without life insurance cover. Though the life insurance penetration and the density has reached to $4.10 \%$ of GDP and \$ 33.2 respectively in the year 2006-07, it is still very low when compared to international standards. Among the 87 countries studied for insurance penetration and density, India ranks $76^{\text {th }}$ The Indian contribution to the world insurance business was just $1.68 \%$ in 2006. The penetration level of life insurance in India is one of the least in the world.

## Objectives of the Study

- To study the growth of private insurers and the impact on the business due to privatization.
- To study the private life insurance policies purchased, reason for purchase, the satisfaction level, the benefits drawn, companies recommended by the policy holders of Mumbai.


## Research Methodology

Both primary and secondary data is used. Survey method is followed for the study. Primary data was collected with the help of questionnaire with open ended and close ended questions posed on insurance policyholders. For the purpose of sampling, the Mumbai city is divided into three stratums, namely, South Mumbai, Western Suburb and the Eastern Suburb. On the basis of the population of Mumbai, the sample size of 400 policyholders were randomly selected and are proportionately divided as 115 from South Mumbai, 115 from Eastern Suburb and 170 from Western Suburb.

## Review of literature

There is enough literature on liberalization and privatization of insurance in India, the role of IRDA, the Tariff Advisory Committee and the insurance penetration and density. Though, there are many published articles written by various authors and experts, there is no specific detailed study conducted in this regard. For the purpose of research, I studied the IRDA Reports 2001-02 to 200708, articles of Insurance Chronicle April 2006 and IRDA journal April 2005 and August 2006.

## Growth of Life Insurance Business after privatisaion

In 2000-01, when the industry was opened up for the private players, the life insurance premium was Rs. $34,898.48$ crore but the same has grown up to Rs. 2,01,351-41 crore in 2007-08 with a $576.96 \%$ growth. Private insurers have improved their market share from 18.10 \% in 2006-07 to 25.61 \% in 2007-08 in the total premium collected during the year. Their first year premium collection (other than single premium) has surpassed the LICs premium for the first time after privatisation (figure-1).


Figure-1 First year premium (other than single) collected by life insurance companies

But in the single premium policy sales, LIC is the undisputed leader. The number of policies issued by private insurers grown at $67.40 \%$ as against LICs $1.61 \%$ in the same year (table-1).

TABLE-1
New Policies Issued

| Insurer | $\mathbf{2 0 0 5 - 0 6}$ | $\mathbf{2 0 0 6 - 0 7}$ | $\mathbf{2 0 0 7 - 0 8}$ |
| :--- | :--- | :--- | :--- |
| Private sector | $38,71,410(73.37)$ | $79,22,274(104.64)$ | $1,32,61,558(67.40)$ |
| LIC | $3,15,90,707(31.75)$ | $3,82,29,292(21.01)$ | $3,76,12,599(-1.61)$ |
| TOTAL | $\mathbf{3 , 5 4 , 6 2 , 1 1 7}$ | $\mathbf{4 6 1 5 1 5 6 6}$ | $\mathbf{5 , 0 8 , 7 4 , 1 5 7}$ |

Note: Figure in brackets indicate growth rate (in per cent).
Source: IRDA Annual Reports 2006-07 and 2007-08
The growth in first year premium was fuelled by increase in sale of unit linked products. This trend is being observed for the last three years (table-2).

TABLE-2
Trends in life insurance business-Unit linked insurance plans Unit linked policies\% $\quad$ Non linked policies\%

|  | $2005-06$ | $2006-07$ | $2007-08$ | $2005-06$ | $2006-07$ | $2007-08$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Private | 82.30 | 88.75 | 90.33 | 17.70 | 11.25 | 9.67 |
| LIC | 29.76 | 46.31 | 62.31 | 70.24 | 53.69 | 36.69 |
| Industry | 41.77 | 56.91 | 70.30 | 58.23 | 43.09 | 29.70 |

Source: IRDA Annual Reports 2006-07 and 2007-08
The analysis of table -2 reveals that the private life insurance companies' business is mainly dependent on ULIP. This is not only a healthy trend for private companies but also for the industry.

## Analysis of data

(a) Policies purchased

The awareness level of the 400 respondents was taken into account and also their source of information. Overall, Money back policy is the well-known policy with $92.00 \%$ (368 out of 400), ULIP came second with $81.00 \%$ ( 324 out of 400). Out of the total 855 policies purchased 194 policies were Money Back Policy - the highest. Out of these 194 policies 183 policies were bought from the public sector life insurance company LIC.


Figure -2 Sector wise Purchases of Life Insurance Policies
Among the 147 ULIP policies purchased, 125 policies were from private life insurance companies. The sector wise analysis reveals that the LIC topped the list with $71.35 \%$ while private sector life insurance companies got $28.65 \%$ (figure2).

The study reveals that LIC dominates the market except in ULIP and Pension policies. It dominated especially the Money Back policy ( $94.32 \%$ ) and Endowment policy ( $91.2 \%$ ). But interestingly when it comes to ULIP private insurance companies are the market leaders with $84.83 \%$. In Pension Policies LIC has a very close edge over private life insurance companies, as pension policy from LIC contributes $51.97 \%$ whereas private insurance companies are close at $48.03 \%$. Thus it is obvious that private insurance companies are giving a tough competition to LIC.
(b) Reason for purchase

TABLE-3 Sector wise Reason for purchase of Life Insurance Policies

| Reason | Public | Private | Total |
| :--- | :--- | :--- | :--- |


|  | sectorLIC |  | sector |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | f | $\%$ | f | $\%$ | f | $\%$ |
| Tax saving | $\mathbf{2 4 3}$ | $\mathbf{3 2 . 9 7}$ | 77 | 25.08 | $\mathbf{3 2 0}$ | $\mathbf{3 0 . 6 5}$ |
| Investment | 128 | 17.37 | $\mathbf{9 4}$ | $\mathbf{3 0 . 6 2}$ | 222 | 21.26 |
| Child education | 62 | 8.41 | 13 | 4.23 | 75 | 7.18 |
| Safety \&security | 81 | 11 | 30 | 9.77 | 111 | 10.63 |
| Life cover\& tax | 16 | 22.12 | 58 | 18.89 | 221 | 21.17 |
| Retirement | 51 | 6.92 | 29 | 9.45 | 80 | 7.66 |
| Specific needs | 6 | 0.81 | 4 | 1.30 | 10 | 0.96 |
| Others | 3 | 0.41 | 2 | 0.65 | 6 | 0.48 |
| Total | $\mathbf{7 3 7}$ | $\mathbf{1 0 0}$ | $\mathbf{3 0 7}$ | $\mathbf{1 0 0}$ | $\mathbf{1 0 4 4}$ | $\mathbf{1 0 0}$ |

The analysis for the reasons for purchase of policies reveals that the tax saving ( $30.74 \%$ ) is the major reason for buying the insurance products which is closely followed by investment (21.09\%) and Life cover \& Tax saving (20.90\%). The public sector - LIC's policies are mainly purchased for tax saving (32.97\%) while life cover \& tax saving (22.12\%) rank next. But the private life insurance companies' products are purchased primarily for investment purpose ( $30.62 \%$ ).
(c) Satisfaction level

Out of the 221 respondents who responded for LIC, 86 (38.91\%) of them indicated their satisfaction level as 'very good', while 108(48.87\%) responded as 'good', $9.05 \%$ said 'average' but only $1.36 \%$ said poor. This shows that the people are happy with the services of LIC.

For private sector, $39.29 \%$ of the respondents said that the services of private insurance companies are 'very good', while $51.79 \%$ of the respondents said 'good', $7.14 \%$ respondents said 'average' and $1.79 \%$ said 'poor'. This shows that the satisfaction level of private sector insurance companies are little better than that of LIC i.e. by $3.92 \%$.


Figure -3 Satisfaction level of the Life Insurance Policy holders

## (d) Ranking of benefits

The respondents were asked to respond to the benefits provided by the private sector insurance companies. The options that the respondents responded
were - Better service, Professional approach, Timely claim settlement, Good returns, Attractive scheme, Variety of products, Less premium, Less formalities, Trustworthiness and None of them. They were also asked to rank these benefits. The following is an analysis of benefits.


Figure - 4 Ranking of benefits of LIC


Figure -5 Ranking of benefits of private life insurance companies
Majority of the respondents ranked 'Professional Approach' as first, 'Better Service' as second and 'Good Return' as third. From the above results it is clear that people purchased private sector insurance companies' products mainly because of their professional approach and better service.

## (e)Recommendation of private insurance companies by customers

The respondents were asked whether they would like to recommend a particular insurance product /company. Only 344 out of 400 respondents responded. The study revealed that $45.35 \%$ of the respondents recommend Public Sector Life Insurance Company - LIC and only $9.30 \%$ of the respondents recommend Private Sector Life Insurance Company. An analysis of the raw data reveals that for LIC, the money back policy is the most recommended policy, while for the Private it is the ULIP.
TABLE - 4 Recommendations of Life Insurance Products and Companies

| Company | Frequency | Valid Percent |
| :--- | :--- | :--- |
| Public sector | 156 | 45.35 |
| Pvt. sector | 32 | 9.30 |
| Cant.say | 48 | 13.95 |
| Pub.\&Pvt. | 93 | 27.03 |
| Pub.(or)Pvt | 15 | 4.36 |
| Total | $\mathbf{3 4 4}$ | $\mathbf{1 0 0 . 0}$ |

## Findings

It is found that money back policy is the most purchased policy (22.69\%) while ULIP is the second most (21.40\%) purchased policy.

The other objective of the study was to find out whether the growth of private insurance companies has affected the growth of public sector insurance company LIC. Among the new policies purchased by the respondents after the year 2001, LIC's share was only $39.95 \%$ while the private life insurance companies share was $60.05 \%$. This shows that the private life insurance companies could sell $50 \%$ more policies than that of the policies sold by LIC. After going through the analysis it is concluded that the growth of LIC is affected because of the growth of private sector life insurance companies. The same is confirmed by secondary data.

The next important finding is that the satisfaction level of the respondents towards private life insurance companies was $3.92 \%$ more than the LIC.

The respondents have given 'Trustworthiness'( $80 \%$ ) as the major reason for purchase of life insurance products from LIC, on the other hand the private sector respondents gave first rank for 'Professional approach'. This analysis shows that the public sector life insurance company LIC enjoys the 'Government seal', but the private insurance companies were standing on their professional approach and service.

The main problem to private sector is when it comes to recommendations of new products and companies, their customers are not ready to recommend them. This is because of lack of confidence and trustworthiness.

## Conclusion

From the study, it is understood that the majority of the policy holders are buying policies for tax saving only. Life cover becomes the third reason to buy insurance products. This trend has to change. This shows that public has not understood clearly the purpose of insurance. So, it is suggested that the life insurance companies should conduct insurance awareness campaign with the help of advertisements and social groups. The awareness on insurance has to increase at a very young age.

Since the public looks for 'trustworthiness' in a company while buying a insurance product, it is suggested that the private non life insurance companies should spend on advertisement campaigns, social spending for brand building so as to create trust in the minds of customers. Also, some motivational steps could be taken for the recommendation made by the customers.

The other major problem is that the private life insurance companies are heavily depending on market linked policy ULIP. This is not a healthy trend since the market volatility will affect the growth of business. The attractive schemes of private sector will be more attractive and effective if they could add more varieties to attract.

The private insurers have to increase efforts to design new products that are suitable for the market and make use of innovative distribution channels to reach a broader range of the population. From the analysis it is clear that private insurers have taken off but still have a long way to go...

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# Attitude of College Students towards Physical Education and Sports 

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#### Abstract

The main purpose of this study was to analyze the attitude of college students towards the physical education and sports and the secondary purpose of the study was to examine the divergences in the attitudes' from the equal probability occurrence. One hundred subjects were selected from the Lucknow Christian P.G. College, Lucknow for this study. The age of the subjects were ranging from 18 to 25 years. These subjects were administered a self developed questionnaire the entire questionnaire comprised thirty statement with a cover page, a covering letter and a personal information sheet for respondents. The attitude of respondents towards the physical education and sports were analyzed using the descriptive frequency percentage technique for each of the thirty statements of the physical education and sports on the two alternative choices i.e. Yes and No. With regard to the secondary purpose of the study, chi-square test $\left(x^{2}\right)$ was applied to determine the significance of the divergence in the attitudes of respondents from that of equal probability occurrence. Results of this endeavor reveled that both study groups possess positive attitude towards physical education and sports.


Keywords: Attitude, college students, physical education and sports. Introduction

Physical education and sports, at least in its origin, has existed since human society. However, it has been a historic category as a whole but as a matter of fact physical education and sports in India is still in the formative stage. Physical education and sports, in general, dose not has the same status as the other academic subjects in the education curriculum in our education institutions. Though it has been generally accepted as a matter of policy that physical education and sports should be in harmony with the total education pattern and should be complimentary to the ultimate aim of education.

Physical activity is essential for life. If the organism is not physically active; the functions of the body will gradually diminish from desirable levels until there is difficulty in moving even under minimal conditions. Without physical activity, their regression in bodily function will continue until death results.

Physical activity is a part of the society and an integral part group of the culture. It varies in each nation, community and group. It has been a part of life of all people from early times to the present. The influence of international sports has made physical activity a part of life in all cultures and nations.

Attitude is a feeling one has about a specific object, such as a situation, a person, an activity, and so forth. Attitudes are judgments. They develop on the ABC model (affect, behavior, and cognition). The affective response is an emotional response that expresses an individual's degree of preference for an entity. The behavioral intention is a verbal indication or typical behavioral tendency of an individual. The cognitive response is a cognitive evaluation of the entity that constitutes an individual's beliefs about the object. Most attitudes are the result of either direct experience or observational learning from the environment.

Interest in the measurement of attitudes in physical education is not surprising, since it is often assumed that a person with a positive attitude reflect a desirable behaviour. It not always true that attitude reflects behaviour. For example, when people are asked about their attitude toward physical activity in general, most will express a positive view, yet many of these people lead sedentary lifestyle. Although attitudes certainly have some bearing on behaviour, the linkage between the two is complex.

If we thoroughly observe our schools and colleges how much students have taken part in any kind of physical activity then we found very few, because in our society we follow the phrase i.e. "Padoge likhoge to banoge navab, kheloge kudoge to hoge kharab." which means if you study then you will become a king (means you have almost every thing which is essential for better living or survival) and if you play only then you will become bad person (means you don't have much things for better living in a desired manner). This phrase clearly indicates the feeling of our society about sports and physical activity. But today the concept is changed about sports and physical activity and the phrase "Padoge likhoge to banoge navab, kheloge kudoge to hoge kharab" is changed as "Padoge likhoge to banoge navab, aur kheloge kudoge to bhi banoge navab", but which extend that is the purpose of taking this study to ascertained the college students attitude towards physical education and sports. However students' attitude toward physical education has been under investigation since the 1930's. Traditionally, the purpose of such inquiry has been to identify factors that contribute to positive and negative feelings toward physical education and sports. Investigators believed that having such information would improve the quality of physical education by allowing teachers to consider student insights when making curricular or physical education programme. Subsequently, research in this area has been plentiful. The preponderance of attention, however, has focused on middle, secondary and high school students (Arabaci, 2009; Christodoulos et al., 2006; Kocak \& Hurmeric, 2006; Koca et al., 2005; Otomo, \& Ogawa, 2003; Portman, 2003), teachers (Eminovic et al., 2009) and college (Mohammad, 2009; Omar-Fauzee et al. 2009; Ng et al., 2003; Krouscas, 1999, Burling, 1970; Brumbach, 1968; Bell \& Walters, 1953).

## Methodology Subjects

One hundred students were selected from Lucknow Christian P. G.

College, Lucknow (LCC, Lucknow) to serve as the subjects for this investigation. The age of the subjects were ranging from 18 to 25 years.

## Tools

To measure the attitude towards physical education and sports (PES) of the subjects a questionnaire developed by Narwariya (2009) was used. Narwariya developed this questionnaire for the use of their M. Phil. Dissertation at LNUPE, Gwalior.

## Procedure

The questionnaire was administered during the college hours, it was distributed to all selected subjects of the LCC, Lucknow and they were instructed to fill the questionnaire within certain time limit. As the subjects are well matured they were explained orally about the method of answering questions. The investigator assured the subjects that the scores obtained in the test would be kept confidential, after acquiring their cooperation, test was administered.

## Statistical Analysis

To determine the difference in the students' attitudes of LCC, Lucknow, towards PES the acquired data were subjected to the descriptive technique in the terms of the frequency percentage for responses and to examine the divergence in the attitudes the chi-square ( $\mathrm{x}^{2}$ ) test was employed to examine the divergence of the responded from that of equal probability occurrence (null hypothesis) on each statement of the questionnaire.

## Results and Discussion

The frequency percentages and the overall findings for responses of the subjects on each of the statement of the questionnaire have been presented in the preceding tables.

Table 1
Indicating the descriptive frequency percentage of the attitudes' towards PES of the college students on physical aspect

| .No. | Statements | es | F | F | $\mathbf{x}^{\mathbf{2}}$ |
| :--- | :--- | :---: | :---: | :---: | :--- |
|  | Physical education and sports <br> do with physical development | es | 0 | 6 | 13.52 |
|  |  | 0 | 0 | 4 | 13.52 |
|  |  | otal | 00 | 00 | $27.04^{*}$ |
|  | Physical education programme contributes <br> to development of wellness | es | 0 | 3 | 36.98 |
|  |  | 0 | 0 | 7 | 36.98 |
|  |  | otal | 00 | 00 | $73.96^{*}$ |
|  | Physical education and sports is nothing to | es | 0 | 0 | 32.00 |


|  | do with education | 0 | 0 | 0 | 32.00 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | otal | 00 | 00 | 64.00* |
|  | Physical education and sports is mainly concerned with muscle building | es | 5 | 0 | 12.50 |
|  |  | 0 | 5 | 0 | 12.50 |
|  |  | otal | 00 | 00 | 25.00* |
| Organic and muscular development is <br> possible without physical education and <br> sports |  | es | 9 | 0 | 8.82 |
|  |  | 0 | 1 | 0 | 8.82 |
|  |  | otal | 00 | 00 | 17.64* |
| Neuro-muscular coordination can be <br> developed through physical education and <br> sports |  | es | 6 | 0 | 25.92 |
|  |  | 0 | 4 | 0 | 25.92 |
|  |  | otal | 00 | 00 | 51.84* |

S.No.-Statement Number, Res-Response, EF-Expected Frequency, OFObserved Frequency, $\mathrm{x}^{2}$ - Chi-Square

The finding of statistical analysis regarding physical aspect is presented in table-1. Finding pertaining to first statement indicated that out of 100 respondents $76 \%$ says "Yes" while $24 \%$ says "No", on the second statement $93 \%$ says "Yes" while $7 \%$ says "No", on the third statement $10 \%$ says "Yes" while $90 \%$ says "No", on the fourth statement $25 \%$ says "Yes" while $75 \%$ says "No", on fifth statement $29 \%$ says "Yes" while $71 \%$ says "No", on sixth statement $86 \%$ says "Yes" while $14 \%$ says "No".

The corresponding Chi-square ( $\mathrm{x}^{2}$ ) values of all six statements relating to physical aspect of attitudes towards PES indicates that significant divergence occurs among the respondents as the all obtained values are higher than the required value.

## Table 2

Indicating the descriptive frequency percentage of the attitudes' towards PES of the college students on mental aspect

| .No. | Statements | es | F | F | $\mathbf{x}^{2}$ |
| :---: | :--- | :--- | :--- | :--- | :--- |
|  | Physical education and sports <br> makes important contributions to <br> mental health | es | 8 | 0 | 46.08 |


*Significant at . 05 level
The findings of the analysis of data regarding mental aspect of the subjects presented in table 2. The result of seventh statement showed that out of 100 respondents $98 \%$ says "Yes" while 2\% says "No", on the eighth statement $21 \%$ says "Yes" while $79 \%$ says "No", on the ninth statement $96 \%$ says "Yes" while $4 \%$ says "No", on the tenth statement $95 \%$ says "Yes" while $5 \%$ says "No", on the eleventh statement $93 \%$ says "Yes" while $7 \%$ says "No", on the twelfth statement $83 \%$ says "Yes" while $17 \%$ says "No".

The corresponding Chi-square ( $\mathrm{x}^{2}$ ) values of all six statements relating to mental aspect indicates that significant divergence occurs among the respondents as the all obtained values are higher than the required value.

Table 3 Indicating the descriptive frequency percentage of the attitudes' towards PES of the college students on social aspect

aspects presented in table 3. Analysis findings of statement thirteenth showed that out of 100 respondents $92 \%$ says "Yes" while $8 \%$ says "No", on fourteenth statement $83 \%$ says "Yes" while $17 \%$ says "No", on fifteenth $87 \%$ says "Yes" while $13 \%$ says "No, on sixteenth $88 \%$ says "Yes" while $12 \%$ says "No", on seventeenth $86 \%$ says "Yes" while $14 \%$ says "No", on eighteenth $94 \%$ says "Yes" while $6 \%$ says "No".

The corresponding Chi-square ( $\mathrm{x}^{2}$ ) values of all six statements relating to social aspect indicates that significant divergence occurs among the respondents as the all obtained values are higher than the required value.

Table 4
Indicating the descriptive frequency percentage of the attitudes' towards PES of the college students on emotional aspect

| No. | Statements | es | F | F | $\mathrm{x}^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 9 | Physical education and sports helps to develop emotional stability | es | 8 | 0 | 6.48 |
|  |  | 0 | 2 | 0 | 6.48 |
|  |  | otal | 00 | 00 | 12.96* |
| 0 | Competitive sports often result in hostile outburst of motional behaviour | es | 0 | 0 | 0.00 |
|  |  | 0 | 0 | 0 | 0.00 |
|  |  | otal | 00 | 00 | 0.00 |
| 1 | Play is not a healthy medium for emotional expression | es | 8 | 0 | 0.08 |
|  |  | 0 | 2 | 0 | 0.08 |
|  |  | otal | 00 | 00 | 0.16 |
| 2 | A person would be better of emotionally if he/she does not participate in a physical education programme | es | 5 | 0 | 4.50 |
|  |  | 0 | 5 | 0 | 4.50 |
|  |  | otal | 00 | 00 | 9.00* |
| 3 | Participation in physical education programme is emotionally satisfying | es | 8 | 0 | 6.48 |
|  |  | 0 | 2 | 0 | 6.48 |
|  |  |  |  |  | 12.96* |


|  |  | otal | 00 | 00 |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 4 | Physical education and sports activities <br> provide an outlet for pent-up emotions |  |  |  | 11.52 |
|  |  | 0 | 4 | 0 |  |
|  |  | 0 | 0 | 11.52 |  |
|  |  | otal | 00 | 00 | $23.04^{*}$ |

The findings of statistical analysis of subjects score concerning emotional aspects presented in table 4. The analysis of statement nineteenth showed that out of 100 respondents $68 \%$ says "Yes" while $32 \%$ says "No", on statement twenty-second showed that $35 \%$ says "Yes" while $65 \%$ says "No", on statement twenty-third showed that $68 \%$ says "Yes" while $32 \%$ says "No", on statement twenty-fourth showed that $74 \%$ says "Yes" while $26 \%$ says "No".

The corresponding Chi-square ( $x^{2}$ ) values of statements 19, 22, 23 and 24 relating to social aspect indicates that significant divergence occurs among the respondents as the all obtained values are higher than the required value.

Whereas statement twentieth showed that out of 100 respondents $50 \%$ says "Yes" while $50 \%$ says "No", on statement twenty-first showed that $48 \%$ says "Yes" while 52\% says "No".

The corresponding Chi-Square ( $\mathrm{x}^{2}$ ) values of the statement 20 and 21 indicate that no significant divergence occurs among the respondents as the obtained values of the both statement are lower than the required value for being significant.

## Table 5

Indicating the descriptive frequency percentage of the attitudes' towards PES of the college students on general and recreational aspect

| .No. | Statements | es | F | F | $\mathrm{x}^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 5 | Modern life provides us with enough experiences of recreation. Therefore physical education is not necessary in college/ university | es | 3 | 0 | 14.58 |
|  |  | - | 7 | 0 | 14.58 |
|  |  | otal | 00 | 00 | 29.16* |
| 6 | The successes of the physical education programme depend upon the encouragement and cooperation of the head of the institution | es | 6 | 0 | 25.92 |
|  |  | 0 | 4 | 0 | 25.92 |
|  |  | otal | 00 | 00 | 51.84* |
| 7 | Subject teachers (Non-physical education teacher) are generally interested in the academic career of their students but not in | es | 4 | 0 | 3.92 3.92 |


|  | higher achievement in physical education and sports | 0 | 6 | 0 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | otal | 00 | 00 | 7.84* |
| 8 | Physical education programme develops skills, which have carry over values | es | 7 | 0 | 27.38 |
|  |  | 0 | 3 | 0 | 27.38 |
|  |  | otal | 00 | 00 | 54.76* |
| 9 | Physical education and sports is desirable as means of providing relaxation after concentrated academic load | es | 7 | 0 | 27.38 |
|  |  | 0 | 3 | 0 | 27.38 |
|  |  | otal | 00 | 00 | 54.76* |
| 0 | Physical education and sports provides good opportunities for all round development of the personality | es | 2 | 0 | 35.28 |
|  |  | 0 | 8 | 0 | 35.28 |
|  |  | otal | 00 | 00 | 70.56* |

Result of general and recreational aspect of the subjects' presented in table 5. The findings of the statement twenty-fifth showed that out of 100 respondents $23 \%$ says "Yes" while $77 \%$ says "No", on statement twenty-sixth showed that $86 \%$ says "Yes" while $14 \%$ says "No", on statement twenty-seventh showed that $64 \%$ says "Yes" while $36 \%$ says "No", on statement twenty-eighth showed that $87 \%$ says "Yes" while $13 \%$ says "No", on statement twenty-ninth showed that $87 \%$ says "Yes" while $13 \%$ says "No", on statement thirtieth showed that $92 \%$ says "Yes" while $8 \%$ says "No".

The corresponding Chi-square ( $\mathrm{x}^{2}$ ) values of all statements relating to general and recreational aspect indicates that significant divergence occurs among the respondents as the all obtained values are higher than the required value.

## Conclusion

On the basis of the findings and within the limitations of this study it may be concluded that both study groups i.e. physical education students and nonphysical education students possesses positive attitude towards physical education and sports.

Therefore, it is the prime duty of physical educational personnel to understand the correct trend and implement the physical education programmes in their respective educational institutions.

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# Performance of Co-operative Sugar factories in Maharashtra state 

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## Introduction:

Agriculture is the back bone of Indian economy. It contributes a considerable $30 \%$ share to the total national income and provides employment to $70 \%$ population of the country. The sugar industry plays a very important role in the economy of the country. Sugar industry is the biggest industry in the rural areas of India. It is mainly based on an agro -product ,which is sugar cane. Sugar industry is the second largest agrobased industry in India.

The first sugar mill in India was established in 1903 with a modest cane crushing capacity. In the year 1930, there were 29 vaccum pan factories producing about 1,20,000tonnes of sugar These mills were mostly in Utter Pradesh, Bihar and Orissa.

Farmers foundbetter financial returns in growing sugarcane in comparisons with other crops. In view of increases availability of sugarcane, it was decided to develop the sugar industry properly. In 1932 .the sugar industry ( protection) Act was passed where the sugar industry was given protection for 14 years. As a result of protection granted for sugar industry, the number of sugar mills in the country increased to 140.

In 1933-35, four co-operative sugar factories were set up. The first cooperative sugar factory to be set up was the Etikoppaka factory in 1933 in Andhra Pradesh. By 1935, three more co- operative sugar factories were established two in Andhra Pradesh and one in Uttar Pradesh. However, it is the Pravara cooperative Sugar Factory established in 1950 in Maharashtra State, Which become the proto type of co-operative sugar factory up to 2004. Out of 400 Sugar Factories in the Country, 203 were in the co-operative Sector.

## Review of Literature

a) Prof. Gohil Daxa: "A co-operative analysis of transaction cost vis-à-vis financial performance of sugar industry in India", concluded that the transaction cost influencing the financial performance at greater extent whereas transaction cost leads to increase profitability up to optimum level of production but after it negatively influence the financial performance.
b) Shivanna, Advance process technology for cost reduction in sugar industry, co-operative sugar, July 2006. Indian sugar Industry needs, capacity expansion and technological up- Gradation to reduce production cost of sugar.
c) Sugar Industry, cover story, fortune India, Feb. 28-2006 points out that Bajaj Hindustan ; Profitability of the company is bound to improve farther as it has great focus on increasing operational size and reducing cost of production.
d) Dr. G.A. Nikam in his research "Indian Sugar Industries A comparative study", Published by shree Publishers and Distributors, new Delhi, concluded the net operating profit position was quite good at western Maharashtra.

## Defining the problem

India is known as second highest in the world in sugar production. But its share in the International market is very negligible. The reasons are, the Indian sugar Industry is not cost effective as compared to leading sugar producing countries in the world. Globalization has created various challenges for higher cost of sugar products. International sugar market is available only to those whose cost of production is cost effective. Asia's share in the world production is around 29\% where as its consumption is $37 \%$. It shows that consumption exceeds production by about $8 \%$ in this continent. The Indian sugar industry has an advantage to export more sugar in the Asian market. But this is possible only when if the sugar industry is cost effective as compared to its competitors. Therefore, it is necessary to take a complete review of productivity and cost structure of the sugar factories in Maharashtra so that the cost can be minimized.
Objectives: The objectives of the study are as follows:-

1) To study the progress of sugar production in Maharashtra.
2) To study the productivity in cooperative sugar factories.
3) To assess the performance of sugar factories in Maharashtra
4) To suggest the ways and means for survival of cooperative sugar factories in global competition.

## Hypotheses:-

"There is no significant difference in region wise performance of sugar factories in Maharashtra."

## Methodology:

The study is based on secondary data. The required secondary data were collected through various, journals, books, reports, websites, etc. The data considered for analysis are related to the cooperative sugar factories for the period of 5 years form 2000-01 to 2004-05. The data were analyzed with the help of tables and other statistical methods. The conclusions were drawn on the basis of the data analysis and few suggestions are made for the improvement of performance of sugar factories in future.

## Data Analysis

The detailed analysis of data is presented as following.
i. Maharashtra's share of Sugar Production.

Table No. 1 Maharashtra's Share Of Sugar Production

| Year | Sugar <br> Production in <br> India (Lakh <br> tones) | Sugar production in <br> Maharashtra (lakh <br> tones) | Share of <br> Maharashtra in <br> $\%$ |
| :---: | :---: | :---: | :---: |
| $2000-2001$ | 185.11 | 67.05 | 36.22 |
| $2001-2002$ | 185.28 | 56.12 | 30.28 |
| $2002-2003$ | 201.45 | 62.21 | 30.88 |
| $2003-2004$ | 135.46 | 31.74 | 23.23 |


| $2004-2005$ | 126.90 | 22.33 | 17.59 |
| :---: | :---: | :---: | :---: |
|  |  | Average | $\mathbf{2 7 . 6 4}$ |

Source: Indian Sugar, June 2006
Table No. 1 Shows that the production of sugar in India has increased form 2000-2001 to 2002-2003.The similar trend has been shown in the Maharashtra states well. During the year 2003-04 and 2004-05 there is a significant reduction in cane crushing and sugar production as compared to previous year. Maharashtra's Share in Sugar Production was around $28 \%$ which has reduced from $36 \%$ to $18 \%$ during the period.

## ii. Performance of Sugar Factory in Maharashtra

Table No. 2n Performance of Sugar Factory in Maharashtra

| Year | No. of <br> factories | Production <br> lakh tones | No. of <br> days | Crushing <br> capacity <br> TCD lakh <br> Tones | Cane <br> crushed <br> lakh tones | Recovery <br> Rate \% | Capacity <br> utilized \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $2000-01$ | 143 | 67.05 | 158 | 3.56 | 576.05 | 11.63 | 88 |
| $2001-02$ | 160 | 56.13 | 135 | 3.91 | 483.86 | 11.60 | 98 |
| $2002-03$ | 178 | 62.21 | 135 | 4.31 | 534.74 | 11.63 | 86 |
| $2003-04$ | 184 | 31.71 | 90 | 4.04 | 290.04 | 10.94 | 69 |
| $2004-05$ | 185 | 22.17 | 82 | 4.46 | 194.58 | 11.49 | 63 |

Source: M.R.S.S.K.S. Ltd Mumbai
Table no-2 revealed that the production of sugar has increased from 2000-01 to 2002-03, however it has gone down in the year 2003-04 and 2004-05 ,due to draught conditions in different parts of the state. The number of sugar factories has increased from 143 to 185 dunning the period 2000-01 to 2004-05. However the sugar factories in Maharashtra have become more efficient because recovery rate is satisfactory.

Recovery Rate Table No. 3 Recovery Rates

| Year | Recovery Rates \% |
| :---: | :---: |
| $2000-2001$ | 11.63 |
| $2001-2002$ | 11.60 |
| $2002-2003$ | 11.63 |
| $2003-2004$ | 10.94 |
| $2004-2005$ | 11.49 |
| Average | 11.45 |

Source: M.R.S.S.K.S. Ltd Mumbai
Table No. 3 revealed that the recovery rate was 11.45 percent during the period. This indicates that sugar factories in Maharashtra have become more efficient during the last five years.

## iii. Region wise Recovery Rate

Table No. 4 Region wise Recovery Rates \%

| Year | South <br> Region | Central <br> Region | North East <br> Region | Avera <br> ge |
| :---: | ---: | :---: | :---: | :---: |
| $2000-01$ | 12.06 | 11.87 | 10.96 | 11.63 |
| $2001-02$ | 12.09 | 11.53 | 11.18 | 11.60 |


| $2002-03$ | 12.05 | 11.78 | 11.06 | 11.63 |
| ---: | ---: | ---: | ---: | ---: |
| $2003-04$ | 11.48 | 10.76 | 10.60 | 10.94 |
| $2004-05$ | 12.04 | 11.76 | 10.67 | 11.49 |
| Average | 11.94 | 11.54 | 10.89 | 11.46 |

Source: M.R.S.S.K.S. Ltd Mumbai
Table No. 4 Shows the region-wise recovery rates in the Maharashtra state. In North East region recovery rate was 10.89 low as compared to south and central region. This shows that recovery is greatly influenced by cultivation practices and fertile soil

Conclusions: Maharashtra has $28 \%$ share in Sugar Production in India which is considerable. The production of sugar in Maharashtra has increased from 2000-2001 to 2002-2003. During the year 2003-04 and 2004-05 there is a significant reduction in cane crushing and sugar production as compared to previous year. The State has implemented development programs viz. Varietals Planning of sugar cane consistent with the type of soil and agro climatic conditions, maturity -wise harvesting of sugar cane, seed nursery, irrigation facilities etc. have assumed considerable significance.

The average recovery rate was $11.45 \%$ during the period as compared to $10.3 \%$ of India. This indicates that sugar factories in Maharashtra have become more efficient in Sugar Production. Region-wise recovery rate are also satisfactory.

## Suggestions:-

1. The factories should go for bye-product so that financial condition of the factory will be improved.
2. The Government should promote farmers to adopt new technology like drip irrigation, chemicals and organic fertilizers in order to increase sugar cane production.
3. The surplus production of sugar should be exported and therefore the Govt. of India should follow the proper policy for export of Sugar.
4. The minimum support price should be increased by the government.

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# Effects of Asana- Pranayam and Aerobic Exercise on the Pulse Rate in the Group of University Affiliated College Students 

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#### Abstract

: In this study the effect of asan, pranayam and aerobics on the pulse rate among students was observed. In the study the students of bachelor of engineering of the age group of 18 to 22 years were selected. The total number of subjects selected for study were 90 . They were given training for eight weeks. Before and after training, both the pulse rate are measured. To measure pulse rate, the stethoscope and stopwatch was used. To check the effect of training, analysis co variance test was utilized which was found on 0.5 level $F$ cal. 0.27 and 2.99 is smaller than $F$ tab (3.10). this shows that all the trainees were of the same characteristics for pulse rate. Adjusted mean's ratio 9.56 is obtained which is bigger than F in the significant level. F cal (9.56) F tab (3.10) at 0.05 on significant level. That shows that on both kind of trainees there is a remarkable difference in the pulse rate. To know the significance, the Least Significant difference test was used. Both the tests show that through training there is a remarkable increase in the pulse rate and the heart capacity increases.

\section*{Introduction:}

Maharshi Patanjali has presented eight steps of self development in his book "Ashtaang Yog". And without studying these eight steps in a proper way, it is really difficult to reach to the stage of complete self realization. The eight steps of Ashtaang Yog are as following: 1. Yama, 2. Niyama, 3. Yogasan, 4. Pranayam, 5. Pratyahar, 6. Dharana, 7. Dhyan, 8. Samadhi.

In the modern times, Yogasana and Pranayaam are the best available tools to achieve concentration, physical tolerance and stability. All the religions of the world have accepted the Patanjali Yoga of Rishi Patanjali. Moreover, thousands of people all over the world are doing research on the Yoga of Patanjali and they are getting interesting results. ( Swami Akshayatmanad, 2001) "Asan is that posture of a body where one can sit for a longer period of time without experiencing trouble." "The meaning of prana is breathe, breathing, llife, liveliness, energy or power. The meaning of ayama is length, spread and resistance. That means the meaning of pranayam is to take a complete breathing and to control the whole process of breathing. In this process, the action of taking breathing is called Purak, the process of keeping the breath inside the body is known as Kumbhak, and the process of getting the breathing out of the body is called Rechak. Generally, a human being intakes $20 \%$ oxygen from the atmosphere, but while


performing the pranayam, one can take larger amount of oxygen. (V.K. lyengar)
Aerobics are the exercises wherein pranavayu is used a considerably longer period of time and at the same time, the enough amount of pranvayu is maintained in the body. These kind of exercises are generally associated with the activities of tolerance. In such activities, the high speed is not required. In the demonstration of aerobics, it is seen that the more these exercises are slow and firm the more fruitful result is achieved.

With the help of aerobics, the weight can be reduced and maintained to the effective level. It means that the reduction of fate is possible through aerobics. So the aerobics provide protection against the possible danger of heart attack. It also generates and provides good immunity. It reduces the emotional imbalance. (Kinithkuper: 1992). In the aerobics, the musical aerobic dance has also been included and considered where in the exercises are performed with the help of the musical aerobics. In such musical aerobics, the emphasis is put on the rhythmic synchronization of the upper and the lower part of the body. When the parts of the body are thus synchronized, the aerobics becomes more exciting and pleasure producing. Aerobics is an organized set of exercises. (Kinithkuper, 1992)

It is a common law of science that if a man is resting his heart should be beating 72 times per minute. This law applies generally to everybody. So the people imparting the training have found out that the pulse rate can not increase beyond a certain limit. That's why even a sportsman even can not do more than a limit workload. If the heart is not able to supply the needed blood asked by the body in the times of extreme work, then the fatigue is felt. The energy level has reached its extreme limit. Of course, some sports people and yogis have trained their heart to beat less per minute. Such people's heart beats only 55 to 60 times a minute in a resting state. So when the body requires extreme amount of oxygen during sports or for some special events, and when the brain is in need of extra glucose, to meet such demands the heart does not have to beat more fast. If more beats are needed to be added, then the pump like heart is able to beat for around 155 times a minute. In comparison to these extraordinary human beings, the common people's capacity to expand the heart beats come very fast. That means they can not stretch their capacities. To recharge the efficiency, the help of science and technology is taken in life. And it is normal and natural as well. The beating in the blood vessels due to the sankochan and prasaran of heart is known as Pulse rate. This process has a limit of 60 pulse per minute. Exercise, long term training, age, disease, stress, atmospherically temperature etc have effect on the pulse rate. Even then, 72 pulse rate per minute is considered to be a normal. Even less than 72 pulse rate can be acquired in untrained person. (Dr. Sandhya Tiwari: 1999)

## Materials And Methods:

## The selection of subjects:

For the purpose of this study, ten students of Bachelor of Engineering of Sankalchand College of Engineering, Visnagar, Gujarat were selected. The age of the selected subjects was between 18 to 22 . The age was verified from the
college records of the selected students for the study. For the purpose that all the subjects could regularly come in the training and practice and a full cooperation was sought from the subjects, and for that the real outline of the whole study was explained to all the participants. After that by providing one admission form, the details like names, addresses, age, and affirmation to join the training was obtained from all the subjects.

## Procedure:

The selected subjects were divided in three groups. The A group subjects were given training in Asan-Pranayam, the B group was given the training of aerobics and the third group C was kept in control. All the subjects of all the three groups were tested their blood pressure before commencing the training. After that Group A was given the training of Asan-pranayam and the group B was given the training of aerobics for eight weeks. The group C was completely kept out of the training. After completing the training after eight weeks, again the blood pressure of the subjects was recorded. Selection of Equipments and Measurement: To measure the pulse rate, stethoscope and digital/electronic clock was used. Per minute pulse rate were measured during resting state according to Auscultation method. Doctor was present during the measurement of pulse rate.

## Statical Analysis:

To know the effect of training on the blood pressure, the subjects were measured for their blood pressure before and after the training, and to know the effects of both kind of training, the Statically test of Analysis of Co-variance (ANCOVA) was applied. To prepare the graph for the ANCOVA test, Excel software was used. The level of significant was kept at the level of 0.05 .

## The Training Program:

The first group A was given training in Asan and Pranaayam. In this training of Asan and Pranayam, the training was given daily for Sixty minutes in the first four weeks. In the second four weeks the training was given for eighty minutes. In the schedule, the following Asan and Pranayam training was given:

1. Pranayam: Normal breathing, Bhastrika, Kapalbhati, Anulom-vilom and Bhramari
2. Asan: Bhujangasan, Dhanurasan, Salabhasan, Utanpadasan, Saptvajrasan, Halasan, Pavan Muktasan, Shavasan.

Moreover Omkar was performed for three minutes and a dhun was being chanted for six minutes. If needed, the rest of thirty seconds was allowed between the asans.

Group B was given the training in aerobics. In the schedule, for the first four weeks, the aerobics training was given for forty to fifty minutes daily and for the next four weeks, the training was given daily for sixty minutes. In that training program, the following aerobic training was provided:

Alternate lift, alternative biceps, mass forwards, mass back, skip, steptouch, march to front corner, X-step, Press up, Small circle, try step up back, Tap, Clap, Open and Cross, Over Head Press and Lateral deltoid raised. The break of thirty seconds was provided in between.

Group C was kept controlled.

Results and Discussion:
Table: 1 Analysis of co-variance of the means of two experimental and control group in pulse rate:

| Test | A | B | C | Sum of Square | f | Mean <br> variance | F ratio |
| :---: | :--- | :--- | :--- | :--- | :--- | :---: | :---: |
| Pre test mean | 78.06 | 76.76 | 78.30 | 7.62 A <br> 1221.53 W | 7 | 3.81 <br> 14.04 | 0.27 |
| Post test mean | 75.80 | 76.53 | 77.90 | 68.15 A <br> 990.96 W | 7 | 34.07 <br> 11.39 | 2.99 |
| Adjusted Final <br> Mean | 76.08 | 76.17 | 77.97 | 66.96 A <br> 301.02 W | 7 | 33.48 <br> 3.50 | 9.56 |

$\mathrm{A}=$ Among the group variant $\quad \mathrm{TabF}_{0.05}=3.10 \quad \mathrm{~W}=$ within group variants
As shown in Table one, according to ANCOVA (analysis of co variance) for pulse rate pre test mean and post test mean is F multiplication 0.27 and 2.99 is received, which is at 0.05 level smaller than $F$.

F cal ( 0.27 and 2.99 ) is smaller than $F$ tab ( 3.10 ) at 0.05 significant level. So it can be said that the subjects for the study were of the same characteristics. F ratio 9.56 is obtained of adjusted final mean, which at 0.05 level bigger than $F$ value. $F$ cal $(9.56)>F$ tab (3.10) is at 0.05 significant level, which shows the significant changes. That means there were a change in the pulse rate of the subjects due to given training. The given training had a fruitful and significant effect on the pulse rate of the subjects. To know the significance east Significant Difference Test was applied. The following differences were seen:

Table: $\mathbf{2}$ Critical difference and corrected difference for the pulse rate in the three groups $\mathrm{A}, \mathrm{B}$, and C :

| Group A | Group B | Group C | Mean difference | CD at 5\% level |
| :---: | :---: | :---: | :---: | :---: |
| 76.08 | 76.17 | - | 0.09 |  |
| 76.08 | - | 77.97 | 1.88 | 1.73 |
| - | 76.17 | 77.97 | 1.79 |  |

It can be seen from Table 2 that critical difference of Adjust is respectively ed mean is 1.73 . The mean difference of group $A-B$, group $A-C$, group $B-C ~ 0.08$, 1.88 and 1.79. Among them group A-C and group B-C mean difference is bigger than critical difference (1.73). That shows that asana, pranayam and aerobics have considerable effects on pulse rate. Among them, good results are visible through asan and pranayam. While there is no change in the controlled group. These results can be seen clearly through graphs:

Graph - 1 Graph showing the mean comparison of pulse rate of two experimental groups and one controlled group:


## Discussion of findings:

Heart is the most important organ of our body. In the every beating of the heart 70 ml . blood is pushed ahead. So the heart pushes more than five lakhs cubic inches of blood in our body by beating for more than one lakh time in a day. Thus oxygen mixed blood provides oxygen to all parts of body. Heart has a capacity equal to that of lifting one ton weight upto 41 feet height. So we can say that no machine works as accurately as this wonderful machine called heart. The heart only gets one fourth of the total blood supplied by it to the entire body in a day. Heart has four compartments. All these four parts contribute to the efficient working of heart and its pulse rates. Every minute, the pulse rate is generally 72 . (Harkishan Gandhi: 1990)

Through aerobics, asana and pranayam training exercises there is passive force on the muscles of the heart. Through which the blood cells are produced. Through this the muscles of the heart becomes strong. Through which the heart can circulate the blood in the body in a better way. To circulate the blood in the body, the heart requires to pump for less time. And its every beating the amounts to the increase in the blood. So the active muscles get good amount of blood very quickly. In the process, in every beating more blood rushes towards the heart. In this study, it is seen the effect of both kind of training on the pulse rate. In short it can be said that through both kinds of training, there is a remarkable corrections in the pulse rate, while there is no change seen in the controlled group. Juraka, Sarey and Jordan did undertake the study to see the effects of light exercise on the pulse rate of women. The results of that study are in line with the results of this study.

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## Asanas and Lezium Programme on Selected Physical Fitness Variables of School Boys

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#### Abstract

Lezium, as an indigenous activity, has got place in Indian school curriculum, considering it's psycho-physiological values leading to maintain better health and fitness of school students. Out of many rhythmic activities, Lezium is one of the most popular traditional activities in Maharashtra. Even till-to-day, it is generally played during social and religious festivals by the village folk in Maharashtra. On the other hand, Yoga is a significant part of worldly philosophy. It is an ancient Indian system of keeping fit mentally and physically which is increasingly being realized all over the world. It is primarily concerned with the mastery of the mind and its control, in order that it may reach an extra mental stage, variously described as the sub-conscious and/or supra-mental level by modern writers and philosophers. Now-a-days yogic practices are applied for maintaining good health and fitness of an individual. Since 'Lezium' is a type of rhythmic exercise and 'Yogasanas' are the exercises involving passive stretching, their combination may have significant effect on physical fitness variables. Therefore, the present investigation objectives of the present study was, To measure over all physical fitness level of the school boys of age 14 to 16 years. The investigator has used a parallel group method of true experimental design for the present study that consists of one control group and the other experimental group. Seventy male students ( $\mathrm{n}=70$ ) from the Secondary Section of 'Our Lady of Nazareth High School, Bhayandar, Mumbai, (India). These seventy subjects were selected from a population of five hundred students, studying in the School, by using Fishers' table random sampling. The AAHPERD Health-Related Physical Fitness test (HRPFT) was considered as dependent variable, which was developed in 1980. The subjects of the experimental group were then put under six weeks of Lezium and Yogic exercises training programme. The data collected procedures were analyzed primarily by the descriptive statistics. Further, looking towards the nature of design of the present study, a $2 \times 5$ Factorial ANOVA followed by Scheffe's Post Hoc test has been applied for data analysis. The results, have revealed that almost all the variables of health related physical fitness were improved as a result of 6 weeks intervention of combined exercises of Lezium and Yoga. Experimental group could show higher score in Cardiovascular Efficiency ability than the Control group, Experimental group could significantly reduce the body fat than the Control group, Higher performance score in Abdominal Strength and Endurance was evident in Experimental group than the Control group \& Experimental group showed higher performance score in Sit and Reach Test than the Control group. Thus, the null hypothesis i.e., "The


practice of selected Lezium and Yoga exercises for a period of six weeks would not improve all the variables of physical fitness as tested by the items of AAHPERD Fitness Test," was refuted and the hypothesis i.e., "Six weeks training of Lezium and Yoga exercises would help to improve the strength, agility, flexibility and endurance of the children of age 14 to 16 years," was sustained. Lastly This study contributed to establish the favorable impact of combined stimulus "Lezium and Asanas" for improvement of health-related fitness of school children. Key words: Indigenous activity, Yogasanas, Children's \& Fitness.

## Introduction

Physical fitness is one's richest possession. It cannot be purchased, but it has to be earned through daily routine of physical exercises. Although there are various conditioning programmes, which can be used for the development of physical fitness, they are vigorous and consisting of resistance exercise which is emphasized more on cultivation of strength and endurance. Every individual differs in his requirements of different aspects and levels of physical fitness. However, in Indian tradition, rhythmic activities like dancing, lezium etc. have the cultural significance. In fact good physique, body balance, fair sense of rhythm etc., are the outcomes of these rhythmic activities (Old Students Association, 1935). Generally people accept that Lezium has physiological, rhythmical, recreative and demonstrative values of a very high order. If properly performed, one gets a lot of exercise in a very short time. Experiencing such psychophysiological benefits of Lezium, it has been introduced in the school curriculum in India and it is gratifying to note that boys and girls have accepted it with a great zeal. The movements of Lezium exercises are not so formal and rigid as compared to other activities of physical education. During performance of Lezium exercises one can forget one-self and can avoid modern days stress, tension, anxiety, pain and worldly miseries. This is the greatest advantage of this rhythmic activity. It can also be regarded as one of the expressional activities. The above statements help to assume that as an indigenous activity in school curriculum, Lezium exercises have psycho-physiological values and may lead to maintain better health and fitness for school students. On the other hand, Yoga is a significant part of worldly philosophy. It is an ancient Indian system of keeping fit mentally and physically, which is increasingly being realised all over the world. It is primarily concerned with the mastery of the mind and its control, in order that it may reach a supra mental stage, variously described as the sub-conscious and/or supra-mental level by modern writers and philosophers. Now-a-days yogic practices are applied for maintaining good health and fitness of an individual (Bera \& Rajapurkar, 1993; Ganguly, 1989; Gharote, 1987). Although for a common man, there are different methods available for improving various factors of physical fitness, they are, however, hard and vigorous in nature and often lead to fatigue and strain. Moreover, they require facilities like playground, equipment and money. Therefore, there is a need to find some kind of alternative and easy training programmes that would assist in the development of physical fitness considering the psycho physiological homeostasis.

In this study, involvement in the activities of Lezium and yoga is simple, non-rigorous and does not require more financial requirement. Moreover, since 'Lezium' is a type of rhythmic exercise and 'Yogasanas' are the exercises involving passive stretching, their combination may have significant effect on physical fitness variables. In this investigation, an attempt has been made to see the efficacy of rhythmic and passive stretching exercise training programme for the improvement of some aspects of physical fitness.

Lezium is a type of rhythmic activity, which is a most popular traditional activity in Maharashtra. Lezium gets its place in most of the religious festivals. In this activity a lot of exercise is involved in a very short time. This was only restricted for its recreative and spectacular values. Gradually, looking towards the tremendous interest among general mass, the experts in this particular event have focused their attention on improvement of multiple executions of new skills for better spectacular view of Lezium exercises. Slowly new as well as scientific methods came into existence to perform this activity systematically. Various types of music like- Halgi, Dhol and Tasha, generally accompany the play of Lezium. As the play or activity on Lezium is rhythmic the plates produce a ringing sound with such movement which is enchanting to the spectators.

Swami Kuvalayananda made the scientific aspect of Yoga popular. Swamiji, based on scientific evidence, showed how Yoga could be useful in our day-to-day life. Physical exercise has significant relation with physical fitness. Physical fitness is impossible without exercise. Swami Kuvalayananda included a wider and more comprehensive definition of exercise as any work undertaken to improve physique either with the help of the body itself or with the help of some external appliances. Zohman et al., have given description about the exercise in three categories viz., personal appearance, health, and fitness.

- Personal Appearance: Body building, figure control, and various complexions.
- Health: Heart and circulation, joint mobility, flexibility, digestion, sleep, mental health.
- Fitness: Muscle strength, endurance, efficiency, athletic proficiency.

Earlier, physical fitness meant the capacity of an individual to perform given physical task involving muscular effort. But the above concept of physical fitness was very short and narrow. Now new concept of physical fitness is being evolved. The totally fit individual is psychologically stable, not seriously affected by worry or tension, has realistic perception of the world and is adjusted socially in society.

Traditional texts and mythological references revealed that Indian systems of Physical exercises and rhythmic activities have tremendous influence for wholesome development of human beings. However, the introduction of newly Westernized fashion as well as techno-sports in our country diverted our young generation to participate in modern sports with the result so that our Indian system of traditional exercises and rhythmic activities are neglected and mostly forgotten. Therefore, today, the people of intellect realized the importance of such Indian physical culture in developing the muscular vigour and fitness. The
investigator assumes that these aspects of Yogic activity would be advantageous in the improvement of the physical fitness level of school boys. As Yoga deals with body and mind, both with equal importance, there is a possibility of establishing a state of psycho physiological homeostasis for exhibiting optimum level of physical performance. Similarly, in-depth research is required for many rhythmic and light apparatus activities of India. Lezium, which is a physical and cultural heritage since our ancient times, can be restructured like Yoga to suit the modern need. Lezium, being a traditional Indian activity, has not so far been considered on scientific lines. Due to lack of sufficient scientific and experimental evidence less attention has been given to this activity. The people of intellect in India have realized the great value of this traditional activity- "Lezium" for health, fitness and recreation, and perhaps as a result it has been included in the Indian school curriculum. However, till-to-day we are lacking the scientific value of the same. It is, therefore, necessary to employ modern scientific methods to investigate the values of this Indian traditional activity. So far through this study, To measure over all physical fitness level of the school boys of age 14 to 15 years; To compare the scores of physical fitness between experimental and control subjects; \& To evaluate the efficacy of combined stimulus "Lezium and Yoga" on physical fitness ability as assessed by the standard physical fitness test. Method

The investigator has used a parallel group method of true experimental design for the present study that consists of one control group and the other experimental group.

## Subjects

Seventy male students ( $\mathrm{n}=70$ ) from the Secondary Section of 'Our Lady of Nazareth High School, Bhayandar, Mumbai, volunteered in the present experiment. All students were between the ages of 14 to 16 years. These seventy subjects were selected from a population of five hundred students, studying in the School, by using Fishers' table random sampling.

## Procedures

The data collected by the above procedures were analysed primarily by the descriptive statistics. Further, looking towards the nature of design of the present study, a $2 \times 5$ Factorial ANOVA followed by Scheffe's Post Hoc test has been applied for data analysis.

## Data Analysis

A set of selected Lezium exercises and Yogic exercises (asanas) formed the independent variable in the present study. The selected exercises were arranged from simple to complex as per the principles of conditioning, starting from easy movement and gradually intensifying the exercises.

In order to impart training and to make the training effective the selection of exercises was made on the basis of the following points:
i) Variety of Movement (turning, twisting and bending)
ii) Body Area Involved (movement of neck, arms and trunk)
iii) Rhythm of Exercises (applicable to Lezium)
iv) Simple to Complex (starting from easy movement and gradually intensifying the exercises)
v) Psycho physiological advantages.

The AAHPERD Health-Related Physical Fitness test (HRPFT) was considered as dependent variable, which was developed in 1980. Three areas of physiological function appeared to be related to the HRPFT criteria were: Cardiorespiratory (CR) function, body composition (leanness and fatness), and abdominal and low back hamstring musculoskeletal function.
Following variables were taken into consideration for the test:

1) Cardiorespiratory endurance was measured by 1 mile Distance Run test and the performance 1 -mile/ 1609.34 meters run is scored to the nearest second.
2) Skinfold measurement from triceps and sub scapular sites was recorded to the nearest 0.5 mm .
3) Abdominal strength and endurance was measured by using Modified Sit Ups test. The score was recorded in the number of sit ups executed correctly during 60 seconds.
4) Flexibility was assessed by employing Sit and Reach test. The score, measured to the nearest centimeter, is the most distant point reached in the three trials average.

The test items were conducted strictly following the procedures described in the AAHPERD Health - Related physical fitness test manual. Before the actual administration of the tests the subjects were given an opportunity to participate in each of the test items so that they were well acquainted with testing procedures. All the test items were conducted with the help of personnel who were fully acquainted with testing procedures.

Selected seventy subjects of experimental and control group were given pre test which comprised of AAPHERD Health Related Physical Fitness test. The subjects of the experimental group were then put under six weeks of Lezium and Yogic exercises training programme along with their daily routine programme in school; control group was not given the said training. The training considers both Lezium and Yogic exercises daily 75 mins (Lezium: 30 mins ., Rest: 10-15 mins, and Yoga: 30 mins.) except Sundays and holidays for a total period of 6 weeks, whereas the subjects of the control group did not participate in the above programme, but they were continued their daily programme of the school.
Results
The overall significance of the data was acceptable at the 0.01 level of confidence ( $\mathrm{F}=15.84, \mathrm{p}<0.01$ ). The Scheffe's Post Hoc Test further highlights the event wise difference in achievement between the Control and Experimental group
Results on Cardiovascular Efficiency (or Cardiovascular Efficiency)

- Control group could not show significant increment in Cardiovascular Efficiency as assessed by 1 mile run test ( $\mathrm{CD}=0.02, \mathrm{p}>0.05$ ).
- Experimental group could show significant increment in the ability of Cardiovascular Efficiency (CD $=0.20, \mathrm{p}<0.01$ ).
- Experimental group could show higher score in Cardiovascular Efficiency ability than the Control group ( $C D=0.18, \mathrm{p}<0.01$ ).

Thus, mean gain in Cardiovascular Efficiency (as assessed by Cardiovascular Efficiency test) was evident significantly in experimental group as compared to the controlled one. This result helps to interpret that the Lezium and Yogic exercise training is helpful to improve the strength of arm significantly.
Results on Triceps-Skinfold (Body fat)

- Although Control group showed some increment in Body fat (as assessed by Triceps-Skinfold test) it was not statistically significant ( $C D=1.22, p>0.05$ ).
- Experimental group showed significant reduction in triceps body fat at the 0.01 level ( $C D=2.61, \mathrm{p}<0.01$.
- Experimental group could show significantly higher reduction in triceps body fat than the Control group ( $C D=2.83, \mathrm{p}<0.01$ ).

The above results indicate that the treatment effect was evident significantly in the experimental group which was superior to the control group in reduction of excess triceps body fat. This in turn suggests that Lezium and Yogic exercise training had statistically significant effect to reduce the overall level of fat at triceps.

Results on Subscapular-Skinfold (Subscapular-Body fat)

- Control group did not show any significant reduction in Subscapular-Skinfold test ( $C D=0.05, \mathrm{p}>0.05$ ). This in turn indicates that the level of Subscapular-Body fat of control group remained unchanged during the experimental period.
- Experimental group showed significant reduction in Subscapular-Skinfold test (CD $=1.15, \mathrm{p}<0.05$ ). This result helps to interpret that the level of Subscapular-Body fat of the experimental group has been reduced.
- Experimental group could significantly reduce the Subscapular-Skinfold than the Control group ( $C D=1.48, \mathrm{p}<0.01$ ). This result helps to interpret that the Subscapular-Body fat of the experimental group has been reduced as compared to the controlled subjects.

These findings point out that the reduction in Subscapular-Body fat in experimental group was evident as a result of Lezium and Yogic exercise intervention.
Results on Sit Ups (Abdominal Strength and Endurance)

- Control group could not show significant increase in Abdominal Strength and Endurance (CD = 0.08, p>0.05).
- Experimental group showed significant improvement in performance time in Sit Ups ( $C D=1.39, \mathrm{p}<0.05$ ).
- Experimental group showed significantly higher performance score in Sit Ups than the Control group ( $C D=1.49, \mathrm{p}<0.01$ ).

The experimental group could record significantly higher performance score in abdominal strength and endurance as compared to the control group.
Results on Sit and Reach (Flexibility)

- Control group did not show any significant improvement in Sit and Reach test ( $C D=0.02, p>0.05$ ).
- Statistically significant improvement was evident among the subjects of the experimental group in Sit and Reach test ( $C D=1.16, p<0.05$ ).
- Experimental group could show higher performance score in Sit and Reach Test than the Control group ( $C D=1.20, \mathrm{p}<0.05$ ).

Thus, the performance in Sit and Reach test of experimental group was better than the control group. This result indicates that the intervention of the schedule of Lezium and Yogic exercises could contribute to the improvement in the ability of Flexibility.

## Discussion

To discuss, the results on physical fitness variables revealed that -

- Experimental group could show higher score in Cardiovascular Efficiency ability than the Control group ( $\mathrm{CD}=0.18, \mathrm{p}<0.01$ ).
- Experimental group could significantly reduce the body fat (Tricep-Skinfold: CD = 2.83, $p<0.01$; Subscapular-Skinfold: $C D=1.48, p<0.01$ ) than the Control group.
- Higher performance score in Abdominal Strength and Endurance was evident in Experimental group than the Control group ( $C D=1.49, \mathrm{p}<0.01$ ).
- Experimental group showed higher performance score in Sit and Reach Test than the Control group ( $C D=1.20, \mathrm{p}<0.05$ ).

The results, as summarized above, have revealed that almost all the variables of health related physical fitness were improved as a result of 6 weeks intervention of combined exercises of Lezium and Yoga. Thus, the null hypothesis i.e., "The practice of selected Lezium and Yoga exercises for a period of six weeks would not improve all the variables of physical fitness as tested by the items of AAHPERD Fitness Test," was refuted and the hypothesis i.e., "Six weeks training of Lezium and Yoga exercises would help to improve the strength, agility, flexibility and endurance of the children of age 14 to 16 years," was sustained.

However, it is recommended that greater emphasis on the practice of Lezium and Yoga exercises be given for the school boys for the improvement of their physical fitness. Lezium and Asanas are recommended to those who are concerned with training and coaching to formulate training programme in relation to aerobic training. Lezium and Asanas are recommended for improving the level of physical and physiological fitness of school children. This study recommends that the inclusion of rhythmic activities and asanas to attain the fitness objectives of physical education. Similar study may be undertaken further for different age and sex groups for improving health-related as well as performance-related fitness factors.

This study contributed to establish the favourable impact of combined stimulus "Lezium and Asanas" for improvement of health-related fitness of school children. In fact, Lezium and Asanas are the neglected events by Indian masses. However, the result of this investigation is encouraging and application of both these activities in combination without doubt can improve health-related physical fitness. Since the evolved method requires less or no financial involvement, the common mass must be benefited.

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# Commerce Education and its Impact of Interdisciplinary Sectors 

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#### Abstract

After considering all elements, regarding the impact of commerce education on interdisciplinary sector, the findings are as for the quality education quality improvement is essential. It will be resulted in the creation of more and excellent impact. After the completion of educational qualification still the commerce graduates are not so confident. In the recent scenario, the situation of commerce graduates is as like expert in all but master in none. Impact of commerce education on interdisciplinary sector in urban areas is quite satisfactory comparatively in rural areas, it well take a sufficient time.

\section*{Introduction}

Today, higher educational institutions of India, which have century-old history, strong traditions, high worked prestige and a big intellectual potential, unite approximately 15 million teachers, researches, and students. They include over 10,000 Universities, colleges, institutes, and other educational institutions. The system of higher education also comprises many research establishments, experimental design offices, and experimental manufacturing enterprises. Due to their highly developed educational research and manufacturing infrastructure, Indian institutions of higher education are ready to offer students a wide variety of academic and vocational programmes, qualification improvement and refresher courses, as well as provide opportunities for participating in diverse fundamental and applied research programmes.


## Scope of the Study

In this new Era commerce students are having very bright career opportunities specially the software, Information Technology - Industries are interested to recruit commerce as well as management fresher's -By which apart from these sectors, their will be a wider scope to these faculty trainees namely in the industrial sector, financial sector, service sector, banking and Insurance sector, health and family care sector, Hospital and medical sector, Hotel management sector etc.

## Objectives of the Study

The prime objectives of the study of commerce stream is to represent be commercial, professional, and vocational. These are the fundamental aspect of the human being in this recent global, competitive age commerce stream is the only education media, which is developing such a young knowledgeable generation for the nation, to achieve their principle objectives:

- To develop knowledge in industry and trade.
- To analysis impact of commerce education on interdisciplinary sectors.


## Higher Education in India

The Universities, colleges, academies and institutes of India give students the opportunity to get higher professional education in any field. Hence the present Catalogue along with the whole profile of the institutes, gives information about the courses offered by definite educational institutions, where the student may find all the necessary information. The student will have a chance to study the profile of the higher professional educational institutions in India, learn much about their history and development, its structure - physical, academic and intellectual, its teaching staff, fields of study, offered specializations, training courses, qualification improvement etc.

- Data on Indian Higher Education

| Universities | $\mathbf{3 5 6}$ |
| :---: | ---: |
| No. of Colleges | 17,625 |
| No. of Teachers | $4,71,931$ |
| No. of Students | $1,04,81,042$ |

- No. of Indian Students studying in foreign countries

| Sr.No. | Country | No. of Students (appr) |
| :--- | :--- | :---: |
| 01 | Australia | 21000 |
| 02 | Canada | 7500 |
| 03 | France | 1200 |
| 04 | Germany | 4200 |
| 05 | New Zealand | 3000 |
| 06 | U.K. | 16000 |
| 07 | USA | 80460 |
|  | Total | $\mathbf{1 3 3 3 6 6}$ |

## What is Commerce Education?

Study of Commerce provides an understanding of the areas of knowledge that are fundamental to the administration and management of individual business and other organizations of all kinds. Some of the subjects of study are given below: -

## Subjects of Study in Commerce:

| Sr. | Name of Subject |
| :--- | :--- |
| No. |  |


| 1. | Financial Management |
| :--- | :--- |
| 2. | Marketing Management |
| 3. | Management Account |
| 4. | Indian Economy |
| 5. | Cost Accounting |
| 6. | Financial Accounting |
| 7. | Auditing |
| 8. | Business Studies. |

1. Financial Management:

Financial Management provides an understanding of the concepts of corporate finance and develops the skills of analysis and evaluation needed to apply the concepts of corporate finance to financial management.
2. Marketing Management:

Marketing management involves the study of products, pricing, promotion, and distribution practices within the organization.
3. Management Accounting:

Management Accounting introduces the role of accounting in the planning and decision-making functions of the management process.
4. Indian Economy:

Indian economy is the study of the development of the Indian economy and the analysis of Indian economic problems.
5. Cost Accounting:

Cost accounting, a special branch of the profession, is concerned with the cost of production in industry.
6. Financial Accountancy:

Accounting involves the analysis of business transactions and their financial effects.
7. Auditing:

Auditing is the study of audit evidence, basic audit techniques, professional ethics, and audit reports.
8. Business Studies:

Business studies develop the techniques needed to plan, organize and keep institutions, businesses, and industries running. Students learn how to bring together workers and raw materials in order to produce, sell, and distribute goods and services.

1) Personnel Management is concerned with the functions like recruitment, training, placement, and promotion. It also helps to create and maintain good staff relations with the effective use of manpower.
2) Production Management deals with the direction, coordination, and control of production processes. It includes process development, production and supply of materials, standardization, testing and quality control and cost analyses and control.
3) Finance Management focuses on financial policies and execution of
financial programmes. It ensures optimum utilization of financial resources meant for its smooth running.
4) Marketing Management involves the study of products, pricing, promotion, and distribution practices within the organization.
5) Entrepreneurship is the study of the key requirements for entrepreneurship, the skills experience and resources necessary to launch a successful new venture.
6) Business Administration examines business activity with emphasis on performance in the public sector and its interaction with the private sector.
7) Industrial Relations is the study of the effective utilization of the employees within an organization, union-management relations, and the relations between law and labour.

## Commerce Education and its impact:

Graduation in Commerce is the basic qualification to become an Accountant, though master's degree gives an added advantage. Some graduates go for position in other departments like purchase, sales and marketing, etc. of a company. They are also preferred for selling accounting packages. The impacts of Commerce education interdisciplinary sectors given below.
Agricultural Sector:
The impact of commerce education on the primary sector of the country like India includes, Agricultural Management, proportionate use of land, water, Electricity and Energy.

## Industrial Sector:

The impact of commerce education on the most important sector industrial sectors includes Industrial development and growth. Industrial policy and industrialization.

## Service Sector:

Now days due to the effect of global warming and competitive age the service marketing sector also concentrating the influence on commerce education. Specially the service and marketing sector.

## International Trade:

Acieration in International and foreign trade and investment structure finance and promotion of financial institution. Due to the free trade policy the greater impact on international trade influences the entire world marketing strategy.
Opportunities in Interdisciplinary Sector:

| Sr.No. | Opportunities in Interdisciplinary <br> Sector |
| :---: | :---: |
| $\mathbf{1 .}$ | Actuaries |
| $\mathbf{2 .}$ | Armed Forces Officers |
| $\mathbf{3 .}$ | Auditors |
| $\mathbf{4 .}$ | Bank Managers |
| $\mathbf{5}$. | Chartered Accountants |

ISSN 0975-5020

| 6. | Company Secretaries |
| :---: | :--- |
| $\mathbf{7 .}$ | Cost Accountants |
| $\mathbf{8 .}$ | Credit Analysts |
| $\mathbf{9 .}$ | Economists |
| $\mathbf{1 0 .}$ | Equity Analysts |
| $\mathbf{1 1 .}$ | Finance Analysts |
| $\mathbf{1 2 .}$ | Others. |

1) Actuaries: Actuaries apply knowledge of mathematics, probability, statistics, principles of finance and business to problems in life, health, social and casualty insurance, annuities, and pensions.
2) Armed Forces Officers: Armed forces officers render invaluable services to the country in times of war as well as in peace. Depending on their interest and specialty they can choose from a variety of jobs in armed forces.
3) Auditors: Auditors ensure that all the accounts of a client's company are accurate and drawn within the legal accounting principles.
4) Bank Managers : Bank Managers are in charge of every aspect of banking, from making certain that accounting procedures are followed through approving loans, to marketing the bank to potential customers.
5) Chartered Accountants: Chartered Accountants perform audits and provide other accountancy and financial services to their clients. They are usually well-versed in a variety of accounting fields such as taxation, account consolidation and auditing.
6) Company Secretaries: Company Secretaries act as advisors to the management of the company with regard to legal and business matters.
7) Cost Accountants: Cost Accountants are responsible for the management of cost. Their work covers all those aspects that influence the cost of product or service and its ultimate pricing.
8) Credit Analysts: Credit Analysts analyze credit data to estimate degree of risk involved in outstanding credit or lending money to firms or individuals and prepare reports of findings.
9) Economists: Economists plan, design, and conduct research to aid in interpretation of economic relationships and in solution of problems arising from production and distribution of goods and services.
10) Equity Analysts: Equity analysts are in charge of identifying opportunities in the stock market, which will yield profits. Their work revolves around financial statement analysis, cash flow and profitability projections, and estimating demand supply.
11) Finance Analysts: Finance analysts are responsible for managing and forecasting the financial performance of their organizations. They are the essential link between corporation / public company and financial markets, banks, and insurance companies.
12) Others : a) Insurance Surveyors b) International Business / Foreign Trade Managers c) Investment Analysts d) Management Accountants e)

Marketing Personnel f) Stockbrokers g) Tax accountants/consultants.

## Conclusion and Suggestions:

1) The professional courses with a number of colleges offering an option of specializations in various programmes very often leaves a student with a mind-boggling number of options. Today there are large numbers of institutes in India that offer professional programme.
2) So watch out for the following, when making a choice of institute to apply or while making a final choice between two institutes.
a) Infrastructure is the resources and facilities that an institute has its disposal. Infrastructure consists of various factors like campus area, num of classrooms etc. In today's scenario access to computers, connectivity etc. would be of additional importance to deliver an edge in education.
b) The Intellectual capital of an institute would consist of the experience of the faculty, number of books in the library, access to published journals or online journals etc.
c) The experience of the Faculty of the institute is often a clear indication of the learning imparted at the institute. Keep in mind factors like total number of permanent faculty and whether there is a fair mix of relevant industry and teaching experience.
3) The level of Industry Interaction is an indication of where exactly an institute stands in real time with the industry. Consultancy is a telling factor how professional institutions are visualized in terms of its capacity to groom effective professionals/experts. (Higher revenues from consulting also mean more investment for the benefits of students.)
4) The placement record - for foreign jobs, look at the percentage of students placed abroad. Try to identify if the figures quoted as salaries are inclusive of both foreign and Indian placements. Gain an idea of the average salary offered per annum.
5) Exchange programmes, which are common at IIM A, B, the IIT's etc. expose the students to the international professional arena, offering insights into a global trade environment and business practices. Exchange programs allow student's placement opportunities though summer placements or internships when they are abroad.

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# Policy of Special Economic Zone and its Implication on the Vision of Eleventh Plan (2007-12) Document of Inclusive and Sustainable Growth of Indian Economy Ravikiran R Garje : HOD Economics, K. C. College, Mumbai-400020. 


#### Abstract

: The Eleventh Five Year Plan, which was approved by the National Development Council on $19^{\text {th }}$ December 2007, committed to achieve inclusive and sustainable growth of Indian economy. The Eleventh plan targets 9\% PA growth rate of GDP to reduce poverty, creates employment opportunities, reduce income inequality, remove regional imbalance, environment sustainability, provide health and education to each citizen. The preamble to the Special Economic Zone Act 2005 has mentioned objectives of generating additional economic activity, promotion of export, promotion of investment, creation of employment, development of infrastructure facilities and inclusive growth. Even though these objectives of SEZ are relevant to Eleventh Plan vision, it fails to achieve inclusive and sustainable growth. It shows that SEZ policy has resulted into various inequalities such as $3 / 4^{\text {th }}$ of SEZs are located in already developed five states, $2 / 3^{\text {rd }}$ of them are dominated by IT / ITES services, and more than $60 \%$ employment is generated in IT / ITES services. Most of the SEZs are located near to major cities of Mumbai, Pune, Delhi, Kolkata, Chennai, Hyderabad, Ahmadabad and Banglore. Most of the SEZs are located on fertile agriculture land, which has been acquired at throw away prices and displaced this local poor population further into poverty and income inequality.

\section*{Introduction}


Special Economic Zones (SEZs) are specific geographical regions that have economic laws different from and more liberal than a country's typical economic laws. The goal is usually an increase in foreign direct investment (FDI) in the host country. A variety of terms such as industrial free zones and free trade zones are used interchangeably through most of the SEZ literature. Two of the earliest examples of SEZ are the tax exemption area developed in Puerto Rico in 1947 and Shannon export processing zone set up in Ireland in 1958. The most famous Special Economic Zones were founded by the government of the People's Republic of China under Deng Xiaoping in the early 1980s. The most successful SEZ in China, Shenzhen, has developed from a small village into a city with a population over 10 million within 20 years.

The SEZ scheme introduced by the government of India in April 2000 has its genesis in the Export Processing Zone (EPZ) scheme, which was introduced in 1965 when the first zone was set up in Kandla, Gujarat. By the late 1990s, seven more zones had come into existence. Under the new scheme, however, all the existing EPZs were converted into SEZs. However, the impact of SEZs remained far removed from expectations. Bureaucratic red tape, administrative procedures, rigid labour laws and poor infrastructure were believed to have affected the
investment climate adversely in the manufacturing sector [Acharya 2006]. In order to provide a significant thrust to the policy, the government enacted the SEZ Act 2005. The act became operative in February 2006 after the SEZ rules were framed and notified.

## SEZ Act 2005

The Act provides for a comprehensive SEZ policy framework to satisfy the requirements of all principal stakeholders in an SEZ the developer and operator, occupant enterprise, out zone supplier and residents. Another major feature of the Act is that it claims to provide expeditious and single window clearance mechanisms which aims at overcoming the problem of getting approval from different government offices. The Act also offers a highly attractive fiscal incentive package, which ensures
(i) Exemption from custom duties, central excise duties, service tax, central sales tax and securities transaction tax to both the developers and the units;
(ii) Tax holidays for 15 years (currently the units enjoy a seven year tax holiday), i e, 100 per cent tax exemption for 5 years, 50 per cent for the next five years, and 50 per cent of the ploughed back export profits for the next five years; and
(iii) 100 per cent income tax exemption for 10 years in a block period of 15 years for SEZ developers.

The responsibility for promoting and ensuring orderly development of SEZs is assigned to the board of approval. It is to be constituted by the central government. While the central government may suo motto set up a zone, proposals of the state governments and private developers are to be screened and approved by the board. The act provides for setting up of SEZs in public, private and joint sectors. SEZ units may be for manufacturing, trading or service activities.

After the SEZ Rules of 2006, the board of approval has granted formal approval to 439 SEZ proposals. There are 138 valid in-principle approvals. Out of the 439 formal approvals, 195 SEZs have been notified. The total area under these SEZs is 220,000 hectares ( 550,000 acres) [SEZ India, 2008]

### 2.1 Objectives of SEZ Act 2005

The preamble to the SEZ Act 2005 gives following main objectives:

1) Generation of additional economic activity.
2) Promotion of exports of goods and services.
3) Promotion of investment from domestic and foreign sources.
4) Creation of employment opportunities.
5) Development of infrastructure facilities.
6) Promotion of inclusive growth.

## 3. Need for inclusive growth the Eleventh plan document

After the introduction of economic reforms in 1991, our economy is growing more than traditional Hindu Growth Rate (3.5\% PA) of GDP. In tenth plan our GDP growth rate was 7.7\% PA and Eleventh plan kept the target of 9\%PA growth rate of GDP. But this high growth rate of GDP failed to solve the problem of poverty, income inequality, and unemployment, backwardness of rural area and
agriculture sector, regional disparity and developed only few traditional states, neglect of health and education, most important thing is neglect of environment and sustainable development. The Eleventh Five Year Plan, which was approved by the National Development Council on 19 ${ }^{\text {th }}$ December 2007, committed to achieve inclusive and sustainable growth of Indian economy. The Eleventh plan targets 9\% PA growth rate of GDP to reduce poverty, creates employment opportunities, reduce income inequality, remove regional imbalance, environment sustainability, provide health and education to each citizen.

## 4. Implications of SEZ

Apart from positive implication of increasing export revenue and high growth rate of service sector and employment opportunities to skilled manpower, SEZ policy has following negative implications:

### 4.1 Increasing regional disparity

For comparability, we focus only on the 154 SEZs that have been notified under the SEZ Act. Information about the name, location, area and type of SEZ is available for all 154 SEZs. The share of two states, viz. Andhra Pradesh and Gujarat and five states, viz. Andhra Pradesh, Gujarat, Karnataka, Maharashtra and Tamil Nadu, usually the top two and top five states geographically, more than three-fourths of the SEZs by number and 92 per cent by area are in the five states. Of this, two-thirds of the area is in just two states. The notified SEZs are limited to only 53 districts out of 607 districts and even within these 53 districts they are highly concentrated across twenty districts. These twenty, mostly urban, districts account for 71 per cent of SEZs. In contrast, of the 154 notified SEZs, 124 are in districts with an above average urban population. All the major cities except Kolkata are part of these districts, viz. Delhi (Noida and Gurgaon), Hyderabad, Bangalore, Chennai, etc. even though some of the larger proposed SEZs around Mumbai and Delhi are yet to be notified. In addition, many of the new cities, such as Pune, Vishakapatnam, Coimbatore, Indore, Ahmedabad, Mohali, Nagpur and Surat figure in the list. From their location it is evident that SEZs are very much an urban phenomenon, with the formation of new cities that will be clustered around existing cities. A higher rate of urbanisation is an inevitable consequence and a necessary facilitator of rapid growth but are we prepared for this? What are the arrangements to run the SEZ cities that will emerge if the policy succeeds (Vaidya 2009, Mukhopadhyay 2009)?

### 4.2 Concentrated to IT and ITES service sectors

For the purposes of analysis, the types of SEZ have been grouped under four broad heads, viz. (i) IT/ITES, (ii) apparel, textiles, gems and jewellery, footwear and pharmaceuticals, (iii) Multi product, and (iv)Others. IT/ITES sector dominates the number of SEZs, with almost two-thirds (64\%) in this sector. The SEZ boom is concentrated heavily in the IT/ITES sector, one that has already boomed. It may not be out of place to characterize the SEZ policy as a continuation of support for the IT/ITES sector through the back door (Narayan 2006, Mukhopadhyay 2009). Even in Maharashtra state IT / ITES sectors have dominated in Pune and New Mumbai.

### 4.3 Investment

Information about proposed investment by the developer is available for 109 SEZs, with a projected total of over Rs 100,000 crore, apparently over five years of this, 46 per cent is in IT/ITES, 25 per cent in Multi-Product SEZs, 17 per cent is in port and power. Locationally, 83 per cent of this investment is in five States with 62 per cent in just two States. This shows huge concentration of investment in developed states (Mukhopadhyay 2009).

### 4.4 Employment generation in IT /ITES sector

Information about proposed direct employment is available for 110 SEZs, projecting a total of 2.14 million employees. Of this, 61 per cent is in IT/ ITES. Further, 85 per cent of this proposed employment is in the five States, with 40 per cent in Andhra Pradesh alone, of which two-thirds is from IT/ITES SEZs. In addition to direct employment, information about proposed indirect employment is available for 82 SEZs, with a projected total of 2.94 million employees. Of this indirect employment too, 68 per cent is generated by IT/ITES. It means SEZs are successful to generate more employment for skilled labour as compare to less skilled labour (Narayan 2006, Virmani 2006, Pellissery \& Bino 2007, and Mukhopadhyay 2009).

### 4.5 Lower bargaining power of labour

Indian states have been allowed to label all economic activity in SEZ as a "public utility service", which in turn, acts to curtail the ability of workers to strike and lower their bargaining power. Another reason of less protection to labour rights is that Development Commissioner instead of Labour Commissioner will implement labour laws in SEZ (Singh 2009).

### 4.6 Loss to farmer

The process of planning and development is under question, as the states in which the SEZs have been approved are facing intense protests, from the farming community, accusing the government of forcibly snatching fertile land under the ambit of the Land Acquisition Act 1894, at heavily discounted prices as against the prevailing prices in the commercial real estate industry [Fernandes et al, 2006].The farmer selling his land for a project should become a partner in the prosperity that the project generates. Rehabilitation needs to be pareto-optimal. Those currently displaced should be compensated to cover the value of land, and their current incomes rising at the planned growth rates of the economy need to be protected, through compensation.

### 4.7 Loss of Environment

Most of the SEZs have been set up on fertile agriculture land, which is said to be big loss to environment and biodiversity. This is yet to be estimated by environmental economist.

### 4.8 Loss of Revenue

At present maximum contribution to national income and export comes from service sector, especially from IT /ITES sector. Most of these sectors are located in SEZ to obtain long term direct and indirect tax benefit and government subsidies. Similarly existing manufacturing and service sectors are relocating their
plant to SEZ to get these benefits. Government is loosing substantial amount of tax revenue because of these activities (Narayan 2006).

## 5. Conclusion

Policy of SEZ is not successful in India as compared to China (Sinha 2008). SEZs are responsible for increasing regional disparity, over crowding of major cities, displacing agriculture sector and farming community. Government is loosing huge revenue due to tax concessions and dislocation of existing industries and services to SEZ. SEZs are concentrated on skill based labours which neglects local unskilled labours. Migrated labours in SEZ are creating physical pressure on local resources. Thus SEZ policy does not seem to solve the problem of poverty, unemployment of less skilled, regional disparity, inclusive growth and sustainable development (Bhagwati 2008).

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## Appendix:

TABLE 3: Number of SEZ in Districts Above the National Average

|  | Total SEZs=154 (As on December, 2007)* | Total SEZs=247 <br> (As on August 1, 2008)* |
| :---: | :---: | :---: |
| Urban Population | 124 | 188 |
| Non Agricultural Workers | 131 | 215 |
| Literacy | 148 | 206 |
| Male Labour Force Participation | 123 | 186 |
| SC | 35 | 81 |
| ST | 22 | 40 |

# Role and Responsibility of Local Community in Business 

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#### Abstract

: Today, computerization is a major advancement in technology that helps in many ways: it makes information storage easier and faster thus it can do a lot of time and manpower, and many tasks are done in a certain amount of time.

Great amount of time is being consumed by information retrieval and the billing process of most Local Community Hospitals without computer generated system is slow. To be able to provide the medical needs of the rapidly growing population, Local Community Hospitals must be versatile to the original trends and innovation in today's changes in technology.

One of the concerns of Local Community Hospitals nowadays is how to lessen the number paper works in having a transaction with the patient that could fasten the process of admission, discharging and billing of a patient. This greatly affects the profitability of the institution that makes the admission and billing of patients a long process.

Another concern is how to extend the accuracy in computing the patient bills, which is very essential in Local Community Hospitals. Because some patients are so bright that they can get a blueprint that they do not have to pay their Local Community Hospitals bills. Some are having a difficulty in paying because of the slow process of computation which can take less or more than a month depends on the number of laboratory procedures or other cases.

Observing the institution; the researchers decided to propose a computerized patient monitoring and billing system that is intended to solve the concerns that they discovered. Efficient patient monitoring and billing management greatly affect areas of a Local Community Hospitals such as medical services, billing policies and heed rates. With the wait on of this proposed computerized system the Local Community Hospitals can easily keep track and maintain each patient's information.

The computerized patient monitoring and billing system is expected to be friendly Local Community Hospitals because of its ability to automatically compute the patient's bills, generates reports and official receipt that surely fasten their transactions with the patients. From admitting a patient to discharging, laboratory procedures and other Local Community Hospitals procedures will be updated and presented in precision.

\section*{Objectives of the Study}

\section*{General Objective}


The general objective of the study is to develop a computerized patient monitoring and billing system, for the medical institution Local Community Local

Community Hospitals to fasten the admission and discharging process of patients, and to provide automatic computation of one's patient bills.

## Specific Objectives

- To originate a prototype that will provide accurate patient information, monitor the medical services that each patient undergo, make the recording of all patient information more organized and generate automated reports of patients in the Local Community Hospitals.
- To develop a system that will lessen the numbers of paper works and provide security of patient information and medical records of each patient.
- To test and evaluate the acceptability of the system by gathering feedbacks from the target users, the Local Community Hospitals management and technical experts.
- Developing an entirely paperless medical record system.

Key Research
This study is a great achievement for the researchers because it will improve their skills in technical writing. The experiences while doing the research build up their characters and teach them values like creativity, working hard, team building and responsibility and time management. It also builds friendship and camaraderie among the co-researchers. The research also tests their skills that helped them gain sense of fulfillment and responsibility. It also gives them an overview of the IT industry and trains them to prepare to the competitive professional field. Through its aggressive research program, the researchers are on the forefront of efforts to increase the use of computers in health care. Several projects funded by governments that laid the foundation for using computers in health care are being used by the private sector. The research study shows, computers can improve quality and cut costs in many uses.

## Scope and Limitations of the Study

This study is about patient monitoring and billing system for Local Community Local Community Hospitals. The scope of the study is to monitor the admission and release of each in-patient inside the Local Community Hospitals. It will track the services that each in-patient undergo, time spent by the in-patient inside the Local Community Hospitals, backing up the records. This study also includes the billing system of the Local Community Hospitals; the automated calculation of patients total payment, change and printing of receipt.

This study tries to eliminate the manual patient monitoring and billing system that is currently used by Fabella Local Community Hospitals. All information from the admission of a patient to his discharge will be recorded, even the laboratory procedures and medicines. With this information, the patient bills will be automatically computed and generated.

The study also includes Discounts and other privileges in the billing process. The peruse does not include the payroll of employees and the issuance of Birth Certificates.

Using computers in health care can improve the quality and effectiveness of care and reduce its cost. However, adoption of computerized billing process in health care lags behind use of computers in most other sectors of the economy.

Automated hospital information systems can help improve quality of care because of their far-reaching capabilities. One of the first information systems in a hospital to combine the use of computers for storing and transferring information with using them for giving advice to solve clinical problems but the study focus on billing system.

## Significance of the Study

The significance of the study is discussed in three parts; first one is local community hospitals, second is employees and third is the patients. The brief discussion has been carried out as under:

## Local Community Hospitals

The study will serve as a new instrument for the technological advancement that greatly benefits the Local Community Hospitals. This computerized system is intended to lessen the manpower which will lead to a faster and more suitable billing process which will lead to profitability of the Local Community Hospitals.

## Employees

The job of the employees will become more apt and efficient through the use of the proposed system. This leads to less error which saves time and energy on the side of the workers. Employees can also focus on other tasks assigned that will make them more productive.

## Patients

The service of the Local Community Hospitals to the patient will become more convenient. Less time will be consumed during the payment process. This will also lessen time for patients to wait for computation of Local Community Hospitals bills. The study is also expected to increase the satisfaction of the patients to the services of the Local Community Hospitals.

## Suggestions/Recommendations

Improving the quality of care through the use of computerized medical information systems must not override the need to protect individual rights to privacy. Strong safeguards must protect confidentiality. Patient rights, provider rights, and other concerns are being addressed to prevent inadvertent disclosure or alteration of computerized medical records. The unique computer system is taking care of the following:

1. To remain efficient
2. To level the competitive playing field
3. To achieve an advantage through innovation

## Necessary Advantages:

1. It allows for simultaneous, remote access to patient data by all authorized providers.
2. It facilitates faster and better communication among providers.
3. It reduces errors which results in better health care and lower cost.
4. Electronic systems facilitate safer data and improve patient data confidentiality.
5. It allows for flexible data layout and therefore integrates easier with other information resources.
6. It allows for incorporation of various related electronic data, and records are may be continuously processed and updated.
7. It makes the searching and finding of data considerably easier

## Significant Advantages:

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Admission refers to the formal acceptance by a Local Community Hospitals or other inpatient health care facility of a patient who is to be provided with room, board, and continuous nursing service in an area of the Local Community Hospitals or facility where patients generally reside at least overnight.

Discharging refers to the term which means that the patient leaves the Local Community Hospitals and either returns home or is transferred to another facility such as one for rehabilitation or to a nursing home. Discharge involves the medical instructions that the patient will need to fully recover.

For information from different databases to be compared, common terminologies and standards and uniform identifiers are needed. New databases demonstrate the usefulness of uniform data, allowing comparison of health care services, medical effectiveness, and the use and cost of hospital care. The data bases contain patient information for typical hospital stays in a uniform format while protecting privacy. This data base covers inpatient care in community hospitals.

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## Need of Marketing for Mobile Phone Operators

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#### Abstract

: Today, a mobile phone is not just a rich man's fashion accessory in India. It's transforming the way millions of people do business in a country where even landlines were considered luxury barely a decade ago.

According to liberal governmental policies more and more companies are setting up their businesses in India. Marketing plays an very important role in reaching to the consumers and stimulate them to purchase the product. In the age of cut throat competition every mobile phone operator is looking towards increasing the sales through effective marketing strategies.

\section*{Introduction :}

Today, a cell phone is not just a rich man's fashion accessory in India. It's transforming the way millions of people do business in a country where even landlines were considered luxury barely a decade ago. Across the country people with low income group are now adopting cellular phones as tools for enhancing business. Cell phone technology introduces new senses of speed and connectivity to social life.

Nowadays, virtually everyone carries a mobile phone, including the young children. They have become the most important item an individual can own. They serve as a communication tool used to make and receive calls as well as send text messages, listen to music, surf the internet and even play mobile games.

Mobile are now so common that they hardly attract attention. People have started understanding the value, convenience and ease of owing a mobile phone. In earlier days, very few people could think of buying mobile phone but today looking at the dropped prices, almost every individual can afford to purchase it. Mobile phones are equipped with every latest feature you desire. Even if you don't need the advanced features, you can get a basic mobile phone to make and receive calls. They can help us in our fast lifestyles when we have no time to meet our friends, relatives and left with the only option of talking over the phone. We can stay in touch whenever and wherever we need to.

According to the liberal governmental policies more and more companies are setting up their businesses in India. Today, there is a cut throat competition in the business. Marketing plays an very important role in reaching to the consumers and stimulate them to purchase the product. Marketing helps in creating the need of the product among the consumers.

The need of marketing strategies is not of recent origin. It has a long history, in the olden days king used the announcers for spreading commercial messages and political campaigns, among their citizen. With the passage of time new medias of marketing have evolved such as banners, hoardings, newspapers, radio, television, mobile marketing, internet advertising, etc.


As the economy was expanding during the $19^{\text {th }}$ century, the need of marketing grew at the same pace. After globalization new companies entered into the market and to make their image among the consumers these companies started spending huge amount of money on marketing strategies. People are constantly bombarded with advertisements through various media. In a materialistic society as ours it is impossible to avoid or ignore the power and need of marketing. But at the same time it is necessary to study that whether the marketing done through various medias are really effective or not. It is also necessary to find out it's impact on the consumers.

## History of Indian Telecom Sector :

India's telecom sector has been doing exceptionally well in past decade. Its structural and institutional reforms have provided tremendous growth opportunity to this sector. India has nearly 200 million telephone lines making it the third largest network in the world after China and USA. With a growth rate of $45 \%$, Indian telecom industry has the highest growth rate in the world. The first reforms in Indian telecommunications sector began in 1980s when the private sector was allowed in telecommunications equipment manufacturing. In 1985, Department of Telecommunications (DOT) was established.

## Evolution of the industry-Important Milestones

Year History of Indian Telecommunications
1851 First operational land lines were laid by the government near Calcutta 1881 Telephone service introduced in India
1947 Nationalization of all foreign telecommunication companies to form the Posts, Telephone and Telegraph (PTT), a monopoly run by the government's Ministry of Communications.
1985 Department of Telecommunications (DOT) established, an exclusive provider of domestic and long-distance service that would be its own regulator (separate from the postal system)
1986 Conversion of DOT into two wholly government-owned companies: the Videsh Sanchar Nigam Limited (VSNL) for international telecommunications and Mahanagar Telephone Nigam Limited (MTNL) for service in metropolitan areas.
1992 Liberal policy announced by the government allowing private participation in Telecom sector.
1997 Telecom Regulatory Authority of India created.
1999 Cellular Services are launched in India. New National Telecom Policy is adopted.
2000 DoT becomes a corporation, BSNL

## Significance of the study:

Marketing is the most important part of business. In the age of cut throat competition every company is looking towards increasing the sales through effective marketing strategies. For increasing the sales company would select the best medium of marketing their product to the final consumer.
Objectives:

1. To study the need of marketing for mobile phone operators.

## Benefits of Marketing:

## 1. Establish brand recognition:

The primary and most important benefit of marketing is brand recognition. Marketing strategies help to imprint a brand in the minds of customers. This ensures that customers seek a particular brand of a product, rather than the brand seeking out its customers.

## 2. Gain and retain customers:

Once a brand has gained its ground and established its customers, marketing enables it to retain its customers. This is essential so that the brand does not lose ground to products that newly come into the market.
3. Identify real customers:

Marketing strategies allow a business to identify potential and actual customers. Instead of trying to force a product or service on unwilling customers, marketing helps to target customers who have the real need.
4. Provide information:

Marketing a product is the best way to provide information about it. The salient features of a product or service is what is used to market the product. It is this same information that will attract customers towards the product. Knowing a brand better ensures that customers will come to trust it better.
5. Save time:

Marketing, and more so, effective marketing will help reduce the break-even period of a business. By promoting a product or service through effective marketing, a business can promote its sales and reach its intended clientele faster.
6. Establishtrust:

Repeated and effective marketing ensures that a product remains in the minds of its intended customers. This in the longer run would help in establishing a brand trust, which would make customers choose the product irrespective of competition. Trust is created over a long period of time and marketing is an effective way in establishing it.

## 7. Encouragesreferrals:

Marketing encourages new customers to seek information about the brand. By making a product seen and heard frequently, a business also increases the chances of word-of-mouth referrals. The chances of suggesting an oftenseen product is higher when compared to something that you do not see frequently or are unaware of.

## 8. Addressissues:

The various means of marketing a product can also act as a means of clearing inhibitions or misunderstandings about the quality or nature of a product or service. Often, marketing can become an effective tool in clarifying misapprehensions relating to a brand.

Effective marketing allows a business to reach its potential customers by fulfilling their needs at the right time. But, however effective or efficient a
marketing strategy is, the success of a business will depend on the quality of the product or service it offers. Therefore, only a quality product marketed in the appropriate manner through an effective channel to reach its potential customers at the right time can achieve success.

## Conclusion:

The study highlights the importance of marketing. In the last few years a lot of players have entered the telecom sector with similar resources thus intensifying the competition. The company with the right marketing mix would be able to generate maximum profits.

The mobile operators would have to keep a watch on the call rates, promotional offers, after sales service and the most important follow the concept of customer relationship management.

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## Literary Criticism

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#### Abstract

: Literary criticism is the act of interpreting literature. Writers and critics build on each others' understanding of a work of literature in a kind of dialogue. Noted authors often have a body of criticism attached to their work. Critics evaluate and debate the ideas of fellow critics. Good criticism can help us develop a better understanding of a work. It can help us develop a point of view about a work, whether or not we agree with the opinions of the critic. A person who has understood the work of art better than the ordinary reader makes it easier for the reader. Through his comments, interpretations and expositions the ordinary reader begins to understand and enjoy literature. That is why a critic is the interpreter first and a judge later. Interpretation includes assessment and appreciation.

Criticism is a literature upon literature, writing upon writing, book upon book. Both literature and criticism use the same medium of expression --language. Authors present us with work that can have multiple meanings, expecting us to consider thoughtfully--to interpret.

There seems to be a general understanding that the function of criticism is --- three-fold: to interpret, to assess and to judge. That is why a critic is called a judge passing judgment on a work of art and he is expected to be free from prejudices and impartial like the judge in the court of law. Some claim that he is the guide that takes the reader through the world created by masterminds. T.S.Eliot, a well known voice in the realm of criticism, in his essay 'Functions of Criticism' expresses his views on different types of criticism. He describes criticism as 'a commendation and exposition of works of art by means of written words'. That is commenting on a work of art is the primary function of criticism. It is common knowledge that everybody cannot understand and appreciate every piece of literature.

The reader finds stumbling blocks as the writer is superior to the reader because the writer is endowed with the special faculty called imagination. To follow what he has to say becomes problematic if one cannot understand. If one does not understand the nuances one does not enjoy literature. A person who has understood the work of art better than the ordinary reader makes it easier for the reader.

Eliot expects the critics to have a general understanding with as many critics as possible regarding the interpretation of art. This being difficult to achieve he states that interpretation is legitimate when it is not interpretation. An interpretation should put a reader merely in possession of a few simple facts that the reader is sure to miss and encourage the reader to go ahead with that lead. That is the right approach of criticism to literature, as it encourages reader to discover the meaning with the help of this new insight.


Literary Criticism can be categorized into types:

1. Sociological Criticism
2. Textual or Formalistic Criticism
3. Archetypal Criticism
4. Moral Literary Criticism
5. Comparative Literary Criticism
6. Psychological Criticism
7. Feminist Criticism

## Sociological Criticism:

Sociological Criticism (also known as Historical Criticism) is based on the fact that there is a vital relationship between art and the society in which the artist lives. The time and space in which the artist is fixed shapes his thinking. Hence the sociological critic pays attention to 'the social milieu and the extent to which the artist responds to it'.

Sociological Criticism dates back to the $18^{\text {th }}$ century with a perspective study of the social conditions in Greece which went into the composition of Homer's epics. The French critic Taine broke new ground by saying that every artist is moulded by three forces, the race, the milieu, and the moment. By the race he meant the distinguishing characteristics of the race to which the artist belongs. The milieu is the totality of the economic, political and the cultural institutions to which the artist is subjected. The moment is the particular point in the time-not eternity but the here and now-that faces the artist.

Taine's sociological criticism has two serious limitations. First, it ignores the factor of personality and regards the individual writer as little more than a product of his race and epoch. It is only the minor writers that reflect their age. Second, the sociological theory ignores the fact that the literature has a double sided relation with the society. The great writer is not only a creature of his time but also its creator. As Harry Levin says: 'Literature is not only the effect of the social causes; it is also the cause of social effects'

Marxist Criticism is an offshoot of sociological criticism. It attaches primary importance to the economic conditions of society. It relegated to the background such factors as religion, culture, art etc. Marxist criticism values only those writers who either reflect or remedy the economic ills in the society. Therefore, Marxist criticism has little relevance in the affluent West.

The sociological approach shows how literature mirrors social conditions or how social conditions affect a writer's thinking. Charles Dickens reflects the abominable social conditions of the Victorian age in his novel Oliver Twist. Oliver Twist was written to expose the corruption that had crept into the administration of the work-houses.
Textual or Formalistic Criticism: Textual or Formalistic Criticism eschews external matters as moral, social and biographical forces acting on a writer. They concentrate only on the close analysis of the text. T.S. Eliot considered the moral, sociological, historical and biological approaches to literature as extrinsic and unnecessary. He wants critics to concentrate on the texts of the works themselves
and not the external factors. In his essay Tradition and Individual Talent he said that great poetry is not an expression but an extension of the poet's personality. He advances the view that great poetry is impersonal. A great poet does not express his personality through his writings but rises above it. This essay is an attack on the biographical approach to poetry and induced critics first to scrutinize the text of the poem. Formalistic critics have played a constructive role in studying the symbols that Eliot has borrowed from the French symbolists of the $19^{\text {th }}$ century and the metaphysical of the $17^{\text {th }}$.

A sensible critic should adopt a holistic approach and besides studying the effect of each of the elements one should be able to study the combined effect of all the disparate elements. To put it simply, he should be like a mechanic who separates the parts of a complex machine and then reassembles them.

Formalistic Criticism has serious limitations:

- The Formalistic Critics with their extremely obtrusive terminology are not intelligible to the layman.
- The Formalistic Critics use obscure jargon which can be understood only by the chosen few.

Formalistic Criticism demands that the closest possible attention be paid to the text of the work, whether it is a poem or prose. We can study the iambic pentameter, characteristics, and the stylistic devices of the work. The technique of the stream of consciousness was extensively used by James Joyce in his novels Ulysses and Finnegans Wake. This technique fascinated Virginia Woolf and she made a similar attempt in Mrs. Dalloway.
Archetypal Criticism: Archetypal Criticism, also called the totemic, mythological or ritualistic criticism has the salient features of other critical methods also - it studies the text closely like the formalistic critic, analyses arts' appeal to an audience as the psychological critic. I.A.Richards does the poem -reader relationship, probes basic cultural patterns like a sociological critic and investigates a social past like the historical critic.

Archetypal Criticism is a monumental study of magic and religion, tracing numerous myths back to prehistoric times. Carl Gustav Jung propounded the theory of collective unconsciousness. He believed that the civilized man preserves though unconsciously, prehistorical ideas of knowledge and articulates them obliquely in myth. $20^{\text {th }}$ century writers like James Joyce and W.B Yeats have used the ancient myth of Psyche and Cupid to retell modern man's struggle towards eternal love.

Archetypal Critics engage themselves in discovering the hidden mythological patterns in literary works. For these critics, the myth is the 'protoplastic' pattern of the race which the individual unconsciously repeats. A myth is, as Eric Fromm said 'a message from ourselves to ourselves'.

The Archetypal Critic functions in two ways. First, he discovers the mythological patterns which a writer has consciously or unconsciously used in his works. Second in which the archetypal critic works to set up modern fictitious characters as new mythological figures representing the plights and problems of
moderns.
Some objections have been raised against archetypal criticism. One basic objection is that the archetypal criticism does not evaluate literature but merely explains the reason for the appeal of certain kinds of writings. The second objection is that the archetypal critics are known more for their ingenuity than for the validity of what they have to say. Anyhow, it must be accepted the archetypal criticism has rendered one important service ---it has linked the modern man, despite his rationality and scientific bent, with his ancient roots.

The study of Homer's Iliad and Odyssey is the study of archetypal criticism for without this type of criticism one cannot understand the nuances of Greek literature.
Moral Literary Criticism: This approach dates back to the dim past. Plato (427 B.C.- 347 B.C.) banished the poet from his ideal Republic for fear that he might spread immorality and destabilize the country. Horace, Latin critic (65 B.C. -8 B.C.) and author of Ars Poetica studied how poetry could be used to promote morality. Dr. Johnson, the literary director of $18^{\text {th }}$ century, was a stern upholder of morality and attacked Shakespeare for what he considered to be his slip-shod treatment of moral values.

The moral critics of the $20^{\text {th }}$ century have come to be called neo-humanist. Their watchwords are order, restraint and discipline. They want man's animalistic impulses and 'egocentric yawps' to be governed and controlled by reason and ethical values. In the beginning the neo-humanists were secular. To compensate for the limitations and deficiencies of the secular neo-humanist, a new brand of humanism called 'Christian Humanism' was enunciated by T.S.Eliot who in his essays The Humanism of Irving Babbitt, Second Thoughts on Humanism and Religion and Religion and Literature attacked secular humanism by Irving Babbitt.
T.S.Eliot said that a writer should consider it his duty to raise the man's moral nature. Marlowe's Doctor Faustus is a moral play showing the punishment meted out to Faustus for his refusal to obey Christian Canons.

The Puritans were a powerful sect in England during the regime of Oliver Cromwell. The voyagers from England to America spread Puritanism with its entire rigor in the country of their adoption. In his revolutionary novel The Scarlet Letter Hawthorne brings out the wench caused to sensitive people by the Puritan code.

The French novelist Flaubert, in his novel Madame Bovary, uses Madame Bovary as a symbol of a person living beyond ones station.
Comparative Literary Criticism: Comparison of writers' writings in different languages is possible. Works of the same author belonging to different periods can be compared in order to measure the extent of his improvement or degeneration. Thus Romantic comedies of Shakespeare have been compared with his Final Romances in order to find out how his themes (especially the theme of forgiveness) have deepened in the later plays.

Comparative critics have often undertaken influence studies. Thus it has been studied how Petrarch's Italian sonnets have influenced Shakespeare's.

Studies of the sources of a writer also come under comparative studies. Thus the sources of every one of Shakespeare's plays have been exhaustively studied.

Comparative studies serve to bring out the elements of common human nature as portrayed by the writers of different cultural contexts. Great writers penetrate the superficial layers of a given culture and arrive at the bedrock of basic human nature. Comparative studies bring out the 'universals' which no amount of cultural differences can disguise. Comparative studies show that cultural differences are superficial and that human nature is basically the same all over the world.

Comparative critics study various works in the same era, in different cultures, for example the works of Shakespeare is compared to the works of Tukaram or the dramatic monologues of Tennyson are compared to that of Browning.
Psychological Criticism: Freud was not the first to talk about the workings of the psyche. The Romantics, both English and the European, had earlier delved into the workings of the mind. Diderot's Rameaus' Nephew influenced Freud deeply. In his work, Rameau's nephew stands for the irrational element in the human nature which Freud later called id. Diderot represents the reason that controls impulses. Freud calls this reasoning faculty the ego, and the super ego.

Rousseau's Confessions is another work that deeply influenced Freud, as it opened his eyes to the immoral self that lies hidden in the depths of even a good person. The concept of free love was aired by Shelly and Byron in England and by Schlegel, Schopenhauer and Stendhal in Europe. This concept strengthened Freud's concept of libidinous Id struggling against the rational ego and the super ego. Novalis's death wish led Freud to view death as men's desired goal. Poe's poems about strange dreams helped Freud formulate his dream theories.

## The major works of Freud:

- Three contributions to the Theory of Sex (1910)
- The Interpretations of Dreams (1912)
- Beyond the Pleasure of Principle (1920)

The Freudian view that man is a victim of taboos and repressions and that he can experience joy only by liberating himself from these outer and inner restraints very much appealed to the Romantics and the Naturalists. The Puritan culture in America and the Victorian culture in England attached much importance to reticence, chastity, gentility, and respectability and so on. But in the $20^{\text {th }}$, thanks to the impact of Freud, these traditional values are viewed as the products of ignorance and 'regressive blindness'. Writers like D. H. Lawrance, Thomas Mann, Sherwood Anderson, Katherine Mansfield and Graham Greene have been influenced a great deal by Freud's teachings.

Freud has affected literary criticism in three ways:
First, psychological terms are being increasingly used in literary criticism. These early critics used psychological tools indiscriminately and injudiciously.

They tried to trace erotic motives and meanings in all literary works under the sun. I.A.Richard's Principles of literary Criticism paved way for such studies analyzing the constituents of aesthetic experience, he said that literature contributed to 'synaesthetic equilibrium' and evoked 'a harmonious kind of response' from the audience

Second contribution made by Freudian psychology is that psychoanalysts psychoanalyze creative authors in an effort to find out how the maladjustments of authors colours theirs works.

Third contribution made by Freud is that psychology is being increasingly used to explain fictitious characters. The critic becomes a psychoanalyst, searching for subconscious forces which motivate the character.

There were two charges made against the psychological approach.

1. Oversimplification
2. Psychologist mistake poets for dreamers. The dreamer has no control over his dream but the poet has control over his product.

Freud used the term 'Oedipal complex' to denote the excessive attachment that a son has to his mother which prevents him from having a normal sexual relationship with the woman of his own age group. Freud traced this abnormality to Sophocles' play Oedipus Rex in which King Oedipus, through ignorance, marries his own mother and has children by her.

## Feminist Criticism:

Feminist criticism is a type of literary criticism, which may study and advocate the rights of women. As Judith Fetterley says, "Feminist criticism is a political act whose aim is not simply to interpret the world but to change it by changing the consciousness of those who read and their relation to what they read." Using feminist criticism to analyze fiction may involve studying the repression of women in fiction. How do men and women differ? What is different about female heroines, and why are these characters important in literary history? In addition to many of the questions raised by a study of women in literature, feminist criticism may study stereotypes, creativity, ideology, racial issues, marginality, and more.

Feminist_criticism is a type of literary criticism, which was developed in the late 1960s, focusing on the role of women in literature. Two important representatives are Virginia Woolf and Simone de Beauvoir who claim that women are a subject and no object.

The main interest of the Feminist Critique is to explore the extent of patriarchal ideology in literature, namely to explore the material forms of social, economic and political discrimination of women. It examines the representation of and by woman, men, and homosexuals to show how gender (in contrast to biological sex) is culturally constructed and how therefore masculinity and femininity are depicted in literature.

While the 1970s focused on exposing the mechanism of patriarchy, in the 1980s the focus changed: there was a shift from androtexts (texts by men) to gynotexts (texts by women). The main focus of gynocriticists is to retrieve
forgotten literature by women, so they can participate in literature and not only accept the constructs of feminity developed by men. The examination of those new found texts testifies how women viewed themselves and the role that gender plays in society.
Conclusion: - For all its shortcomings, literary criticism still provides the writer with the tools for self-evaluation and self-improvement. It introduces work of periods and cultures different in theme and treatment. Literary criticism comes in various shapes and aims. At best it poses searching questions of the writer, and insists that he understands how the arts, the sciences and philosophy have different but coexisting concepts of truth and meaning. Art in the end cannot be divorced from contemporary life, and that consideration leads on to literary theory.

We must make our own judgments. That is the nature of literary criticism. Moreover, until we can appraise the various critical attitudes, weighing up the strengths and shortcomings of each approach, we are not evaluating but just borrowing undigested material that won't help with unfamiliar work, or develop the skills needed to rescue our own productions.

It's also unavoidable. Good writing needs continual appraisal and improvement, and both are better done by the author, before the work is set in print. In short, the approaches of this section should give writers some of the tools needed to assess their work, and to learn from the successful creations of others.

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## Human Resource Accounting: Some Conflicts

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#### Abstract

: However, providing adequate and convincing information on human resources in algebraic terms inside traditional balance sheets has proved extremely difficult. There is a need for a joint approach by the accountants and personnel managers to develop Human Resource Accounting (HRA) system as a decision making support system. What's more accounting is still in the age of transition. The leading conflict in this regard is how to establish a coherent terminology and link the reporting of HRA with the improved aspect of human resource management. Truth to type that idea of HRA is developed at conceptual level rather than at empirical level that created a ground for the sluggish progress in the research work of HRA. This article attempts to well synchronize the grounds of divergence in HRA in this existing epoch and tries to put forward some impend taking place it.


## Key Word:

Human Capital Valuation, HRA, Intellectual Assets, HR Audit, HR Information System.

## Introduction

Efforts to assign value tag to the organizational human resource are still in the process from the balance sheet of R.G. Barry Corporation in the year 1967 till date. Various approaches have been suggested by many proponents from diverse fields advocating the use of cost, value and psycho - social measures. All though initially many used to consider HRA as a cosmetic item, soon the subject acquired due importance and momentum. A subjective valuation of the invisible human assets and reporting in balance sheet may pose a problem to the traditional accountants. ${ }^{1}$ There is a need for a joint approach by the accountants and personnel managers to develop HRA system as a decision making support system. Today accounting is in the age of transition which passes through stewardship accounting to financial accounting and financial accounting to management accounting and management accounting to accounting for intangibles. The said shifts are gradual and evolved out of the business and corporate information need. Accounting as an information system evolved out of the felt needs of the society and legal compulsions. The pressure from the investors, the regulatory bodies and from the statutory authorities made the corporate operates to disclose and reveal the true and fair view of business in the form of financial reports as a legal compulsion. In the process of accounting information being disclosed to the public out of obligation (legal, regulatory and market domination), the question of internal use and utility is also felt. It is a fertile area where further research and validation is required. To evolve a technique of valuation of human resource, revelation in the annual report and the general
acceptability as accounting practice (G.A.A.P) is the real challenge for the researchers, management consultants and practicing accountants ${ }^{2}$. To bring HRA in its finished form, it should be free from following conflicts.

## Lack of Statutory Provision for Disclosure:

Section 211 (5) of the Companies Act, 1956 provides that:

1. Every Balance - sheet of a company shall give a true and faire view of the state of affairs of the company as at the end of the financial year and shall subject to the provisions of this section be in the form set out in part I of schedule VI or as thereto as circumstances admit.
2. Every profit and loss account of a company shall give a true and fair view of the profit and loss of the company of the financial year and shall comply with the requirements of part II of schedule VI.

The balance sheet and profit and loss requirements given in schedule VI provide for disclosure of physical assets and creation of depreciation provision thereon but there is complete silence as regards to disclosure of value of human assets in balance sheet is concerned. Actually speaking the company law treatment of total expenditure incurred on the human resources development is recorded in profit and loss account fully in the year when incurred and capitalizing of such outlays on physical assets which add nothing to the income generating process without human touch. This result in violating of matching principle that current year's sales revenue should be matched with current year's expenditure to arrive at current year's profits. The concept of materiality is impaired because by charging total expenditure of human resources development which will benefit in future years in profit and loss account of current year profit figure is substantially suppressed and true and fair view of the profitability and financial position of the entity is actually not disclosed by the profit and loss account and balance sheet. At this juncture the point to be noted that expenditure incurred by companies on human resources training and development is significant and material enough because its knowledge can change one's impression about the profit situation or the financial statements of companies in making important policy decisions because magnitude of the income producing asset viz., human resources are not included in financial reports of the majority of the companies, still they dominate the functioning of organizations over physical assets.

As regards to disclosure of statistical information of employees in the annual reports under section 217 (2A) of the Companies Act, 1956 entail the companies to give the particulars of employees drawing wages Rs. 12,000 per month or above in the company's annual reports. These particulars include name of the employee, designation and nature of the duties, gross and net remuneration received, qualifications, age of the employee, experience, date of commencement of employment and particulars of last employment held by the employee. As far as human resource accounting is concerned the disclosure of particulars of employees by companies in fulfillment of statutory requirement of section $217(2 \mathrm{~A})$ is not sufficient to draw any conclusions. ${ }^{3}$
Indian Accounting Standards:

Through the ASB (Accounting Standards Board) of Institute of Chartered Accountants of India (ICAI) has brought out accounting standards on most of the important areas in accounting and has ensured their implementation by making accounting standards mandatory. The most regretting facts that the ICAI has not been able to bring any definite accounting standards on measurement and reporting of human resource accounting information in financial statements. Even the international bodies are still struggling to find solutions over reporting of HRA in the financial statements of the companies. There is a need for urgent call of action on behalf of accounting bodies to take this task very seriously and form the committees and come out with some concrete solutions over HRA. It could be made possible by the institutions like ICAI, ICSI and ICWA by sponsoring long term research projects in this regard. If the solutions on the HRA is not arrive, it will distorts net income disclosed by profit and loss account; total assets figure in balance sheet and also distort computation of rate of return on capital employed. Because its components namely net income and total assets are distorted. ${ }^{4}$

## Conventionally Treated as Service:

Conventional / traditional accountant do not recognize human being as an assets in the balance sheet. The human being is considered as an economic factor of production and treated as an expense like materials, power etc. Costs incurred on individual employees for their recruitment, training and development are partly charged along with the wages and salary bills and mostly accumulated along with general overhead charges of the organization. So also the expenditure on human organization development gets merged with general overhead charges. The committee on Human Resource Accounting has observed the accepted practice of regarding all expenditures on human capital information as an immediate charge against income is inconsistent with the treatment accorded to comparable outlay in physical capital. At times, the omissions of human resource from accounting would not only be misleading but also 'misanthropy to the accounting profession involving disastrous effect on employee commitment. ${ }^{5}$ Such omissions to account for human resources are causing uneasiness inside and outside the accounting profession. ${ }^{6}$

## No Proper Classification of Human Resource Cost:

The variegated types of costs associated with the employees or the human resources have been classified by the experts into a number of categories such as cost of selection, training cost etc. Anyhow, on the basis of the purpose for which the costs are incurred by the companies, the human resource costs may broadly be classified into three categories. They are acquisition costs, development costs, and periodical wages and salaries. ${ }^{7}$ It may be recalled here once again that the majority of experts who have contributed to the current literature on human resource accounting have reckoned either the first two groups of costs or the third group of human resource costs for the purpose of ascertaining the value of human resources without bothering to find whether they possess the features of assets or not. ${ }^{8}$ Hence there is a need for a critical analysis of different categories of human resource costs to find out the category of
human resource costs which possesses the features of assets and which do not possess. Only those human resource costs which possess the features of assets can be assetised but not all the human resource costs.

## Idea Developed at Conceptual Level rather than at Empirical Level:

Tax laws do not recognize human beings as an asset. So human resource accounting has been reduced to a merely theoretical concept. The much needed empirical evidence is yet to be found to support the hypotheses that HRA, as a managerial tool, facilitates better and effective management of human resources. There is a constant fear of apposition from the trade unions, placing the value on employees would prompt them to seek reward and compensation based on such valuation. The concept of HRA is still at the experimental and developmental stage; very few firms in developed nations have introduced in their respective organizations. HRA is still new and much additional research will necessary before it can be applied universally. This is because of the fact that there is no universally accepted method of human asset valuation. So there is an urgent need for evolving a method which could be universally acceptable. This is all the more important for optimum allocation of scarce resources in India and elsewhere. ${ }^{9}$

## Absence of HRA Audit:

Human behavior is complicated and it is not easy to impose control without leading conflicts. Employees do not like controls because they give rise to pressure and strains. HRA audit is a systematic and comprehensive analysis of all activities and results of a personnel programme. Due to the failure of ICAI to bring any accounting standards on human resource accounting and in the absence of any guidelines from ICAI and Indian Companies Act, 1956 on HR audit, Joint Stock Companies are free to follow their own procedure relating to HR. During the research of sample industry it was noticed that procedure of HR audit were absent. Negligence on behalf of ICAI, Indian Companies Act, 1956 and Joint Stock Companies towards HR audit emerged as one of the major setback for the growth of HRA. If HR audit would have been followed it would provide a answer of; ${ }^{10}$
Procurement $=$ personnel inventory, selection rates, recruitment ratios, recruitment time lag, retrenchment, dismissals and lay - offs etc.
Utilization = capacity utilization, idle time statistics, extra time spastics, backlogs, turnover per employees.
Training and Development $=$ systematic promotions, career planning, formal appraisal, time taken in training, apprentice ratios, productivity increase.
Compensation = Job evaluation programme, earnings differentials, etc.
Integration and maintenance = measure morale, absenteeism and turnover rates, suggestion ratios, accident ratios, number of grievances, employees voluntary participation in optional service programme.
Labour relations = labour management committees, grievances and their settlement, no strikes clause, arbitrations.

There is no set of procedure for conducting personnel audit is available.

Like all other audit under Indian Companies Act 1956 HR audit also has two basic sources of information, viz, written records of facts and multiple opinions obtained from a sample of respondents from the groups interested in and concerned about the activity. ${ }^{11}$

## Available Models are Popular but not Universal:

It may be inferred that even though most of the above models appear logically sound in appropriate cases, it is not possible to apply most of them in practice for lack of suitable data and inability to have objective measurement of all the variables mentioned in the models. Measurement of these methods, though appear theoretically acceptable, is too difficult to provide an objective assessment of human resources. They are not even applied to any organization. Although a few organizations in India followed a modified model on the Lev and Schwartz method, with some refinements suggested by Flamholtz and Jaggi and Lau for the valuation of human assets, in most of the empirical studies, so far done, the method suggested by Brauch Lev and Aba Schwartz is used. This is because the application of model, where it emphasizes on the capitalized value of remuneration payable to the employees, is operationally feasible. Since salaries are determined through agreements measurement of HR value becomes easier and it is easy to collect the related information and data required for the purpose. This method may thus be regarded as a better approach for evaluation than others as it provides a surrogate measure of value of HRs on the basis of estimated future earnings of the employees in an organization. ${ }^{12}$

Several models for valuation of human resource and accounting have been developed by various experts; the absence of general acceptance of the measurement criteria for valuation of human resources would prove to be an impediment towards its wider adoption. However, as more experience is gathered in the use of various models, it is expected that in the years to come corporate reporting practices will describe greater importance to this emerging dimension of accounting. Much will, therefore, depend upon the application and usefulness of human resource accounting efforts made by managers, accountants and academicians. Much will also depend on their willingness to experiment and innovate, keeping the doors and windows open to let free air from a far blow in.

## Extreme Subjectivity:

No doubt HRA can provide valuable information both for management and outsiders, yet its development and application in different industries and organizations has not been very encouraging. This accounting concept is not popular like social responsibility accounting because it may not result in providing immediate and tangible benefits and on account of the fact of lack of consensus among accountants and other concerned about the basis of measurement of the value of human resources. HRA is subject to following extreme subjectivity; ${ }^{14}$
(i) There are no specific and clear - cut guidelines for finding cost and value of human resources of an organization.
(ii) The life of human resources is uncertain and therefore, valuing them under uncertainty seems unrealistic.
(iii) There is a possibility that HRA may lead to dehumanizing and manipulations of employees. For example, a person having a low value may feel discouraged and thus, in itself, may affect his competency in work.
(iv) Human resources, unlike physical assets, are not capable of being owned, retained and utilized at the pleasure of the organization. Hence, treating them as 'asset' in the strict sense of the term could not be appropriate.
(v) In what form and manner, should these be included in the financial statements? Is another question on which there is no consensus in the accounting profession?
(vi) If a valuation has to be placed on human resources how it should be amortized? Should the rate of amortization be decreased, constant or increasing? Should it be the same or different for various categories of personnel?
(vii) HRA looks very attractive; however, it is very subjective and difficult in practice.

## Miscellaneous Conflicts:

The inability of traditional accounting system to monitor and account for human resources invited severe criticism three decades ago when Likert logically questioned the traditional accounting practice. The process of assigning numeric figures to human resources depends upon the approach adopted. However, the present HRA system suffers from following miscellaneous problems, viz; ${ }^{15}$
(i) Management has absolutely no information regarding the total investment made in human resources.
(ii) Increase accounting cost.
(iii) HR is not considered as an asset.
(iv) Lack of expertise knowledge, as HRA requires knowledge of accountancy as well as of economics.
(v) Economic effect of HR's migration were not considered any where, where as it plays very important role in human resource valuation.
(vi) Inadequacy of traditional balance sheets in providing sufficient information on enterprise performance.
(vii) Measuring problems deriving from the valuation of human resources.
(viii) Redistribution of social responsibilities between the public and private sectors.
(ix) Security versus flexibility in employment.
(x) Improved human resource management.
(xi) Formal learning versus in-firm competency acquirement.

## Summary:

Accounting treatment of resources to the organization cannot be made in vacuum. The changed role of human resource to the organization should get the required status in the balance sheet. In the era of mergers and acquisitions patenting for intellectual property right the ignored asset, i.e. Human Resource should appear in the balance sheet. The general acceptability comes through genuine demands by the investors, felt needs of the management and pressure from the regulatory bodies. A disclosure norm at present is to satisfy the legal
compulsions. This trend should be changed. In the coming days a spin off or a splinter branch to social responsibility accounting may be emerged in the form of a new accounting, which may be called "Impact Accounting", where the impact of the resource to the organization and the functional impact of the organization towards the resource will be ascertained, measured and accounted. To keep intact the role of Human Resource Accounting under "IMPACT ACCOUNTING", the researcher, academician and ICAI should take initiatives to remove the obstacles in the development of HRA

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# India Vision: 2020 

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## "A Vision is not a project report or a plan target. It is an articulation of the desired end results in broader terms."-Dr. A.P.J.Abdul Kalam


#### Abstract

Successful education policy forms the bedrock of all fields of national development- political, economical, technical, scientific, social \& environmental. Education is the foundation for a vibrant democracy growth of productivity and income\& employment opportunities, literacy must be considered the minimum right \& requirement of every Indian citizen. Presently, the country has about 300 million, illiterate adults. The government's goal is to achieve $75 \%$ literacy with in the next 5 years. A $100 \%$ literate India is of paramount importance for realizing the greater vision presented in this document.

Education is the second main thrust area of this vision document. Greater coverage better quality education at all levels from basic literacy to hi-tech science \& technology is the essential prerequisite for raising, agricultural productivity \& industrial quality, spurring growth of manufactured \&service expert, improving health \& nutrition , domestic stability \&quality of governance.

Literacy is an indispensable minimum condition for development but it is far from sufficient. In this increasingly complex \& technologically sophisticated world ,10 years of school education must also be considered an essential prerequisite for citizens to adapt \&succeed economically ,avail of social opportunities \&develop their individual potentials. The current enrolment rate for primary education is around $77 \%$ and for secondary education $60 \%$. Achieving 100\& enrollment, of all csschildren in the 6 to 14 year age group is an ambition but achievable goal for 2020 that should be persuade as a top priority.


## Introduction

India vision 2020 was initially a document prepared by "TIFAC" under the chairmanship of Dr. A.P.J.Kalam and a team of 500 experts. Dr. Kalam further gave shape to this concept through his seminar work along with Dr. Y.S.RanjanIndia 2020;Vision for the new millennium. It is difficult to predict the future. In our everyday lives we implicitly depend on a "future will be like the present" prediction more sophisticated forecasters often predict that potential changes will occur quickly in the short term, ignoring the institutional barriers to change.

According to Planning Commission Government of India-Identifying potentials and anticipating the challenges for future progress in different sectors of the national economy does not constitute a vision of the country's future.India 2020 will be bustling with energy ,entrepreneurship \& innovation. The countries 1.35 billion people will be better fed, dressed and housed, taller, healthier, more educated and longer living than any generation in the country's long history, literacy \& all major contagious diseases will have disappear. School involvement
from age $6-14$ will near $100 \%$ and drop out rates will fall to less than 1 in 20.
India claim to the title "silicon valley" of Asia will be followed by the diversification of IT to Biotechnology, Medical science and other emerging fields of technology, widening the field of India's international competitiveness and generating a large number of employment opportunities for the educated youth. These developments driven by the firm commitment of the government and a quantum expansion of vocational training programs will ensure jobs for all by 2020.

Computerization of education will dramatically improve the quality of instruction and pace of learning, so that many students will complete the first 12 years of school curriculum in as little as 8 . computerized distance education will catch on a big way \& enable tens of thousands more students to opt for affordable higher education. Computerization in government will streamline procedures and response time to a degree unimaginable now. Perceptive observer will find that India is leap frogging directly into a predominately service economy.

India will be much more integrated with the global economy \& will be a major player in terms of trade, technology and investment. Rising levels of education, employment\& income will help establish India internal security\& social environment. A united and prosperous India will be far less vulnerable to external security threats.

## Vision of India's education sector

The $21^{\text {st }}$ century will herald a powerful era of knowledge revolution. Vision for India's education sector should not only to achieve \& sustain 100\% literacy but also to refocus our higher education to nurture centers of excellence that would acquire global standing and international recognition. The main source of competitive advantages in $21^{\text {st }}$ century's going to be knowledge rather than wealth. The focus should therefore be on more equitable distribution of knowledge to empower the people of India to create wealth. The key to success in India's vision of dominating the knowledge industry lies in the ability of higher education system to quickly refocus \& reorient itself to become a globally efficient provider of knowledge.

One of the preconditions for achieving this goal is to significantly increase the public expenditure on the education sector to the level of at least $5 \%$ of GDP. Highly skilled manpower with a rare combination of hard work, sincerity, commitment\& capability is our major strength. We must capitalize on this strength through completely revamp of our educational system to emerge as a most competitive force in the field of IT, financial service\& entertainment industry.

## Nodal Points of Indian Prosperity

There are some nodal points of action, which when touched can release the enormous pent up energy of the society \& through it in to constructive action. Dr. A.P.J.Abdul Kalam has written in his book "INDIA VISION 2020"-that Transforming the nation in to a developed country, five areas in combination have been identified based on India' core competence natural resources \&
talented manpower for integrated action to double the growth rate of GDP\& realize the vision of developed India -

- Agriculture\& food processing
- Infrastructure with reliable\& quality electric power.
- Education\& health care
- ICT
- Critical technology\& strategic industries

India is a nation with a soul \& a great spiritual tradition founded upon faith in the power of the spirit to create \& manifest in the world. It is our spiritual value, our psychic essence, which is the core strength of Indian civilization that has sustained it for millenniums will elevate the quality of our national life in future. These values possesses the ultimate power both for national prosperity \& to propel India; to be a proud member of the world community. True spirituality will not make us less tolerant. Through our spiritual tradition takes an infinite variety of forms, they all share a common faith in our capacity as human beings to realize whatever we aspire for.

Our future depends not on what will happen to us, but on what we decide to become, and on the will to create it.

There are some nodal points which are given below--

1. Peace,security\& national unity
2. Food\& nutritional security
3. Jobs for all
4. Knowledge
5. Health
6. Technology\& infrastructure
7. Globalisation
8. Good governance
9. Work-values

Activation of all these nodal points requires firm \& determined adherence to high values, including prompt decision making, disciplined execution, systematic implementation, finally tuned co-ordination unceasing effort and endurance.

These nine nodes are not independent powers .Each draws upon and contributes to the power of the other seven .The are mutually supportive and reinforcing. They are not a hierarchy of power simultaneously. As peace and education are essential for growth of employment and living standards. So, are food, security \& employment opportunities essential for peace\& social stability ad so forth; but beyond these physical, social \& mental powers this country possess something even more powerful\& essential to its existence.

## Mission 2020 \& Education

The shortfall of skilled manpower \& professional can be met by India, where both educated unemployment \& the no. of people joining the workforce are on the rise. The government is paying heed to this challenge. Sarva-Siksha Abhiyan is geared towards achieving useful and relevant elementary education for all children by 2010.This movement is showing results. The number of out of
school children in the 6 to 14 years age group has dropped from 13.4 million in 2005 to 7.06 million in March 2006. Simillarly the UGC has announced a new budget with promising initiatives \& better funds for universitie.

## Our vision for 2020 in this regard Is to see a nation free from all forms Of child labour.

We need some "policy reforms", in the education sector. Players in this sectors must be given freedom to enter, operate \& exit. India need more universities while Japan has 4000 universities for its 127 million people\& U.S. has 3,650 universities for its 301 million; India has only 348 universities, for its 1.2 billion people.

India can not afford to lose more time on debates. In Japan, $75 \%$ of all higher education institutes are prevail. We need to pass the private universities Bill that has been pending in Parliament since 1995.

India need "curricular reforms" where technological knowledge is evolving with each day, educational institutions need to be granted the freedom to engage with industry \& change the curricula as \& when required. Educational institutions must teach what industry needs.

And finally, the education sector also need "financial reforms" especially in higher education. The government should provide scholarships \& loans to those, who need it the most \& leave academic fee to be determined by market forces. That's what will make our educational institutions relevant \& self sustaining. The need of the our, therefore is to rapidly implement this three pronged reform process, policy reforms, curricular reforms\& financial reforms.

## Suggestions:

These major points would be considered for the implementation-

1. Elimination \& removal of poverty.
2. Basic health \& hygiene for all.
3. Increased access to primary \& secondary education enhanced primary\& secondary education quality combination of secondary education\& skill based work, greater emphasis on vocational training\& technical education.
4. Increased involvement of woman in social \& other developmental responsibilities.
5. Education policy\& its implementation need to be dramatically improved. This would apply across the board(Primary, secondary\& university education)

As a consequence of all these initiatives, Indian population would realize improved standard of living increased life expectancy \& enhanced quality of life. Under the new dispensation, critical technology would be internally developed. There will be a huge domestic commercial opportunities. The ability needed to service this domestic commercial opportunity would be comparable to the best in the world. India will be able to seamlessly integrate with the rest of the world on technology, products\& service, quality of life \& social infrastructure.

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# Management of Fast Food Centers in Competitive Western Mumbai - A study 

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In the present times, it is the fast food craze that has created sensation all over. The fast food has occupied a demanding position in the list of top hot fad foods. People are getting lured into trying yummy fast food dishes, without possessing adequate knowledge regarding Indian fast food nutrition. Well, there is a need for bringing forward some eye opener nutrition facts about fast food.

These days, the fast food chains are booming in number and witnessing flourishing business. Abraham Lincoln had once said, "let the people know the facts and the country will be safe". Well, it also holds true regarding the information about fast food nutritional content. The prime motive is to make the people aware of the fact and then let them take conscious decision.

## Need of the Study:-

Being a Mumbaikar a researcher has to understand the concept of Fast food in a city like Mumbai which is referred as economic capital of India and in which fast food is a major market player. Every time when one walk into a fast food restaurant and order a double cheeseburger with everything, think about this: fast food presents serious health risks. Many people do not realize that every time you take a bite of a fast food hamburger, there are risks you may not be willing to take. Fast food restaurants have become a part of the Mumbaikar's way making it hard to accept the dangers. Fast food originated in the 1940's but flourished during the years following World War II becoming a worldwide phenomenon. Fast food is designed to taste good and is convenient and inexpensive. It is an easier and seemingly safer way to eat a meal. However, there are many downsides to eating fast food.

During the course of the study researcher found that, the food in these restaurants is often cooked in bulk in advance and kept cold, or reheated to order. Many fast-food restaurants are part of restaurant chains or franchise operations, and standardized foodstuffs are shipped to each restaurant from central locations. There are also simpler fast-food outlets, such as stands or kiosks, which may or may not provide shelter or chairs for customers.

Further study was undertaken to study Localization in greater detail through a analysis of different fast food franchise like pizza hut, Domino's, Macdonald's etc. which has developed an entirely Indian menu after studying the eating habits of Indian consumers. As a result, a new line of offerings, new price points and positioning have been developed the specially cater to the tastes of India.

Researcher also found necessary to undertake this study because one of the important motive was to find out the health value of the fast food of Mumbai.

In the contemporary times, Mumbaikars are heading their way towards fast food restaurants, for the purpose of snacking. Fast food is selling like real hot cakes especially amongst youngsters. Though fast food is not a very healthy option to go in for, but still people are opting for it because today fast foods have become an integral part of fad trend. Well, now when one has decided to eat fast food, then at least it is advisable to look out for healthy fast food choices as in low caloriefast food.
Fast food craze has created sensation all over and is sweeping millions of people into trying it. Seeing this phenomenon, fast food restaurants are working towards introducing healthy fast-food options. Super size fast food eating should be avoided, because there is a need to maintain balance. As it is fast foods contain large amount of calories and on the top of it, if larger quantities will be consumed, it will do a lot of harm to your body. So, eat but in moderate quantities.

## Objectives of the Study:-

Without the clear formulation of the objectives of research the investigator is likely to wonder aimlessly in his field and achieve nothing worthwhile. Following are the objectives of the research.

- To find the role of advertisement in promoting fast food in Mumbai.
- To find out the success of fast food industry in capturing Mumbai's Market.
- To study the nutritional value of Fast Food.
- To study Social responsibilities of Fast food companies towards community.


## The Hypothesis

- Advertising is the key factor in promoting fast food in Mumbai.
- The Major Competition for international fast food chains in India comes from road side fast food stalls.


## Methodology of the present study

The main aim of the present research is "To study present condition and situation of Mumbai's Fast Food industry Management." For this purpose researcher has adopted the Descriptive Method under which the Survey method is used. But it was not an easy task. Researcher has deeply done the analysis of each and every aspect of the Mumbai's fast food industry, keeping in mind aspects like objectives, content, and methodology.

## Major findings of the Study:-

- The main target markets are mainly young adults and families with children.
- In general there has been a rise in Fast food advertising in India.
- Ad spending generally peak in the summer months.


## Recommendations:-

- Stringent health checks, better inspection of facilities and improved standards should help in improving the quality of fast food joints leading to better and quality food.
- Self- regulation by the fast food industry or formation of industry association will lead to deployment of higher standards in the industry and keep a check on fly-by night operators out to make fast buck form the business.

These measures should go a long way in the management of the sector and its development in Mumbai.

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# Qualities of Effective Mathematics Teacher 

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Teaching itself is a complex and tension filled practice and hence it needs to be handled with care and sensitivity. Somehow teacher who are part of the systems are lacking of such sensitivity. Teaching is not just a teaching learning process but it is a profession and teacher is a professional. Some of the professional qualities of teachers in the context of mathematics are discussed in this article.

A quality of excellent Mathematics teacher is divided in the following categories as:
(A) Professional Knowledge
(B) Professional Attributes
(C) Professional Practice
(A)Professional Knowledge: Effective teacher of mathematics have a good knowledge of their professional work, their decision making capacity, their knowledge about planning and harmony relations. They have knowledge of students learning theories of mathematics and sound knowledge of subject and technology. Professional knowledge of teacher can be classified in to the following ways.
Knowledge of students: Effective teachers of mathematics have complete knowledge of the student's they teach. This includes the knowledge of students social, cultural, family back ground, previous knowledge etc; so he can use this knowledge best way and connect the new concept with previous one. They know physiological attitude of students and their comfort in the learning of mathematics. He knows the ways in which students learning is influenced by individual experiences and out of school learning, including language and family/ community values and conditions. He has knowledge of the characteristics of one's own culture and use of language and of how they differ from other cultures.
Knowledge of Subject: Effective teachers of mathematics have a thorough knowledge of mathematics appropriate to the student level they teach. They have good knowledge of current curriculum and previous standard curriculum what students learned. He is able to communicate the concepts of mathematics to real life situation and able to satisfy the students' desire why they are learning mathematics. He is able to connect concepts of mathematics within and other subjects. He has good command on the conversion of symbols to verbal and conversely. He has ability to help students make connections across the curriculum in order to promote retention and transfer of knowledge to real-life settings.
Knowledge of Learning Theories of Mathematics: Effective teacher of mathematics have rich knowledge of how students learn mathematics. He is closely associated with change in learning theories of mathematics. He has knowledge of modern technologies and best use of models, and languages etc.

He knows the effective strategies and techniques for teaching and learning of mathematics, creating enjoyment in learning and positive attitude to mathematics. He has ability to exhibit the professional dispositions delineated in professional, state, and institutional standards, working with students, colleagues, families, and communities.
B) Professional Attributes: Effective teachers of mathematics are committed and enthusiastic professionals. They always ready to learn and extend their knowledge of both mathematics and pupils learning. They set high, achievable goals for themselves and their students. They know the values of caring and respect of other.
Personal Attributes: The effective teacher of mathematics knows. How to engage students in their learning? He is enthusiasm about learning of mathematics. He is positive about mathematics and believes that every student can learn mathematics. He has rich knowledge of goal setting for student and set high and achievable goal for each individual. He has sense of humor, care, and respect for students. He should able to motivate the students for self learning.
Personal Professional Development: Effective mathematics teacher has thrust for personal professional development and believe in continued improvement of their teaching practices. He always searches opportunities for personal development. He undertakes sustained purposeful professional growth in their own knowledge and understands skill in mathematics in the teaching and learning. Effective teaching of mathematics has knowledge of physical, emotional, and social development of students at different ages and of the relationship of these to learning readiness and to cognitive development of students.
Community Responsibilities: Effective teachers of mathematics are active contributors to the range of communities relevant to their professional work. They have positive advocates for mathematics and its learning in the school and wider community. He ensures effective interaction with parents including provision of information about students learning progress and behavior in class with classmate. He has the knowledge of the role and responsibilities of members of different types of teams including, but not limited to, building based students support teams. He is able to share the responsibility for all students learning across the school and collaborate with colleagues to support every student's growth. He is actively participating in school decision making.
Professional Practice: Effective teacher of mathematics has knowledge of range of professional literature, particularly resources that relate to own teaching field(s). He is sensitive and responsive to all aspects of the context in which they teach. Professional practice depends upon the following concepts.
Learning Environment: Effective teacher of mathematics has ability to participate in the creation and nurturance to of a learning environment that supports standard based in equity, reflective practice, and collaborative learning for teachers at all stages of their concerns. He create environment in such a manner so each students feel comfortable and has learning opportunities. He has
ability to articulate and reflect on a personal philosophy and its relationship to teaching practice and professional learning choices and commitments. He has knowledge of the processes and skills associated with peer coaching and mentoring. Students are empowered to become independent learning's. He is motivated the students to improve their understanding of mathematics and develop enthusiasm for, enjoyment and interest in mathematics.
Planning for Learning:Excellent teacher of mathematics plan for organized learning experiences that have the flexibility to allow for spontaneous self directed learning. He has ability to use students prior knowledge and experiences to introduce new subject related content students back grounds and prior mathematical knowledge are taken into account of the set example of real life problems to learn. He has ability to select and support the use of instructional and assistive technologies and to integrate these into a coherence instructional design. He has ability to plan the questions and questioning to assist all students in developing skills and strategies in critical and high order thinking and problem solving.
Teaching Action: Teaching in action is an important factor in effective teaching of mathematics. Effective teachings of mathematics know how to provide instructions in class beyond the textbook. Since mathematics is applicable to real life problems and that is necessary skill for living. Effective teacher of mathematics has following actions in teaching as clear communication and explanation of topic and goals. He is able to use a variety of methods of instructions. Building interest and maintaining it by varying methods and/or by making the topic when possible relevant to the student's experiences. He is expert in engagement of students.
Conclusions: Effective teacher of mathematics has knowledge of classmanagement, knowing and caring for the students, addition in instructional skills, strong back ground in mathematics, expert in the preparation of effective lesson plan, active engagement of students, expert in conducting group activities / in class student collaboration, coherence, flexibility of teaching fits, individual students needs, cultivating students interest, understand the beauty of mathematics and giving importance on memorization after understanding .

Best schools are only 'best to the degree that they have 'best' teachers.

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# Information and Communication Technologies and Academic Engagement: Implication for Teacher Education Programme 

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#### Abstract

In planning for the infusion of ICTs into teacher preparation programmes, several factors important to a programme's success must be considered. This section provides a holistic framework to assist in designing the integration of information and communication technologies (ICTs) into teacher education. The framework is coherent with the context provided by today's society and reflects more recent understandings of the nature of learning, including aspects of learning communities during the school years and beyond into lifelong learning. Teacher education programmes need to prepare and support teachers in the appropriate choices and uses of ICT environments. The successful integration of ICT into the classroom will depend on the ability of teachers to structure the learning environment in non-traditional ways, to merge new technology with new pedagogy, to develop socially active classrooms, encouraging cooperative interaction, collaborative learning, and group work. This requires a different set of classroom management skills to be developed. The key skills of the future will include the ability to develop innovative ways of using technology to enhance the learning environment, and to encourage technology literacy, knowledge deepening and knowledge creation. By using the policy framework presented here, a ministry can assess its current educational policies, in the context of its current and future economic and social development goals. It can select the appropriate approach for connecting ICT to other education reform efforts. And it can plan a trajectory for connecting these education reform initiatives to the nations economic and social development goals.


## Introduction

Globalization and industrialization have had their impact manifested in almost every lifestyle, either in a positive or in a negative sense. It has equipped the modern world with information and communication technologies that helped man win against various odds. One of the prime contributions made by information and communication technology has been in the field of education. With the introduction of information and communication tools in the domain of education, there has been a radical change both in education standards as also in the way education is imparted. ICT tools have helped improve the quality of education by using multimedia and broadcast technologies to change the manner in the delivery of education. By doing so it has succeeded in drawing more students to schools that are attracted by audio and visual techniques and thus find it interesting to be associated with the same. Incorporation of ICT in education has also helped in extending the periphery of education and assisted
students to gain the latest knowledge relating to a particular topic. According to futurist Alvin Toffler (2002), "The illiterate of the 21st century will not be those who cannot read and write, but those who cannot learn, unlearn, and relearn". Information and communication technologies (ICTs)-which include radio and television and newer digital technologies such as computers and the Internet have been touted as potentially powerful enabling tools for educational change and reform. When used appropriately, ICTs help expand access to education, strengthen the relevance of education to the increasingly digital workplace, and raise educational quality by, among others, twining teaching and learning into an engaging, process connected to real life

Education in the $21^{\text {st }}$ century will be expected to equip children with a whole range of skills never before contemplated or required. Foremost currently, is the expectation that in a rapidly changing technological world all children will need to be communicating and problem-solving in ways that are resourceful, adaptive, creative and generative. To this end, pre-service teacher education programmes have a responsibility to ensure that beginning teachers are confident and competent in the field of ICT. And in this context this means not only areas related to personal skills, knowledge and ways of learning through ICT, but well developed pedagogical skills and knowledge of the transformative potential of ICT infused learning (Roder, 2001; Sulla, 1999).

### 2.0.1. A Paradigm Shift in Teacher Education to Infuse ICT

Swarts (2008) refers the need for teachers "to be adequately and appropriately trained through pre-service and in-service teacher education programmes to teach ICT Literacy". She considers that access to ongoing and appropriate ICT professional development is a pre requisite for all teachers, if they are to improve their confidence and competence in using ICT to meet the needs of all their students. Pelgrum and Law (2003) believe that teacher education, and in particular initial teacher education needs to undergo changes to prepare teachers for the challenges of the information age.

Bhatta (2008) emphasizes that the most straightforward task is making teachers IT literate with the greatest challenge lying in the third area of ICT integration. Hadad (2005) contends that a new paradigm for teacher education must emerge that replaces one-shot training with lifelong professional preparedness and development of teachers along a continuum of : a) initial preparation, b) structured opportunities for retraining, upgrading and acquisition of new knowledge and skills c) continuous support.

### 3.0.1. Importance of ICT in Teacher Education

Implementing ICT in teacher education makes us realize that Torneo (2004) is right in his assumptions that ICT has both an instrumental and a cultural dimension, and teachers need to understand and master both. To succeed, teachers can be motivated to work with multiple dimensions of ICT. How teachers act is situated in a social context with deep historical and cultural traditions. Saljo (2005) explains that institutions are units of social practice, having their own cultural tools in a physical, cognitive, communicative and historical context.

Further Lave and Wenger, 2003 have quoted that we are also involved in a number of communities of practice and within this community we share some common resources (such as routines, vocabulary and artifacts) that accumulate knowledge within the community where members are involved in relationships important for learning. All of this has an impact on teachers. Teacher education programs need to prepare and support teachers in the appropriate choices and uses of ICT environments. Furthermore, teachers' fundamental beliefs about how to teach their subject and how specific ICT resources can enhance and fundamentally change the way in which their students learn, needs to be challenged (Cox and Marshall, 2007).

## Prerequisites for Infusing ICT in Teacher Education

When planning for the infusion of ICTs into teacher preparation programmes, the Four themes and Four competencies identifies an important prerequisites. Together they represent a complex set of components to consider when planning for integration of ICTs into teacher education programmes. Consequently, professional associations, countries, states, or universities often collaborate within their larger educational community to establish ICT standards and guidelines that describe the knowledge, skills, and dispositions teacher candidates are expected to demonstrate upon completion of their teacher education programmes. These accepted standards not only provide guidance to universities when developing plans for infusion of technology into their teacher education programmes, but also establish a measure of consistency among teacher education programmes within a region.

### 4.0.2. Four Themes As A Prerequisites For Infusion of ICT In Teacher Education

I. Context and Culture: It identifies the culture and other contextual factors that must be considered in infusing technology into teacher education curriculum. It includes the use of technology in culturally appropriate ways and the development of respect for multiple cultures and contexts, which need to be taught and modeled by teachers.
II. Leadership and Vision: They are essential for the successful planning and implementation of technology into teacher education and require both leadership and support from the administration of the teacher education institution.
III. Lifelong Learning: It acknowledges that learning does not stop after school. In common with the other themes, it is important that teachers and teacher preparation faculty model lifelong learning as a key part of implementation, and as an ongoing commitment to ICTs in teacher education.
IV. Planning and Management of Change: It is the final theme, born of today's context and accelerated by technology itself. It signifies the importance of careful planning and effective management of the change process. These themes may be understood as a strategic combination of approaches that help teacher educators develop the four core
competencies. The core competencies may be seen as clusters of objectives that are critical for successful use of ICTs as tools for learning.

## Using Model Strategies for Integrating ICTS into Teacher Education Programmes

In an effort to implement ICT standards in a variety of coursework taken by preservice teachers across all subject disciplines, a number of methods and strategies have been identified. Many of these strategies employ commonly used productivity tools such as word processing, database, spreadsheet, or browser applications. These software tools can be used in countless ways to support the subject area curricula. Additional strategies, that are multipurpose in application, may also be used to help teacher candidates quickly develop technology-rich lessons for their fieldwork.

### 5.0 Web-Quest Model (For Web based Lessons)

i.Web Quests: A Web Quest is an inquiry-oriented activity in which most or all of the information used by learners is drawn from the Web. Web Quests are designed to use learners' time well, to focus on using information rather than looking for it, and to support learners' thinking at the levels of analysis, synthesis, and evaluation. The Web Quest model (Table 3.4) has been effectively applied to all levels of education, from elementary to postgraduate study, and in many different subject Areas.
The Web Quest model encourages teachers to create for their students new activities and adapt successful ones to take advantage of the Web's power. A higher- level application of this model has students develop their own Web-Quest activities to support the subject matter they are studying, and share the Web Quests with their peers. (San Diego State University, 2002)
ii. Cyber Guides: Cyber Guides include standards based, web-delivered units of instruction centered on core works of literature. Cyber Guides provide a quick supplementary set of activities for students as they explore specific pieces of literature. Each Cyber Guide contains a student and teacher edition, targeted standards, a description of the task, a process by which the task may be completed, teacher-selected web sites, and an assessment rubric. The student guides include activity directions written in a format appropriate for the age and reading ability of the students.
6.0.0 Multimedia Presentations: Multimedia combines media objects such as text, graphics, video, animation, and sound to represent and convey information. In this project-based method of teaching and learning, students acquire new knowledge and skills by designing, planning, and producing a multimedia product. The multimedia presentation contains content conveyed by the student's selection of media. The teachers in training can look at examples of projects and lessons, at Internet sites housing collections of student samples. Some examples of multimedia presentations include: creating a web page or site; developing a branching hypermedia stack; using a multimedia slide show application to create
a computer presentation; shooting and editing video to create a computergenerated movie.
7.0.0. Tele computing Projects: Tele computing projects are Internet-enriched learning activities that often involve students in one location collaborating with students or adults in one or more other locations. They may share, among other things: experiences, beliefs, data, information, problem-solving strategies, products they have developed or jointly developed.
Tele computing tools include email, electronic mailing lists, electronic bulletin boards, discussion groups, web browsers, real-time chatting, and audio- and video-conferencing. Online resources include web sites, interactive environments, and remotely operated robotic devices. Judi Harris provides a variety of Tele computing project web pages. (Harris, 2001)
Online Discussions: A common type of Tele computing activity is online discussion. With the growth of infrastructure around the world comes the ability to access others through remote connections. Students and teacher candidates can connect to experts and peers through a variety of formats, such as chat rooms, electronic bulletin boards, and email. Communicating online offers participants freedom to send and receive information efficiently across diverse geographic locations. Communication can occur asynchronously allowing time for reflection, or to compensate for varying time zones..

## TPD (Teacher Professional Development) Models

TPD (Teacher Professional Development) also known as "in-service" or "teacher education" is the instruction provided to teachers to promote their development in a certain area. It is the tool by which policymakers' visions for change are disseminated and conveyed to teachers. Though the recipient of TPD is the teacher, the ultimate beneficiary is the student. Thus, teacher professional development is often the most critical component of any ICT project.
The three models are described in more detail below.

## 1. Standardized TPD

Standardized TPD typically represents a centralized approach, involving workshops, training sessions and in many cases the cascade model of scaled delivery. Standardized, training-based approaches generally focus on the exploration of new concepts and the demonstration and modeling of skills. To bring about change will take more than the exchange of information typical of "make and take" top-down centralized models for professional development programmes (Dede, 1999). Research findings indicate that informal contact and communication between teachers is the most prevalent form of transferring ICT knowledge.

## 2. Site-based TPD

Teachers work with local ("in house") facilitators or master teachers to engage in more gradual processes of learning, building master of pedagogy, content and technology skills. Site based TPD often focuses on the specific, situational problems that individual teachers encounter as they try to implement new
techniques in their classroom practices.
Site-based models tend to:

- Bring people together to address local issues and needs over a period of time
- Encourage individual initiative and collaborative approaches to problems
- Allow more flexible, sustained and intensive TPD
- Provide ongoing opportunities for professional learning among a single set of teachers
(Gaible and Burns, 2006)
Butler and Leahy point to value of incremental learning associated with site-based communities of practice - where every participant has their own perspectives, values and assumptions that become part of the process of constructing new understandings, as in "forming and reforming frameworks for understanding practice: how students and teachers construct the curriculum..."


## 3. Self-directed TPD

In self-directed TPD, teachers are involved in initiating and designing their own professional development and would share materials and ideas as well as discuss challenges and solutions.

- This approach to professional development helps teachers to become models of lifelong learners.
- Informal versions of self-directed TPD find teachers seeking out experienced colleagues for advice or searching for lesson plans on the Internet.
- The emergence of on-line communities of teachers to provide support in professional development across a range of subject areas and themes (Pelgrum and Law, 2003)
Gaible and Burns (2005) consider that while teachers should certainly be encouraged to participate in ongoing, self-motivated learning, self-directed activities should not be used as the primary means of providing TPD. Instead, they should be used to complement and extend standardized and/ or site-based TPD.


## Conclusion

A change agenda "in which the technology is fully integrated into the learning process" constitutes a complex pedagogical scenario according to Noss and Pachler (1999: 210) where "the teacher's role will be altered fundamentally". Tinker et al. (2007) in their paper on recommendations for large scale 1:1 implementations, concur that TPD programmes should not be planned as singular interventions where teachers are simply exposed to opportunities for tinkering with the new technology. Instead, there needs to be a continuous cycle of exploration, reflection, discussion, application, and knowledge building, through which teachers grow professionally and their students gain deeper knowledge. The authors caution that TPD can constitute the largest cost in implementing effective ICT projects, while indicating strategies for reducing cost by
concentrating on teaching and avoiding overemphasizing the technology.
The mere introduction of technology in education, no matter how advanced, will not result in educational improvement or reform. Teacher training alone will not bring about change. The impact of any reform program will be greater if its introduction is linked to a curriculum that emphasizes deep understanding and knowledge creation, a pedagogy that emphasizes student engagement; teacher training that emphasizes continuous learning, ICT that is integrated into the curriculum, and student assessments that focus on knowledge application as well as recall of facts and procedures. Furthermore, it is important to note that the relationship between education and economic growth is necessary but not sufficient as education can be an important contributor to growth involving many other factors.

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# Clinical Trial in India: Current Regulatory and Ethical Overview 

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#### Abstract

Clinical Research is very essential for the development of new drugs, formulations, drug delivery systems, dosage regimen, surgical and diagnostic techniques, devices and therapies. India is becoming a very favorable destination for clinical trials industries due to i) highly diverse human gene pool and strong availability of study subjects across major therapeutic segments, ii) availability of quality data at a competitive cost, iii) favorable regulatory climate and development speed, iv) Presence of large number of pharmaceutical CROs and v) Strong IT skilled manpower. A challenge for government is to make a powerful regulatory system so that these trials will not run in unethical manner. To run these clinical trials in ethical manner, dual control system has been applied. One is the regulatory authority i.e CDSCO (controls the initiation of clinical trials in India) making it necessary that sponsor should get the clinical trials approval from the DCGI by filling appropriate application accompanying the data about the quality and safety of drug. The other control system is the evaluation of protocol, regular monitoring of the compliance and ethics of the approved clinical trial programmes till their completion by Independent Ethical Committees. In this presentation, the regulatory and ethical concerns of clinical trials are overviewed keeping in view of "The Drugs and Cosmetics Act 1940 \& Drugs and Cosmetics Rules 1945", ICMR and GCP guidelines of clinical trials.


## Introduction

Clinical trials is a "systematic study of new drug(s) in human subject(s) to generate data for discovering and/or verifying the clinical, pharmacological (including pharmacodynamic and pharmacokinetic) and/or adverse effects with the objective of determining safety and / or efficacy of the new drug"

India has emerged as a global hub for carrying out clinical trials and attracts the sponsors due to

- Highly diverse human gene pool and strong availability of study subjects across major therapeutic segments,
- Quality data at a competitive cost,
- High level of ICH-GCP and USFDA standard compliance,
- Favorable regulatory climate and development speed
- Presence of all Pharma major \& also in-house CROs set up by leading pharma companies. over 75 CROs.
- Strong IT industry availability of IT skilled manpower.


## Why clinical trial?

- Clinical trials are the link between the results of pre-clinical testing and actual medical practice.
- They allow researchers to demonstrate the efficacy and safety of a new medicine or treatment, which is a prerequisite for marketing authorisation.
- Without clinical trials, therefore, a medicine could not be made available for treating patients. It is only through clinical trials that progress will be made on new medicines and improved treatments for diseases.

Clinical Trials in a Nut Shell


## Approval of clinical trials in India

1. Regulatory Approval
2. Ethical Committee Approval

Regulatory Approval: New chemical entities may not be administered to human subjects in a clinical trial without permission from the Drugs Controller General of India (DCGI). Such permission may be obtained by submitting to the DCGI an application in form 44 for a clinical trial (CTA).

## The Content of clinical trial application is as follows

## Section A: General Information

1. Introduction about Company
2. Administrative Headquarters
3. Manufacturing Facilities
4. Regulatory permissions/approvals
5. Regulatory and intellectual property status in other countries( if any)

Section B: Chemistry, Manufacturing and Control

1. Product Description
2. Product Development
3. Information on Drug Substance
4. Information on Drug Product

## Section C: Non-clinical Data

1. Non-clinical data along with copy of approval for conducting non-clinical study
Section D: Proposed Phase Studies
2. Protocol for proposed studies

Legislation governing conduct of clinical trials

- The Drugs and Cosmetics act 1940 and rules 1945 govern the proper conduct of clinical trials and the protection of participants
- Ethical Guidelines for Biomedical research on Human Subjects issued by the Indian Council of Medical Research in 2000
- Indian Good Clinical Practice (GCP) Guidelines adopted in 2001
- Regulatory Bodies
- Central Drug Standard Control Organization (CDSCO):
- Regulatory apex body under the government of India that oversees all clinical trials in the country.
- Indian Council of Medical Research (ICMR):
- Apex body that formulates, co-ordinates and promotes biomedical research
- Genetic Engineering Approval Committee:
- Consists of experts in the field of genetic engineering and molecular biology; clinical trials involving the use of biotech products would be referred by DCGI to GEAC for recommendations
- Atomic Energy Review Board (AERB):
- Authority that exercises regulatory control over the approval of new types of radiation equipment, and for the registration/commissioning of new radiation equipment, inspection and decommissioning of installations
Other Administrative Requirements such as Covering letter, Application Form -44 along with treasury challan for Rs. 50,000/, Investigator Brochure,Details regarding name of the laboratories where analysis will be performed, Form -12 etc.


## The Ethical Principle

All research involving human subjects should be conducted in accordance with the ethical principles contained in the current revision of Declaration of Helsinki and should respect three basic principles, namely justice, respect for persons, beneficence (to maximize benefits and to minimize harms and wrongs) and non malaficence (to do no harm) as defined by "Ethical Guidelines for Biomedical Research on Human Subjects" issued by the Indian Council of Medical Research.

The following principles are to be followed:

- Essentiality
- Voluntariness, Informed consent and community agreement
- Non-exploitation
- Privacy and confidentiality
- Precaution \& risk minimization
- Professional competence
- Accountability and transparency
- Maximization of the public interest and
- Distributive justice
- Institutional arrangements
- Public domain
- Totality of responsibility
- Compliance


## The participants Right and how they are protected in clinical trials

 Right to detailed informationBefore enrolling in a clinical trial, participants must receive clear, understandable but sufficiently detailed information on the nature of the trial and be given the opportunity to ask and receive answers to questions. The benefits and possible risks of participating in the study are also explained. A decision should not be taken immediately and individual participants are allowed time to consider their position.

## Voluntary written informed consent

Consent from the participant is required. This consent is in written form to confirm the individual subject's participation on a voluntary basis. In the case of children, handicapped and very ill patients, the written consent of their representative or legal guardian is required.

## Right to withdraw at any time

A participant can withdraw from the trial at any time without giving a reason and without any prejudice to continuing treatment.

## Patient data confidentiality

The clinical trials sponsor and the authorities must have explicit permission from the individual patient to have access to his medical files. All documents containing details of a patient's identity are filed exclusively at the Investigator's site

## References

1. The Drugs and Cosmetics Act, 1940 and The Drugs and Cosmetic Rules, 1945 as amended from time to time. Ministry of Health and Family Welfare, Government of India.
2. Ethical guidelines for Biomedical research on human subjects - (2000). Indian Council of Medical Research, New Delhi.
3. Good Clinical Practice: Guidelines for Clinical Trials on Pharmaceutical Products in India (December, 2001). Central Drugs Standard Control Organisation, Directorate-General of Health Services, Ministry of Health and Family Welfare, Government of India, New Delhi.
4. Deodia S.S., Soni G.R., Kashyap V.K. and Jain N.K. "Clinical Trials: An Overview of Global Standards and Indian Scenario" Indian J. Pharm. Educ. Res.2010; 44(2):126-135
5. Gupta M. and Kohli K. "Current Regulatory and Ethical Requirements for Conducting Clinical Research in India" JIACM 2006; 7(3): 189-92.
6. Sarin K. "Clinical Trials: Overview and Opportunities"
7. Guidance for Industry on Submission of Clinical Trial Application for Evaluating Safety and Efficacy

## बिहारी काव्य में समाज

डॉ. उषा मिश्रा : श्रीमती एम. पी. शाह वुमेन्स कॉलेज, माटुंगा, मुम्बई

हिन्दी साहित्य के इतिहास में एक बहुत बड़ा समय रीतिकाल के नाम दर्ज है जो अपनी विशिष्टाओं के कारण अपना एक अलग स्थान रखता है और इस पूरे कालावधि में बिहारी और उनकी सतसई अपने आप में अद्वितीय है। ‘बिहारी सतसई' एक मात्र ऐसा ग्रंथ है जिसका संस्कृत में अनुवाद हुआ है। इतना ही नही तुलसीदास के 'रामचरितमानस' के पश्चात कोई ग्रंथ सबसे अधिक लोकप्रिय रहा तो वह ' बिहारी सतसई' ही है। इसको व्याख्यायित करने के तथा समझने के अनेक प्रयोग होते रहे और होते रहेंगे। जहाँ तक मेरी जानकारी है तो हिन्दी में तुलनात्मक समीक्षा की शुरूवात भी 'बिहारी सतसई' की पृष्ठभूमि पर ही हुआ। इतिहास गवाह है कि बिहारी और देव की तुलना का दौर लगभग १५ वर्षों तक चलता रहा। आलोचकों के समक्ष यह स्थिति भी उत्पत्न हई कि - 'शिवा को सराहौ के सराहौं छत्रसाल कौं।'

मिश्रबन्धुओं से लेकर आज तक 'बिहारी सतसई' पर सैकड़ों समीक्षात्मक पुस्तकें लिखी गयी। कहने का तात्पर्य यह कि श्रृंगार प्रधान सतसई परम्परा में ‘बिहारी सतसई' एक ऐसी कृति है जिसने लोकप्रियता के, समीक्षा के अनेक आयामों को प्राप्त किया है। बड़ी ईमानदारी से स्वीकार करती हूँ कि सालों-साल मेरे जेहन में यह बात बैठी थी कि बिहारी रीति कालीन कवि है और यह काल सामन्ती परिवेश में पला बढ़ा है। अत: राजाओं, सामन्तों को प्रसन्न करके जीविको-पार्जन करना ही इनके कर्मो तथा कर्तव्यों की इति थी। समाज के दुख-दर्द से इनका कोई लेना-देना नही था। परन्तु बिहारी को पढ़ाते समय विशेषरूप से यह प्रपत्र तैयार करते समय कई ग्रंथों के अवलोकन के पश्चात मुझे यह अहसास हुआ कि रीतिकालीन कवियों को पढ़ना अभी बहुत बाकी है। जब हम यह पढ़ते हैं कि रचनाकार अपने युगीन परिवेश को वाणी देता है तो यह कैसे सम्भव है कि बिहारी जैसे कवि जिस परिवेश में रहे उससे अछूता रहता कोई रचनाकार भला अपने युग से कैसे असम्पृक्त रह सकता है ? जिन तत्वों से कवि-मानस का निर्माण होता है जानेअनजाने उसकी रचनाएँ उससे प्रभावित होती ही है। यह बात अलग है कि कुछ प्रवृत्तियाँ विशेष रूप से उनकी रचनाओं में स्थान पाती है तो कुछ गौण रूप में।

जैसा कि हम सभी जानते हैं कि बिहारी उत्तर मध्य काल के कवि है और यह उत्तर मध्यकाल राजनैतिक उथल-पुथल का काल है। स्वयं बिहारी ने चार मुगल सम्राटों के शासन काल को देखा था। यद्यपि इनके जीवन का अधिकांश समय जहाँगीर और शाहजहाँ से जुड़ा था। बिहारी का जन्म भले ही मध्यमवर्गीय परिवार में हुआ था परन्तु उनका अधिकांश समय राजदरबार में ही बीता और महाराजा जयसिंह की उन पर विशेष कृपा थी और उस कृपा को नजरअंदाज करके उनके विरोध में लिखना या उनकी कमियों को रचनाओं के माध्यम से दर्शाना आसान बात नहीं थी। अत: उनकी रचनाओं में भूषण जैसा शौर्य और साहस तो नहीं है परन्तु जातीय भावना की कमी नहीं है। भूषण जैसी अभिव्यक्ति न होने के दो कारण थे - पहला तो यह कि बिहारी के आश्र्यदाता मुगलों के प्रतिद्वन्दी नहीं थे और दूसरा यह कि बिहारी का अधिकतर समय शाहजहाँ तक सीमित था। उन्होंने औरंगजेब के अत्याचारों को नहीं देखा था। परन्तु यह भी उतना ही सत्य है कि संवेदनशील रचनाकार अपने आस-पास की परिस्थितियों से प्रभावित होता है। तभी तो दुहरे शासन की मार झेलने वाली प्रजा की पीड़ा को बिहारी ने इन शब्दों में व्यक्त किया है।

दुसह दुराज प्रजानि कौ, क्यों न बढ़ै दु:ख द्वन्द।<br>अधिक अंधेरा जग करत, मिलि पावस रवि चन्द।

प्रत्येक कवि की अपनी एक सीमा होती है और उसकी अभिव्यक्ति का अपना एक अलग अन्दाज होता है। यही कारण है कि बिहारी कबीर की तरह डंके की चोट पर तो अपनी बात नहीं कहते परन्तु विपरीत परिस्थितियों का चित्रण उनकी रचनाओं में मिलता जरूर हैं -

$$
\begin{aligned}
& \text { बसै बुराई जासु तन, ताही को सनमानु। } \\
& \text { भलौ- भलौ कहि छोड़िये, खोटे ग्रह जपु दान। }
\end{aligned}
$$

आज हम जिस लोकतन्त्र में साँस ले रहे हैं वहाँ सारे संवैधानिक अधिकार हमारे पास है। फिर भी हम सत्ता का कितना विरोध कर रहे है और जहाँ करते हैं वहाँ हमें कितना सही परिणाम मिलता है हम सभी बहुत अच्छी तरह से जानते है। आज भी न जाने कितने अयोग्य व्यक्ति सत्तासीन है। बिहारी का समय तो शाही और सामन्ती ही नहों था वे स्वयं राजदरबारी कवि थे फिर भी उन्होंने अयोग्य अधिकारियों की नियुक्ति की और संकेत किया है -

> मरतु प्यास पिंजरा पर्यौं सुआ समय के फेर।
> आदर दे-दै बोलिअतु, वायसु बलि की बेर।।

हम उन दो दोहों को कैसे भूल सकते हैं जो उनके अपने आश्रय दाता की खामियों को दर्शाते है -
नहिं पराग नहिं मधुर मधु, नहिं विकास इहि काल।
अली कली ही सौ बँध्या। आगे कौन हवाल।।
स्वारथ सुकृत न श्रम वृथा, देखि विहंग बिचारि।
बाज पराएँ पानि परि, तू पच्छिन न मारि।।
राजा के आधीन जीवन-यापन करने वाले रचनाकार के लिए उस दरबारी परिवेश में उपरोक्त दोहा, जो राजा विरोधी है, लिखना आसान नहीं था। मुगलों की आधीनता स्वीकार करने लिए जयसिंह का राजपूतों से लड़ना बिहारी की दृष्टि में उचित नहीं था, जिसे उन्होंने प्रकारान्तर ढंग से उपरोक्त दोहे में व्यक्त किया है। ' बिहारी सतसई' में अनेक ऐसे दोहे हैं जहाँ बिहारी मात्र दरबारी कवि नही अपितु संवेदनशीन कवि के रूप में हमारे सामने आते हैं।

बिहारी के समय में समाज चार वर्गो में बँटा था। एक तो राजा नवाबों का, दूसरा सामन्तों का, तीसरा मध्यम वर्ग और चौथा वह वर्ग जो दलित था जो आदिम अवस्था का जीवन व्यतीत करता था। यह वर्ग सभी वर्गो के ऐश्वर्य साधन का जुगाड़ करता था परन्तु किसी योग्य नहीं समझा जाता था।

कैसे छोटे नरनु तैं सरत बड़नु के काम।
मढ़यौ दमामौ जातु क्यौं कहि चुहे के चाम।।
यह वर्ग गाँवो में रहता था और ग्राम जीवन को हेय माना जाता था। ग्रामीणों में हेय भावना घर कर गयी थी। गाँव नागरिकों, प्रशासनिकों के लिए व्यापारिक एवं आर्थिक किसी भी दृष्टि से महत्वपूर्ण न था। वहाँ तो सिर्फ धोबी, गदहों पर बोझ ढोने वाले तथा कुम्हार रहते थे। बिहारी ने इस स्थिति का वर्णन इस प्रकार किया है -

चल्यौ जाइ, ह्याँ को करे करै हाथिनु को व्यापार।

## नहिं जानतु इहि पुर बसैं धोबी, ओड़, कुंभार ।।

रीति कालीन काव्य में वर्गीय विषमता के अनेक चित्र मिल जाते हैं परन्तु ग्रामीणों में असंतोष का भाव नहीं दिखायी देता है। कारण, शायद उस समय साम्यवादी भावना का न होना है।

रीति काल में जो संस्कृति पोषित हो रही थी, उसमें शिक्षा के लिए उपयुक्त वातावरण नहीं था। अत: अंधविश्वास का बोलबाला था। एक बड़ा वर्ग जादू-टोने में विश्वास करता था। विशेष रूप से स्त्रियाँ। उनका तो इतना विश्वास था कि यदि उसकी विधि में कोई कमी रह गयी या कोई गल्ती हो गयी तो उसका उल्टा प्रभाव यह होता है कि उसका प्रकोप टोना सिध्द करने वाले व्यक्ति पर ही हो जाता है। इस सम्बन्ध में बिहारी का एक उदाहरण देखिए -

$$
\begin{aligned}
& \text { साजै मोहन-मोह कौं, मोहीं करत कुचैन। } \\
& \text { कहा करौं, उलटे परें टोने लोने नैन।। }
\end{aligned}
$$

टोना करने वाली स्त्रियों से लोग दूर रहते थे। लेकिन दूसरी तरफ बिहारी के दोहे में यह भी लक्षित होता है कि लोगों का जादू टोना करने वालियों पर बड़ा विश्वास था। उनका मानना था कि वे किसी को भी अपने वश में कर सकती है। बिहारी के दोहों में यह स्पष्ट से दिखायी देता है -

टुुहाई सब टोल मैं, रही जु सौति कहाइ।
सु तैं ऐचि प्यौ आपु-त्यों, करी अदोखिल आइ ।।
बिहारी ने अपने समय के दिखावे तथा आडम्बर को भी शब्द बध्द किया है -
जपमाला, छापे तिलक, सरै न एकौ कामु।
मन काँचै नाचै वृथा, साँचे राँचे रामु।।
सामान्य लोग, जिनमे शिक्षा और समझ दोनों नहीं थी, वे उपर्युक्त आडम्बर में फँस जाते होंगे। सामन्ती परिवेश, दरबारी दृष्टि और जन समुदाय से बहुत दूर रहने के बावजूद बिहारी ने ऐसे दोहे लिखकर अपनी दूरदृष्टि का परिचय दिया है। बिहारी ने ऐसे लोगों के बारे में भी अपनी लेखनी चलायी है, जिनकी कथनी-करनी में बड़ा अन्तर था। पंडित जी कथा में तो श्रोताओं को यह बताते थे कि परस्त्री की तरफ कुदृष्टि नहीं डालनी चाहिए जबकि श्रोताओं में उनकी परकीया बैठी रहती थी। दोनों भेदभरी दृष्टि से एक-दूसरे को देखकर मुस्करा देते थे। बिहारी के शब्दों में देखिए -

> परतिय दोष पुरान सुनि, लखि मुलकी सुखदानि ।
> कसु कर राखी मिश्र हूँ, मुँ ँह आई मुसकानि।।

पंडित ही नहीं ऐसे वैद्यों का चित्रण भी बिहारी ने किया है जो स्वयं नपुंसक थे परन्तु दुसरों के नपुंसकत्व को दूर करने के लिए अच्छा-खासा धन लेते थे और ईलाज का ढ़ोंग करते थे -

बहु धन लै अहसानु कै, पारौ देत सराहि।
बैद्य-बंधु हँसस भेद सौं, रही नाह-मुँह चाहि।।
उत्तर मध्य काल पूरी तरह से विसालिता के लबादे में लिपटा था। शासक वर्ग तो विलासी था ही उसकी विलासिता का प्रभाव पूरे समाज पर भी दिखायी पड़ती है। भारतीय परिवारों में देवर और भाभी का प्रेम अत्यन्त

पवित्र माना गया है। उनका विनोद भी सर्वविदित है। कभी देवर भाभी के सम्बन्ध को मातृत्व की दृष्टि से देखा गया तो कभी विशुध्द विनोद के रूप में। रीति काल में इसका एक अलग रूप दिखायी देता है। बिहारी के दोहों में इस तरह के कई चित्र मिलते हैं। एक तरफ तो देवर के प्रेम को प्राप्त कर नायिका की खुशी का ठिकाना नहीं रहता देवर फूल हने जुसुस उठे हरषि अंग फूलि। हँसि करत औषधि सखिनु देह ददोरुु भूलि।।
तो दुसरी तरफ देवर अपनी भाभी पर कुदृष्टि रखता है। परन्तु भाभी पतिव्रता है, सुशील है। उसे घर, परिवार तथा समाज का डर है। इस डर से वह किसी से कुछ कह भी नहीं पाती है। उसे इस बात का भी डर है कि अगर उसने इस बारे में किसी से कुछ नहीं कहा तो देवर कुछ अनुचित न कर जाये। सब तरह से डरी हुई भाभी सूखती जाती है -

> कहति न देवर की कुबति, कुलतिय कलह डराति।
> पंजर-गत मंजार ढिग सुक लौं सूकति जाति।।

बिहारी के दोहों में पतनोन्मुख समाज के अनेक ऐसे चित्र मिल जाते है। मध्य युग में मदिरा-पान तथा तम्बाकू का प्रचलन स्त्री-पुरूष दोनों में था। पूरा युग सुरा और सुन्दरी के मायाजाल में लिप्त था। लोगों का जीवन लक्ष्य हीन था और जो लक्ष्य था भी समाजोन्मुख नहीं था। ऐसे में समाज एवं साहित्य दोनों में नारी मात्र विलासिता की प्रतीक थी। मदिरा पान में उन्मत्त एक ऐसी ही नारी का चित्रण बिहारी ने किस प्रकार किया है -

हँसि हँसि हेरति नवल तिय, मद के मद उमदाति।
बलकि बलकि बोलति बचन, ललकि ललकि लपटाति।।
यहाँ तक कि विलासिनी नारी अपनी ममता तथा प्रेमिका के भेद तक को भूल बैठती है -

> बिहॉसि बुलाई बिलोकि, उत पौढ़ तिया रस धूमि।
> पुलकि पसोजति पूतकौ, पिय चूम्यौं मुख चुमि।।

जब नैतिकता का भार ढोने वाली स्त्री यह का हाल उस युग में था तो फिर पुरूषों के बारे में क्या कहना ? बिहारी ने अपने एक दोहे में ऐसे ज्योतिषी पिता का वर्णन किया है जो अपने पुत्र की जन्म-कुंडली में पिता की मृत्यु का योग देखकर दु:खी हो जाता है परन्तु दूसरे ही क्षण वह यह सोचकर प्रसन्न हो जाता है कि वह तो उसका पिता है ही नहीं -

## चित पितु मारक जोग गनि भयो भये सुत सोकु।

फिरि हुलस्यौ जिय जोय सी समुझ्यो जारज-जोग।।
रीति कालीन कवियों पर यह आरोप लगाया जाता है कि इनका काव्य सामन्ती धरातल पर ही टिका है। उसे उन्होंने सामाजिक धरातल पर नहीं उतारा है। यह सत्य भी है। बिहारी भी इस परिधि में आते हैं। यद्यपि उनके काव्य में उपरोक्त सामाजिक चित्र मिलते हैं। यहाँ इसे विशुध्द सामाजिक चित्र माने या यहाँ भी यही कहें कि ‘राधिका कन्हाई सुमिरन को बहानो है।' मध्यमवर्गीय परिवार में जन्मे बिहारी सामन्ती परिवेश में अधिक रहे भी और रमे भी। उनका अपना समाज भले ही उनके अन्तरमन में रहा हो पर अभिव्यक्ति पाते वक्त सामन्ती परिवेश अधिक प्रभावी रहा। इसलिए बिहारी के काव्य में समाज पर दृष्टिपात करते समय उनके उस परिवेश तथा उस

परिवेश के प्रभाव को देखना ही होगा।

## संदर्भ ग्रंथ :

१) बिहारी का नया मूल्यांकन : डॉ. बच्चन सिंह
२) बिहारी और उनका साहित्य : डॉ. देशराज सिंहभारी
३) बिहारी मीमांसा : डॉ. रामसागर सिंह
४) बिहारी का काव्य लालित्य : डॉ. रमाशंकर तिवारी

# पंचायत राज व्यवस्था से महिलाओं का अभ्युदय : <br> उत्तराखंड राज्य के जनपद चमोली का एक अध्ययन 

प्रोफेसर अंजलि बहुगुणा : प्रोफेसर अर्थशास्त्र विभाग, हेमवती नन्दन बहुगुणा केन्द्रीय विश्वविद्यालय, श्रीनगर, गढ़वाल (उत्तराखंड) 246174.
डॉ. पूनम धस्माना : प्रवक्ता (अंशकालिक), अर्थशास्त्र विभाग, बी. गोपाल रेड्डी, पौड़ी केम्पस, हेमवती नन्दन बहुगुणा केन्द्रीय विश्वविद्यालय, पौड़ी गढवाल, उत्तराखंड.

प्रस्तुत अध्ययन में उत्तराखंड राज्य के जनपद चमोली को एक ईकाई के रुप में अध्ययन हेतु लिया गया है। जनपद चमोली के पंचायत राज व्यवस्था में महिलाओं का अभ्युदय के अन्तर्गत महिलाओं की स्थिति का अध्ययन शिक्षा, व्यवसाय, आयु और जाति के आधार पर द्वितीयक आँकड़ों द्वारा किया गया है। प्रस्तुत अध्ययन में द्वितीयक आँकड़ों का आकलन सांख्यिकी दृष्टि से प्रतिशत के आधार पर किया गया है। अध्ययन से यह स्पष्ट होता है कि जनपद चमोली में वर्ष 2008 की चुनावी प्रकिया में पंचायत राज व्यवस्था (जिला स्तर, क्षेत्र स्तर एवं ग्राम स्तर) में महिलाओं का प्रतिशत 52.34 है। जनपद चमोली में 599 ग्राम प्रधानों में से 311 (51.91\%) महिलायें ग्राम प्रधान है। 249 क्षेत्र पंचायत सदस्यों में से महिलाओं की संख्या 131 (52.61\%) है। 27 जिला पंचायत निर्वाचित सदस्यों में $16(59.25 \%)$ महिलायें जिला पंचायत सदस्य है। निष्कर्ष रुप से यह कहा जा सकता है कि जनपद चमोली में पंचायत राज व्यवस्था में निर्वाचित सदस्य महिलाओं को अपनी उच्च शिक्षा बढ़ाना आवश्यक है। इससे महिलाओं को पंचायत राज व्यवस्था की कार्यप्रणाली हेतु अन्य पर निर्भर न रहकर स्वयं निर्णय ले सकती है। निर्वाचित महिलायें कृषि से जुड़ी है। पंचायत राज व्यवस्था में युवा वर्ग की तथा सामान्य जाति की महिलायें अधिक है। महिलाओं के अभ्युदय में सभी जातियों की महिलाओं को मिलकर भागीदारी देनी होगी। जिससे महिलाओं का कल्याण एवं उत्थान होगा।

## प्रस्तावना :

73 वें 74 वें संविधान संशोधन के बाद ग्रामीण भारत में पंचायतों के प्रचार प्रसार में क्रान्ति आई, क्योंकि पंचायत राज व्यवस्था को संवैधानिक दर्जा मिला। इस नवीन पंचायत राज व्यवस्था में पहली बार महिलाओं के लिये $1 / 3$ स्थान आरक्षित किये गये तथा पुरुष वार्ड से भी महिलायें चुनाव लडने के लिये स्वतन्त्र हुई । इस अधिनियम में यह प्रावधान रखा गया कि महिला वार्ड या आरक्षित महिला निर्वाचन क्षेत्र से वेववल महिला ही चुनाव लड सकती है। इस प्रावधान द्वारा महिलाओं का पंचायत राज व्यवस्था में अभ्युदय तथा राजनैतिक सशक्तिकरण हुआ। जिससे महिलाओं के प्रति हिंसात्मक पहलुओं एवं किशोरियों के साथ भेदभाव को समाप्त करने का प्रयास किया जा रहा है। ग्रामीण क्षेत्रों में किशोरियों एवं महिलाओं के व्यक्तित्व की प्रगति तभी सम्भव होगी जब वे शिक्षित होकर अपने अधिकारों को समझेगी एवं शोषण के खिलाफ अपनी आवाज उठा सकेगी। पंचायत राज व्यवस्था में सहभागिता प्राप्त कर महिलाओं को ग्रामीण क्षेत्रों के विकास एवं सामाजिक न्याय सुनिश्चित करने का अवसर प्राप्त हुआ। यह ग्रामीण महिलाओं एवं किशोरियों की स्थिति को सुधारने के लिये आवश्यक कदम है।

महिलाओं को राजनैतिक रुप से सशक्त बनाने में "भारतीय सरकार ने संविधान के आर्टिकल 243 डी

में संशोधन कर महिलाओं के लिये स्थानीय सरकार में 50 प्रतिशत आरक्षण दिया।" ${ }^{1}$ पंचायत राज व्यवस्था में भागीदारी से ग्रामीण महिलाओं की छवि निरन्तर बदली है। महिलायें आर्थिक, राजनैतिक एवं सामाजिक क्रिया कलापों से जुड़ी है। उन्हें अपने विचारों को प्रस्तुत करने हेतु मंच मिला। उनकी नेतृत्वता एवं निर्णय लेने की क्षमता विकसित हुई है। इससे ग्रामीण महिलाओं एवं किशोरियों का मनोबल ऊँचा हुआ है। "ग्राम सभा की मीटिंग में महिला और पुरुष संसाधनों के उचित उपयोग तथा सुविधाओं (पेयजल, सड़क, शिक्षा एवं बिजली) पर विचारविमर्श करते है।" "सर्वे एजेन्सी एसी नील्स ने पंचायत राज मन्त्रालय के लिए देश के 23 राज्यों, 114 जिलों, 228 ब्लाकों और 1368 ग्राम पंचायतों में पहला देशव्यापी सर्वेक्षण के आधार पर पंचायती भागीदारी से 80 प्रतिशत महिलाओं का आत्मविश्वास बढ़ा।" "उत्तराखंड राज्य में घरेलु हिंसा से निबटने में $50 \%$ निर्वाचित प्रतिनिधियों ने प्रयास किया। $78.7 \%$ प्रतिनिधियों के आत्मसम्मान में बदलाव आया है। $81.5 \%$ प्रतिनिधियों को ग्रामीणों के बीच आदर में बदलाव आया है। $73.7 \%$ प्रतिनिधियों की निर्णय लेने की क्षमता मे बदलाव आया है।" ${ }^{4}$
"गोपालपुरा ग्राम, जयपुर (करनार्ड 2007) ${ }^{5}$ की महिला सरपंच की उच्च शिक्षा ने गाँव के आधारभूत ढ़ाँचे को नया रुप देने तथा पंचायत कार्यो को समझने में काफी मदद की।" "शोधों का यह निष्कर्ष है (जयाल 2006) ${ }^{6}$ कि महिलाओं ने जरुरतों को ध्यान में रखकर पानी, पोषण केन्द्रों और बच्चों की शिक्षा पर अधिक खर्च किया है।" "हिमाचल प्रदेश में (इस्ट्टीट्यूट ऑफ सोशल स्टडीज ट्रस्ट, 2005) ${ }^{7}$ महिला पंचायत सदस्यों ने विवाह एवं शिशु पंजीकरण करने में सफलता प्राप्त की।" "मध्य प्देश में (रवि बेंकट 2004) ${ }^{8}$ पंचायत राज व्यवस्था के तहत महिलाओं ने बच्चों के स्कूल छोड़ने के कारणों को जानने की जिम्मेदारी ली तथा किशोरियों के लिये ज्यादा कमरों का निर्माण किया। मातृत्व एवं शिशु केयर में बेहतर कार्य किया।" पंचायत राज व्यवस्था में भागीदारी से महिलाओं ने ग्रामीण क्षेत्रों की जरुरतों को ध्यान में रखकर धन को खर्च किया। उत्तराखंड राज्य में महिलाओं को पंचायत राज व्यवस्था में 50 फीसदी का आरक्षण दिया गया है। महिलायें पूरे जोश के साथ अपने कार्यो का निर्वहन कर रही है और गांवों के आधारभूत संरचना को बदलने का सक्षम प्रयास कर रही है। शोध प्रारुप :

प्रस्तुत अध्ययन का उद्देश्य जनपद चमोली में पंचायत राज व्यवस्था से महिलाओं के अभ्युदय के अन्तर्गत महिलाओं की स्थिति को ज्ञात करना है। यह अध्ययन उत्तराखंड राज्य के जनपद चमोली में वर्ष 2008 के पंचायत राज व्यवस्था में (जिला स्तर, क्षेत्र स्तर एवं ग्राम स्तर) निर्वाचित सदस्य महिलाओं की स्थिति को शिक्षा, व्यवसाय, आयु और जाति के आधार पर प्रतिशत द्वारा दर्शाता है। द्वितीयक ऑकडे ग्राम पंचायत विभाग, जनपद देहरादून (उत्तराखंड) से लिये गये है।

## अध्ययन क्षेत्र :

उत्तराखंड राज्य का गठन 9 नवम्बर वर्ष 2000 को उत्तरप्रदेश के उत्तरीभाग का विभाजन करके गठित किया गया। भारत का यह 27 वाँ राज्य बना। उत्तराखंड राज्य का भौगोलिक क्षेत्रफल 55845 वर्ग किमी. है। 2001 की जनगणना के आधार पर राज्य की जनसंख्या 84.80 लाख है। उत्तराखंड राज्य में सबसे अधिक क्षेत्रफल (9136) वर्ग किमी.) चमोली जनपद का है। उत्तराखंड राज्य के जनपद चमोली पर्वतीय क्षेत्र है। प्राकृतिक आपदाओं से जनजीवन समय-समय पर अव्यवस्थित हो जाता है। जनपद में रोजगार की अपर्याप्तता,

स्वास्थ असुविधा, कृषि पर निर्भरता एवं शिक्षा के स्तर में सुधार की आवश्यकता है। ग्रामीण क्षेत्र में इन समस्याओं के निराकर हेतु पंचायत राज व्यवस्था की निचली प्रणाली ग्राम पंचायत की भूमिका अहम् हो जाती है। जनपद चमोली में 9 विकासखण्डों में जोशीमठ, दशोली, घाट, पोखरी, कर्णप्रयाग, गैरसैण, नारायणबगड़, थराली एवं देवाल है।
जनपद चमोली में पंचायत राज व्यवस्था में महिलाओं की स्थिति :
जनपद चमोली में वर्ष 2008 की चुनावी प्रक्रिया में पंचायत राज व्यवस्था ग्राम स्तर पर कुल ग्राम प्रधानों की संख्या 599 है जिसमें 311 ( $51.91 \%$ ) महिलायें है। क्षेत्र स्तर पर 249 सदस्यों में 131 ( $52.61 \%$ ) महिलायें है। जिला स्तर पर 27 सदस्यों में 16 ( $59.25 \%$ ) महिलायें है। त्रीस्तरीय पंचायत राज व्यवस्था में निर्वाचित महिलाओं की कुल संख्या 458 है। जनपद चमोली में पंचायत राज व्यवस्था में निर्वाचित महिलाओं की स्थिति (शिक्षा, व्यवसाय, आयु एवं जाति) को तालिका-1 में दिखाया गया है।

तालिका - 1 जनपद चमोली में निर्वाचित सदस्य महिलाओं की स्थिति

| शैक्षिक विवरण |  | जिला <br> स्तर | क्षेत्र स्तर | ग्राम स्तर | कुल महिलायें <br> (\%) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| साक्षर |  | 1 | 1 | 53 | 66(14.67\%) |
| प्राथमिक / जूनियर हाईस्कूल |  | 3 | 6 | 146 | 215(47.77\%) |
| हाईस्कूल / इन्टर |  | 8 |  | 74 | 108(24\%) |
| स्नातक / परास्नातक |  | 4 | 2 | 35 | 61(13.55\%) |
| पंचायतो में कुल महिलायें |  | 16 / 16 | 126 | 31 308/311 | 450 / 458 |
| पंचायत राज व्यवस्था में $8(1.74 \%)$ महिलाओं का शिक्षा का विवरण उपलब्ध नहीं है। जिसमें 5 क्षेत्र पंचायत सदस्य महिलायें और 3 ग्राम प्रधान महिलायें है। |  |  |  |  |  |
| व्यवसायिक विवरण | जिला स्तर | क्षेत्र स्तर |  | ह्गाम स्तर | कुल महिलायें <br> (\%) |
| व्यवसाय | 0 | 1 |  | 0 | 1(0.21\%) |
| कृषि | 16 | 130 |  | 310 | 456(99.78\%) |
| पंचायतों में कुल महिलायें | 16/16 | $131 / 131$ |  | 310 / 311 | 457 / 458 |
| पंचायत राज व्यवस्था में 1 (0.21\%) ग्राम प्रधान महिला का व्यवसायिक विवरण उपलब्ध नहीं है। |  |  |  |  |  |
| आयु विवरण | जिला स्तर | क्षेत्र स्तर |  | ह्गाम स्तर | कुल महिलायें <br> (\%) |
| 35 वर्ष से काम | 12 | 78 |  | 153 | 243(56.64\%) |
| 35 से 55 वर्ष | 4 | 52 |  | 121 | 177(41.25\%) |
| 55 वर्ष से अधिक | 0 |  | 1 | 8 | 9(2.09\%) |


| पंचायतों में कुल महिलायें | 16 / 16 | 131/131 | 282/311 | 429 / 458 |
| :---: | :---: | :---: | :---: | :---: |
| पंचायत राज व्यवस्था में $29(6.33 \%)$ ग्राम प्रधान महिलाओं का आयु विवरण उपलब्ध नहीं है। |  |  |  |  |
| जाति विवरण | जिला स्तर | क्षेत्र स्तर | ह्राम स्तर | कुल महिलायें <br> (\%) |
| सामान्य जाति | 3 | 64 | 142 | 209(48.83\%) |
| अनुसूचित जाति | 3 | 26 | 51 | 80(1.86\%) |
| $\begin{aligned} & \text { अनुसूचित } \\ & \text { जनजाति } \end{aligned}$ | 1 | 1 | 10 | 12(2.80\%) |
| पिछडा वर्ग | 1 | 5 | 8 | 14(3.27\%) |
| महिला | 3 | 35 | 67 | 105(24.53\%) |
| अनारक्षित | 3 | 0 | 3 | 6(1.40\%) |
| आरक्षित | 2 | 0 | 0 | 2(0.46\%) |
| पंचायतों में कुल महिलायें | 16 / 16 | 131/131 | 281/311 | 428 / 458 |

स्रोत - ग्राम पंचायत विभाग, जनपद देहरादून (उत्तराखंड)
तालिका - 1 यह दर्शाती है कि पंचायत राज व्यवस्था में कुल महिलायें 458 है। शैक्षिक आधार पर $450(98.25 \%)$ महिलाओं का शैक्षिक विवरण उपलब्ध है तथा $8(1.74 \%)$ महिलाओं का शिक्षा का विवरण उपलझ्ध नहीं है। निर्वाचित महिलाओं का शिक्षा का स्तर यह दर्शाता है कि साक्षर 66(14.67\%), प्राथमिक / ज्यूनियर हाईस्कूल $215(47.77 \%)$, हाईस्कूल / इन्टर 108(24\%), स्नातक / परास्नातक 61(13.55\%) महिलायें है। उच्च शिक्षित महिलायें कम है। उच्च शिक्षा की कमी से निर्वाचित सदस्य महिलाओं को सरकार द्वारा चलाई गई योजनाओं और नीतियों को समझने में बाधा हो सकती है। इस प्रकार महिलाओं को अपनी शिक्षा को बढ़ाना आवश्यक है। व्यावसायिक स्तर में 457 महिलाओं का विवरण उपलब्ध तथा 1 महिला का उपलब्ध नहीं है। निर्वाचित सदस्य महिलाओं के व्यवसाय में 1 ( $0.21 \%$ ) एवं कृषि में 456 ( $99.78 \%$ ) महिलायें है। आयु वर्ग के आधार पर 429 महिलाओं की ( $93.66 \%$ ) आयु का विवरण उपलब्ध है तथा $29(6.33 \%)$ महिलाओं का आयु विवरण उपलब्ध नही है। जनपद चमोली में 35 से कम आयु की $243(56.64 \%)$ महिलायें, $35-55$ वर्ष की $177(41.25 \%)$ महिलायें तथा 55 वर्ष से अधिक आयु की $9(2.09 \%)$ महिलायें है। जाति के आधार पर $428(93.44 \%)$ महिलाओं का जातीय विवरण उपलब्ध है तथा $30(6.55 \%)$ महिलाओं का जातीय विवरण उपलब्ध नहीं है। जनपद चमोली में 209(48.83\%) सामान्य जाति, अनुसूचित जाति 80(1.86\%), अनुसूचित जनजाति $12(2.80 \%)$, पिछडा वर्ग $14(3.27 \%)$, महिलायें $105(24.53 \%)$, अनारक्षित $6(1.40 \%)$ एवं $2(0.46 \%)$ आरक्षित महिलायें है।

## निष्कर्ष :

उत्तराखंड राज्य में पंचायत राज व्यवस्था में महिलाओं को 50 प्रतिशत आरक्षण देकर निश्चित तौर से महिलाओं के अभ्युदय का सार्थक प्रयास किया गया है। जनपद चमोली में निर्वाचित महिलाओं को शैक्षिक स्तर बढ़ाने की आवश्यकता है जिससे वे विभिन्न परिस्थितियों में सुगमता एवं शीघ्रता से निर्णय ले सकती है। किशोरियों की शिक्षा हेतु "उत्तराखंड राज्य में गौरा देवी कन्या धन योजना चलाई जा रही है, इसके अन्तर्गत बी. पी. एल. परिवारों की इण्टरमीडिएट परीक्षा उत्तीर्ण करने वाली छात्राओं को कन्याधन का लाभ मिलेगा। वर्तमान वर्ष के लिये 4000 लाख रुपये की व्यवस्था की गई। इसके अर्न्तगत 25 हजार रूपये की धनराशि राष्ट्रीय बचत पत्र के रूप में दिये जाने की व्यवस्था की गई।"9 जिससे बालिकाओं की शिक्षा के लिये प्रोत्साहन मिले। जनपद चमोली में कृषि मुख्य व्यवसाय है तथा कृषि उत्पादन में निरन्तर कमी से ग्रामीण जनता के आय का स्तर नीचा है। इस प्रकार रोजगारपरक कार्यक्रमों से जनता को लाभान्वित करने का प्रयास किया जा रहा है। महिलाओं को आत्मनिर्भर बनाने के लिये उत्तराखंड राज्य में दुग्ध विकास में महिलाओं की सहभागिता प्राप्त करने हेतु "महिला डेयरी विकास योजना के लिये 135.85 लाख रूपये का बजट प्राविधान, 80 नई महिला दुग्ध समितियों, 1550 मिनी डेयरी के गठन व 20 के पुनर्गठन का लक्ष्य एवं अब तक 55 सघन मिनी डेयरी यूनिट की स्थापना की गई।" ${ }^{10}$ जिससे महिलाओं की आर्थिक स्थिति बेहतर बने एवं ग्रामीण जनता का पलायन रूवेच। युवा महिलायें नई सोच एवं बुलन्द इरादों के साथ ग्रामीण विकास तथा महिला कल्याण के कार्यक्रमों में रूचि ले रही है। पंचायती राज में अनुसूचित जातियों तथा अनुसूचित जन जातियों के लिये स्थान सुरक्षित किये गये है। सामान्य जाति की भाँति अन्य जातियों की महिलाओं के जीवन-स्तर में सुधार हेतु आवश्यक है कि वे अपने अधिकारों और कर्त्तव्यों को जाने, समझें तथा इसका उचित प्रयोग जनहित में लगाये।

## सुझाव:

त्रिस्तरीय पंचायत राज व्यवस्था की कार्य प्रणाली को बखूबी समझने हेतु महिलाओं के शिक्षा के स्तर को उच्च बनाना जरुरी है। निर्वाचित महिलाओं एवं ग्रामीण महिलाओं को जागरुक करना होगा कि वे अपनी किशोरियों को उच्च शिक्षति करें जिससे वे अपने अधिकारों को भलीभाँति सम ३ेंगों इवं जानेगीं। निर्वाचित महिलाओं एवं ग्रामीण महिलाओं को आत्मनिर्भर बनाने के लिये रोजगारपरक कार्यक्रमों से अवगत कराके आत्मनिर्भर बनाना चाहिये। सामान्य जाति के अतिरिक्त अन्य जातियों की महिलाओं को आगे बढ़कर अपनी भागीदारी का उपयोग जनहित में करना चाहिये। महिलाओं को प्रशासनिक स्तर पर उचित सहयोग मिलना चाहिये तथा उनके साथ पक्षपात रहित व्यवहार हो। निर्वाचित महिलाओं को प्रशिक्षण देने की व्यवस्था हो। ग्रामीण महिलाओं को भी पंचायत बैठको में अपना सहयोग देकर निर्वाचित महिलाओं को प्रोत्साहित करना चाहिए जिससे ग्रामीण महिलायें योजनाओं को समझेगी तथा अपना सहयोग दे सकेगी। ग्रामीण महिलाओं को उनके अधिकारों के प्रति जागरुक करना आवश्यक है। जिससे कि वे सामाजिक कुरीतियों को ग्रामीण समाज से समाप्त कर सके इससे बालिकाओं की राह सुगम बनेगी। तभी सही मायने में महिलाओं का अभ्युदय ग्रामीण समाज में होगा।
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# मध्यकालीन भक्ति साहित्य : सामाजिक एकात्मता 

डॉ. मिथिलेश शर्मा : अध्यक्षा हिंदी विभाग, रामनिरंजन झुनझुनवाला कॉलेज, घाटकोपर पूर्व, मुंबई

## तुलसी की समन्वय साधना :

आधुनिक समाज पूर्व की तुलना में बहुत अधिक प्रगति कर चुका है। विज्ञान, तकनीक, संस्कृति, दर्शन सभी आगे बढ़ने की होड़ में जुटे हुए हैं। और, सबका लक्ष्य एक ही है "मानवतावाद"। धार्मिक क्षेत्र में, ईश्वर एवं उसकी अलौकिक शक्तियों का आश्रय संतों व समाज सुधारकों ने मानवसुख एवं सामाजिक प्रगति लाने वे लिए किया। सदैव ही, मानव समाज मानवता के आदर्श को लेकर आगे बढ़ता रहा है और आगे भी बढ़ता रहेगा। मानव के किया-कलापों को जन-समुदाय से जोडनेवाली मुख्य शक्ति प्रत्येक मानव में व्याप्त मानवीयता है, जिसका महत्व सदैव ही अनुकरणीय रहेगा।

समन्वय हासोन्मुख मध्यकाल की आंतरिक आवश्यकता थी और उसकी आवश्यकता हर युग में रहेगी। सामन्ती युग में जन्में महाकवि तुलसीदास की ऑखों ने जन साधारण की पीड़ा और असमानता वे तांडव को ओझल होने नहीं दिया। सर्व साधारण की पीड़ा उनकी अपनी पीड़ा बनकर फूटी। सोलहवीं शताब्दी में वे शक्तियॉ विकसित नहों हो पाई थीं जो समाज में समानता लाने में सक्षम हैं। फिर भी, तुलसीदास जी की कुशाग्र बुद्धि ने विषमता को दूर करने के लिए समन्वयवाद का बिगुल बजा ही दिया। इस समन्वय के लिए तुलसी ने सामाजिक, पारिवारिक, आध्यात्मिक, धार्मिक, राजनीतिक, आदि सभी क्षेंत्रों को चुना और इन सभी क्षेत्रों में समन्वय स्थापित करते हुए तद्युगीन समाज में व्याप्त घोर अशांति, पापाचार, अनाचार, अधार्मिकता, विषमता, आदि को दूर करने की सफल चेष्टा की। समाज में समानता स्थापित करने के लिए "रामचरितमानस" की महत्वपूर्ण भूमिका रही है।
"बिनु विज्ञान कि समता आवइ। कोउ अवकाश कि नभ बिनु पावइ।" (उ. का.)
आज से कई वर्षो पूर्व लिखी गई यह चौपाई बताती है कि सामाजिक समानता के लिए विज्ञान का पूर्ण विकास आवश्यक है। विना विज्ञान के समता संभव नहों है। जिस प्रकार बिना सड़क के गाड़ी का चलना संभव नहीं ठीक उसी प्रकार बिना विज्ञान (तकनीक) के मानव के विचारों में सामाजिक हित की भावना भरना टेड़ी खीर है। वास्तव में विज्ञान ‘सभ्य समाज की समानता की आधार शिला है।’ यह सत्य सदैव रहेगा। मार्क्स और लेनिन का दर्शन भी यही कहता है कि - 'मूलतः विज्ञान ही उन परिस्थियों को समाज में उत्पन्न कर सकता है जो समाज में समानता लाने के लिए अनुकूल होंगी।' ?

तुलसीदास जी समाज में समानता लाने के पूर्ण समर्थक थे। उनका रामराज्य के विषय में लिखा यह दोहा मन में उत्पन्न सभी शंकाओं का समाधान कर देता है। जैसे -

## दण्ड जतिन कर भेद जहॉ, नर्तक नृत्य समाज।

जीतहुं मनहिं सुनिअ अस रामचन्द्र के राज। । (उ. का.)
रामराज्य में दण्ड शब्द केवल सन्यासी लोगों के हाथ में मदद के लिए किया जाता था और अन्य किसी अर्थ में नहीं। दण्ड का प्रयोग सजा के अर्थ में विलुप्त हो गया था। भेद शब्द केवल सुरताल के भेद के अर्थ में और जीतने शब्द का अर्थ मन जीतने तक सीमित रह गया। किसी को किसी के जीतने की आवश्यकता ही नहीं रह गई थी। समानता के प्रेमी तुलसी ने ऐसे राज्य की कल्पना की जहॉ कोई दु:खी न हो। वे कहते हैं -

## 'नहिं दरिद्र कोउ दुखी न दीना। नहिं कोउ अधुध्द न लच्छन हीना।।'

साहित्य गंगा की तरह निर्मल और सबका हित करने वाला हो। वही श्रेष्ठ है "कीरति भनिति भूत भलि सोई। सुरसरि सम सब कर हित होई।।" (बा. का.)
तुलसी के समय में धर्म मानवीयता का सबसे बड़ा आधार था। महाकवि की दृष्टि में धर्म - दूसरों वरो सुख पहुँचाना है और अधर्म - दूसरों को दुख पहुँचाना है।

जैसे - 'परहित सरिस धर्म नहिं भाई, पर पीड़ा सम नहिं अधमाई,'
तुलसीदासजी को लोक और शास्त्र दोनों का पूरा ज्ञान था। उन्होंने भारत और उसकी चिन्तनधारा को समझा तथा धर्म को साधना के क्षेत्र से निकालकर लोकजीवन से जोड़ा। इसीलिए, उनका धर्म लोक-धर्म बन गया। लोकधर्म के तीनों अंगों - कर्म, ज्ञान और भक्ति या उपासना में समन्वय स्थापित कर समाज को एक नई दिशा दी।

यहाँ मैं तुलसी की समन्वय साधना के विभिन्न पक्षों को उजागर किया जा रहा है ।

## - ज्ञान भक्ति और कर्म का समन्वय :

कर्मकाण्ड का जन्म वैदिक काल से ही माना जाता है क्योंकि वेदों में यज्ञादि कर्मो का ही प्राधान्य है। ब्राम्हण ग्रंथ तो कर्मकाण्ड के ही ग्रंथ थे। पौराणिक काल में कर्मकाण्ड और भक्ति दोनों की ही प्रधानता रहीं। पुन: ये तीनों ही अपनी-अपनी प्रतिष्ठा पाने के लिए संघर्ष करते रहे। इनका सर्व प्रथम समन्वय गीता में लक्षित हुआ। गीता में हमें वेदों के एकेश्वरवाद, ब्राम्हण ग्रन्थों के कर्मकाण्ड, उपनिषदों के ज्ञान एवं पौराणिक भक्ति के समन्वित रूप के दर्शन होते हैं। कृष्ण के मुख से जहॉॅ "कर्मण्येवाधिकारस्ते" कहकर कर्म को महत्व दिया वहीं ‘योगस्थ: कुरू कर्माणि' कहकर कर्म का विधान अनासक्त अवस्था में श्रेयस्कर बतलाया तथा "ज्ञानाग्न : सर्व-कर्माणि भस्मसात्कुरूते अर्जुन :" १ कहकर ज्ञान के महत्व को बतलाया। इस प्रकार गीता में समन्वय का रूप तो मिला पर विरोध किसी न किसी रूप में चलता रहा। वैष्णव प्रचारकों ने जब कर्म और भक्ति का दलन देखा तो उनमें प्रतिक्रिया हुई। जिसके फलस्वरूप श्री रामानुजाचार्य ने भक्ति का प्रचार किया। उस समय श्रीमद् भागवद के आधार पर भक्ति के दो रूप थे - एक प्रेम प्रधान और दूसरी ज्ञान प्रधान । विवादास्पद स्थितियों से बचने के लिए हम इतना कह सकते हैं कि मानव जीवन की पूर्णता इन तीनों के समन्वय पर ही आधारित है। महाकवि तुलसी ने यमुना को कर्म का प्रतीक, सरस्वती को ज्ञान का प्रतीक और गंगा को भक्ति या उपासना का प्रतीक कह त्रिवेणी के संगम की कल्पना की। कर्म ज्ञान और भक्ति के साथ-साथ, हिन्दुओं के दो प्रमुख समुदायों - शैव और वैष्णव, दो प्रमुख दार्शनिक दृष्टियों - अद्वैत और विशिष्षाद्वैत, दो आध्यात्मिक दृष्टियों - सगुण और निगुर्ण, दो उपासना मार्गो - ज्ञान और भक्ति में एक अद्भुत समन्वय स्थापित कर समाज को एक नई दिंशा प्रदान की।

यथा - 'ग्यानहिं भगतिहिं नहिं कछु भेदा, उभय हरहिं भव संभव खेदा।' ‘पंथ जात सोहहिं मतिधीरा। ग्यान भगति जनु धरै शरीरा।'

## - शैव - वैष्णव भावना का समन्वय :

तदयुगीन भारत शैव और वैष्णव भावना के द्वन्द्व का अखाडा बना हुआ था। यद्यपि, तुलसी से पूर्व भी रामकथा ब्दारा शैव और वैष्णवों को मिलाने का प्रयास जारी था। किन्तु इसे पूर्णता तक पहुचाने का श्रेय तुलसी को ही है। शिव की नगरी काशी में तुलसी ने प्रत्यक्ष शैव और वैष्णव की कटुता का अनुभव किग्या और अपनी

रचनाओं द्वारा इन विरोधी भावनाओं के समन्वय का सफल प्रयास किया। "मानस" के मंगलाचरण में ‘रामसीता’ की बन्दना से पूर्व ‘भवानीशंकर' की वंदना इसका प्रत्यक्ष प्रमाण है। एक तरफ तुलसीदासजी शिव के मुख से "सोइ मम इष्ट देव रघुवीरा, सेबत जाहि सदामुनि धीरा।" कहलवाते हैं तो दूसरी ओर राम के मुख से "संकर प्रिय मम द्रोही, सिव द्रोही मम दास। ते नर करहिं कलप भरि, घोर नरक महुँ वास ।।" कहलवाकर राम को शिव का अनन्य प्रेमी दर्शाया और सेतु का निर्माण होने पर राम व्दारा शिव की प्रतिष्ठा एवं पूजा-अर्चना कराके राम को शिव का अनन्य भक्त सिद्ध किया। इतना ही नहीं, अनेक स्थलों पर हम राम और शिव में साम्य एवं अभेद रूपता भी देखते हैं। यथा - 'हरि हर पद रति मति न कुतरकी। तिन्ह कहुँ मधुर कथा रघुवर की।।' ‘रामचरितमानस' में ‘रामस्तोत्र’ के साथ ‘शिवस्तोत्र’ की रचना कर पार्थक्य एवं वैषम्य को दूर कर सुंदर समन्वय स्थापित किया। राम और शिव की समान शब्दों में स्तुति का एक और उदाहरण हम ‘मानस’ में देख सकते हैं -

तुम्ह सम रूप वहम् अविनासी । सदा एक रस सहज उदासी ।
अकल अगुन अज अनघ अनामय। अजित अमोष शक्ति करूनामय ।। (रामसुति)
नमामी शमीशान निर्वाण रूपम् / विभुं व्यापकं व्रहम वेद स्वरूपं।
निजं निर्गुणं निर्विकल्पं निरीहं। चिदाकाश माकाश वासं भजेडहं।। (शिवस्तुति)
उसी प्रकार हम अन्य क्षेत्रों में भी समन्वय देख सकते हैं - विभिन्न दर्शनों का समन्वय
'माया वस परिछिन्न जड जीव कि ईस समान।'
ईई्वर अंस जीव अविनासी। चेतन अमल सहज सुख रासी ।।'
निर्गुण और सगुण का समन्वय - अगुन सगुन दुइ बहम स्वरूपा। अकथ अगाधि अनादि अनूपा।।
राम और कृष्ण का समन्वय - ‘तुलसी मस्तक तव नवै जव धनुष बान लेहु हाथ।’ इतना नहों ‘कृष्ण गीतावली' की रचना कर भावी विवाद को भी समाप्त कर दिया।

नर नारायण का समन्वय - जहाँ कबीर ने - 'दशरथ सुत तिहुु लोक बखाना। राम नाम कै मरम है आना' कहा, वही तुलसी ने 'भए प्रकट कृपाला दीन दयाला कौशल्या हितकारी' कहकर राम को दशरथ पुत्र स्वीकार किया।

द्विज और शूद्र का समन्वय - ‘मानस’ में गुरू वशिष्ठ निषादराज का मिलन दिखाया वहों, उच्चकुल में उत्पन्न राम को तुच्छ वानर भालुओं से प्रेमालिंगन कराते दिखा उच्च एवं निम्न वर्ग में समानता स्थापित की। इसके साथ ही, पारिवारिक क्षेत्र में समन्वय और राजा प्रजा के बीच समन्वय दिखाया, जो कि हर युग की मॉग है। इसके अभाव में आदर्श परिवार व समाज की कल्पना भी असंभव है।

तुलसीदास जी ने धर्म, राजनीति, परिवार एवं समाज के प्रति समन्वयात्मक दृष्टि रखी। साथही, साहित्यिक क्षेत्र में भाषागत विवाद से बचने हेतु प्रचलित ब्रज व अवधी दोनों भाषाओं में ‘मानस' की रचना की। इतना ही नहीं, हिंदी के साथ-साथ संस्कृत भाषा के श्लोकों की रचना करके अपने ग्रंथों में हिंदी और संस्कृत का सुंदर समन्वय किया है, वर्णिक तथा मात्रिक दोनों प्रकार के छंदों का प्रयोग कर छंदसंबंधी समन्वय भी दिखलाया । सभी प्रकार की शैलियों का प्रयोग जैसे - पद पध्द्ति में ‘विनय पत्रिका’, ‘गीतावली’ व ‘कृष्ण गीतावली’ लिखी गई है। दोहा पध्दति में ‘दोहावली’, चौपाई, दोहा, छप्पय पध्दति में ‘रामचरितमानस’ की रचना किया। सवैया पध्दति में ‘कवितावली’ और बरवै पध्दति ‘बरवै रामायण’रचित है। इसके अतिरिक्त लोकगीत व सोहर

का भी प्रयोग ‘रामलाल नहछू' में किया।
इस प्रकार महाकवि तुलसी ने समन्वयवादी भावना को सर्वोपरि रखा क्योंकि वे किसी भी प्रकार की विषमता, कटुता, पतन और भेदभाव को पोषित करना नहीं चाहते थे। फलस्वरूप, सुंदर व व्यवस्थित समाज, परिवार, गॉव व देश की गौरवपूर्ण व्याख्या की जो समन्वय का प्रत्यक्ष प्रमाण है।

सारांश रूप में महाकवि तुलसीदास ने समन्वयवादी दृष्टिकोण को अपनाकर एक सुदढ़ समाज व देश की स्थापना करनी चाही क्योंकि इसके अभाव में कटुता, विषमता एवं पतन ही पनप सकता है। अत : तुलसी जैसे समाजसुधारकों की हर युग को आवश्यकता है और सदैव रहेगी।
संदर्भ-ग्रंथ
१. रामचरित मानस
२. तुलसी की साहित्य साधना - डॉ. लल्लन राय
३. तुलसी और मानवता - सूर्यनारायण भट्ट
૪. हिंदो के प्राचीन प्रतिनिधि कवि - ले. द्वारिकाप्रसाद सक्सेना
५. तुलसीदासः चिंतन और कला — संपा. इंद्रनाथ मदान

## गिरिराज किशोर के उपन्यासों में धार्मिक एवं आर्थिक सरोकार

डॉ चंद्रप्रकाश सिंहः आर. जे. कॉलेज, घाटकोपर (प)

## धार्मिक सरोकार:

सांप्रदायिकता का अर्थ है ... अपने धार्मिक संप्रदाय से भिन्न अन्य संप्रदाय के प्रति उदासीनता, उपेक्षा, दयादृष्टि, घृणा, विरोध और आक्रमण की भावना ब्रिटिश कूटिनीति ने इसका बीज बोया था। जिसका दुष्परिणाम भारत विभाजन तथा उस समय हुए भीषण सांप्रदायिक दंगों के रूप में सामने आया। गिरिराज किशोर ने अपने उपन्यास ‘लोग‘ में यह स्पष्ट किया है कि किस प्रकार अंग्रेजों की -फूट डालो और राज करो' की नीति ने भारत में धार्मिक विद्वेष की आग को तेज किया। कुछ पंक्तियाँ द्रष्टव्य हैं-
‘हर जगह फसाद शुरू हो गया $\ldots$ हिंदू - मुस्लिम एक-दूसरे के जानी दुश्मन हैं। '
इस विद्वेष ने भारत के हिंदू तथा मुस्लिम संप्रदाय के लोगों ने एक दूसरे के धर्म के प्रति सहिष्णुता के स्थान पर नफरत की भावना उत्पन्न कर दी, इसको स्पष्ट करते हुए 'लोग' उपन्यास का पात्र हरगूलाल वरहता है कि...
‘यूं जो थारी रामलीला बड़े बाजार में कू निकल जाया करे थी, अब न नीकलने की। के मुसलमान अपनी मस्जिद के आगे बाजा नी बजने दें।

आधुनिक युग में धर्म का जो रूप सामने आ रहा है, उसमें 'धारणात् इति धर्म:' की आत्मा का लोप हो गया है। धर्म में मानव मात्र के कल्याण की पारस्परिक प्रेम और सौहार्द्र की सहिष्णुता और सेवा वी जो भावना थी, वह आधुनिक युग में लुप्त प्राय हो गई है। अब उसका स्थान आडम्बर और कर्मकांड ने ले लिया है। अब धर्म राजनीतिजों और धर्म के ठेकेदारों के स्वार्थ-साधन का माध्यम बन गया है। इस तथ्य की पुष्टि निम्नलिखित उदाहरण से होती है...
'सम्मेलन से लौटते हुए मि.बेकर ने मोहनदास से सीधा सवाल किया, 'मि.गाँधी आपने क्या फैसला किया ? ‘मोहनदास ने जानकर पूछा, ‘आप किस बारे में पूछ रहे हैं? हमारी धार्मिक परंपरा में सम्मिलित होने के बारे में। मोहनदास इस सवाल का उत्तर पहले ही सोच चुका था। वह बोला, 'मि.बेकर... क्या हम धर्म किराए के घर की तरह बदल सकते हैं। किसी भी व्यक्ति या समाज की जड़ उसकी आस्था में है। आत्मा का संबंध धर्म से ज्यादा होता है। धर्म कोई भी और कैसा भी हो, धर्म समाज और व्यक्ति की आस्थाओं के बीच निरंतर होता प्रयोग और परिष्कार है.... संसार का कोई भी धर्म अपनी कमजोरियों और इच्छाओं से मुक्त नहीं।

देश विभाजन के बाद हुए सांप्रदायिक दंगों उससे उत्पन्न भीषण परिणामों और उनसे संबंधित राजनीतिक दाँव-पेचों को गिरिराज जी ने उपन्यास में मार्मिक रूप से व्यक्त किया है। वस्तुत: इनके अनेक समकालीन उपन्यासकारों ने भी इस स्थिति को अपनी कृतियों में स्पष्ट किया है। डॉ. गोपाल शर्मा के अनुसार-
‘हमारी कथित लोकताँत्रिक व्यवस्था के कर्णधारों के पास सांप्रदायिक राजनीति का एक अचूक हथियार है, जिसका प्रयोग विशेष रूप से चुनाव-काल में किया जाता है। नवें दशक के हिंदी उपन्यासकारों ने अपनी औपन्यासिक कृतियों के माध्यम से इस सत्य की ओर इंगित किया है कि यह व्यवस्था जाति, संप्रदाय और धर्म के

नाम पर लोगों को विभाजित करती है, उनकी शक्ति को, संघर्ष को क्षीण कर रही है।
इस प्रकार हम देखते है कि-विश्व बंधुत्व की जिस भावना को अपनी आत्मा बनाकर भारत ने अध्यात्म के क्षेत्र में जगत् गुरू कहलाया, वह अब लुप्त हो रही है। गोस्वामी तुलसीदास जी ने धर्म के मूलतत्व को रेखँकित करते हुए लिखा है-‘परहित सरिस धर्म नहिं भाई, पर पीड़ा सम नहिं अधमाई।' मानव जीवन पर धर्म का यह नियंत्रण ज्यों-ज्यों शिथिल होता जा रहा है, त्यों-त्यों उसके अस्तित्व के सामने उपस्थित संकट गहराया जा रहा है। धर्म में मिथ्याचारों, आडंबरों ने धर्म के वास्तविक स्वरुप को प्रच्छन्न कर दिया है। इसके फलस्वरुप धर्म का स्थान धार्मिक उन्माद ने ले लिया है, जिसके कारण देश में सांप्रदायिकता की विष बेल बहुत तेजी से फैल रही है। गिरिराज किशोर जी ने इस भयावह तथ्य को प्रभावपूर्ण ढंग से अपने उपन्यास साहित्य में व्यक्त किया है। आर्थिक सरोकार:

भारतीय दर्शन के अनुसार मानव जीवन के चार चरम पुरुषार्थ हैं - धर्म, अर्थ, काम और मोक्ष। इन चारों के बीच में अत्यंत सुविचारित और संतुलित समन्वय है। अर्थ और काम दोनों जीवन के लिए आवश्यक हैं परंतु एक निश्चित सीमा तक इनका नियंत्रण धर्म के द्वारा होता था और तभी मनुष्य धर्म के सारथी द्वारा संचालित और नियंत्रित अर्थ और काम रुपी अश्वों द्वारा परिचालित अपने जीवन रथ पर आरुढ़ होकर अंतिम गंतव्य मोक्ष तक पहुंचने का प्रयास करता था।

आधुनिक युग में दृश्य एकदम बदल गया है। वैश्वीकरण के इस दौर में चारों पुरुषार्थों का सिरमौर ‘अर्थ‘ बन गया है। अब मनुष्य के जीवन में सर्वाधिक प्रधानता ‘अर्थ‘ की और अभिलाषा आर्थिक समृध्दि की है। धर्म और मोक्ष कहीं कोने में छिप गए हैं। इस बढ़ती अर्थ लिप्सा ने मनुष्य जीवन में अनेक समस्याएं उत्पन्न कर दी हैं। सबसे बड़ी समस्या दिन रात बढ़ती आर्थिक विषमता की है। एक ओर पूंजीपति, सामंत और उच्च वर्ग है, जो शोषक है। दूसरी ओर समाज का पद दलित सर्वहारा और निम्नवर्ग है, जो शोषित है। इन दोनों वर्गों के बीच आर्थिक संतुलन की खांई दिन पर दिन बढ़ती जा रही है, जिसके कारण भ्रष्टाचार, महंगाई, बेकारी, भुखमरी, घूसखोरी इत्यादी बढ़ती जा रही है। इसने पूरे सामाजिक जीवन को आक्रांत करने के साथ-साथ समस्त परिवेश को विषाक्त कर दिया है। गिरिराज किशोर के संवेदनशील मन ने अपने उपन्यास साहित्य में इन समस्याओं को बड़ी बेबाकी और चिंतन की गहनता के साथ व्यक्त करते हुए अपने आर्थिक सरोकारों को स्पष्ट किया है।

आधुनिक भारत में बरोजगारी एक जटिल समस्या का रुप लेती जा रही है। बेरोजगार युवा-चेतना जब कुंठित होकर किसी गलत मार्ग पर चल पड़ती है, तब पूरे देश के सामने एक संकटपूर्ण स्थिति उत्पन्न हो जाती है। गिरिराज किशोर ने इस समस्या को बड़ी शिद्दत के साथ अपने उपन्यास साहित्य में उद्घाटित किया है। एक बेरोजगार पात्र का निम्नलिखित कथन द्रष्टव्य है -
'आप लोग अपने दोस्त-अहबाबों के कार्ड निकालती है। .... मैं पिछले एक साल से चक्कर काट रहा हूँ ... दफ्तर है या खटमलों से भरी खाट।

गिरिराज जी ने समकालीन अर्थव्यवस्था के कटु यथार्थ को भी स्पष्ट किया है। वैश्वीकरण और बाजारवाद के नाम पर पूंजीवाद का शिकंजा भारतीय अर्थव्यवस्था पर कसता जा रहा है। औद्योगीकरण की अंधी दौड़ ने जहाँ मुट्ठी भर पूंजीपतियों के हाथ में आर्थिक नियंत्रण सौंप दिया है, वहों छोटे व्यापारी और गरीब किसान निरंतर शोषण के शिकार हो रहे हैं। विज्ञान के विकास के नाम पर गाँवों का अस्तित्व संकट में पड़ गया है।

भारतीय पूंजीपति, पश्चिमी पूंजीवादी देशों की सहायता से निर्धन कृषकों का शोषण भरी अपनी अलग दुनिया में विचरण करते हैं। वहाँ किसी को भी जाने की अनुमति नहों है। गिरिराज किशोर ने कृषि प्रधान देश में कृषि के महत्व को स्थापित किया है। उन्होंने यह स्पष्ट किया है कि किस प्रकार श्रमजीवियों का शोषण पूंजीपतियों द्वारा किया जा रहा है। विज्ञान के प्रसार और कृषि परंपरा के द्वंद्य को दिखाकर लेखक ने इस सत्य को उद्घाटित किया है कि विज्ञान के प्रसार, औद्योगीकरण और कृषि व्यवस्था के बीच एक संतुलित समन्वय होना अति आवश्यक है। इस संदर्भ में उनकी कुछ पंक्तियाँ द्रष्टव्य है -
‘इंद्रसुनें की प्रेरणा मुझे एक वैज्ञानिक संस्थान की स्थापना के दौरान किसानों को उनकी जमीन से बेदखल करने की और उनको उस संस्थान की जरररत के अनुरूप ढालने की प्रक्रिया से मिली और मुझे लगा कि यह भी एक तरह का विस्तारवाद है।

गिरिराज जी का एक उपन्यास है, 'यातना घर'। इसमें उन्होंने स्पष्ट किया है कि स्वतंत्रता से पहले शोषक वर्ग के विरुध्द जो संघर्ष किया गया था उसमें सभी का हित समाहित था। विडंबना यह है कि स्वाधीनता के कई वर्षो बाद वही संघर्ष जारी है, परंतु अब यह निजी स्वार्थो के लिए है। अब ‘येन केन प्रकारेण‘ आर्थिक समृध्दि के उच्च शिखर को छूने की कामना का दस्तावेज है उनका उपन्यास 'यातना घर।

गिरिराज किशोर जी ने पूंजीपति वर्ग द्वारा श्रमिकों के शोषण की विभीषिका को देव लोव तथा मृत्युलोक के प्रतीकों द्वारा स्पष्ट किया है। पूंजीपति वर्ग को देव लोकवासी तथा श्रमिक वर्ग को मृत्युलोक वासी कहा गया है। देव लोकवासी धरती पर जन्म लेकर भी धरती को भूल जाते हैं। धरती के एक भाग से दूसरे भाग को जाने के लिए वे आकाश मार्ग का प्रयोग करते हैं। निर्धन कृषकों तथा श्रमिकों की जमीन खरीदते हैं। अपने बुध्दिकौशल तथा वैज्ञानिक दृष्टि के कारण वे सबके स्वामी बन जाते है। मृत्यु लोकवासियों को देवलोक जाने की अनुमति नहीं दी जाती है। उन्हें धमकाया जाता है ।
'यदिं आप लोगों की परछाई तक कभी इस लोक में पड़ी तो आपके इन लड़को के पेट सटक जाएंगे । इनके सिर लटक जाएंगे । बाजू झूलने लगेंगे और फिर कभी आप इन्हें नहीं देख पाएंगे । ये लोग ईन्सान की तरह कमाकर खाने के स्थान पर जानवरों की तरह चोरी करके खाएंगे।

आर्थिक विषमता और साधनहीनता कितनी भयावह हो सकती है, यह 'परिशिष्ट' उपन्यास में स्पष्ट किया गया है । उच्चवर्ग के छात्र धनाभाव से ग्रस्त निर्धन तथा साधनहीन छात्रों का इतना शोषण करते हैं कि अंत में आत्महत्या के अतिरिक्त उनके पास दूसरा कोई विकल्प नहों रहता है। एक संस्थान से प्रकाशित बुलेटिन का निम्नलिखित अंश द्रष्टव्य है-
'इस संस्थान में वैसे तो वे सभी छात्र एस.सी., एस.टी. हैं जो गरीब, साधनहीन और परिवारों से आने के कारण अपने रहन-सहन का स्तर अन्य उच्चवर्ग के छात्रों के समान बनाए रखने में नितांत असमर्थ हैं। फिर भी एस.सी., एस.टी. छात्रों का जीवन यहाँ शोषण और दमन की कथा कहता है। राम उजागर की हत्या इसका ज्वलंत प्रमाण है।

गिरिराज किशोर ने अपने प्रसिध्द उपन्यास ‘पहला गिरमिटिया' उपन्यास में श्रमिकों पर होनेवाले अमानुषिक अत्याचारों का मार्मिक चित्रण किया है। इनके गोरे मालिक खेतों और बागानों में उनके साथ गुलामों जैसा व्यवहार करते थे। गिरिराज जी ने इस अमानवीय अत्याचारों का जो वर्णन किया है, उसका एक उदाहरण

द्रष्टव्य है-
'अगर कोई गुलाम भाग जाए तो गर्दनिया कर जबरदस्ती वापस लाया जाता था। पिटवाया जाता था। खाना नहों दिया जाता था और सख्त से सख्त काम दिया जाता था। ... चाबुक फटकारे जाने लगे । खुले नल से निकलने वाली मोटी-मोटी धार की तरह ताबड़तोब गालियाँ बरसने लगीं, लातें ऐसे चलती थीं जैसे रेल के इंजन का पिस्टन । मुंह में मिट्टी भरी जाती थी । पीछे से डंडे चढाए जाते थे । रात-बेरात उठवा लिया जाता था । मजदूर हर ज्यादती को बर्दाश्त करते थे और शांत रहते थे ।
'सामान्य जन पर अत्याचार करने में जमींदार और सामंत भी अपने आकाओं से पीछे नहीं थे । वसूली में आनाकानी करनेवाले आसामियों की उनके 'खास' लोगों द्वारा पिटाई की जाती थी कि चमड़ी फट जाती थी और खून बहने लगता था। कई बार तो घरवाले खाट पर डालकर ले जाते थे । अगर कोई जवाब दे देता था तो उसकी मुसीबत आ जाती थी। ....आसामियों का जबरदस्ती मुंह खुलवाकर पेशाब कर देते थे और उसे वे प्यास बुझाना कहते थे।

इस विवेचन से स्पष्ट होता है कि औद्योगीकरण के कारण एक विशेष वर्ग का लाभ होता है लेकिन इससे मानवीय रिश्ते बिखर जाते हैं । वास्तविकता यह है कि जनसामान्य के नीचे गिरने तथा शोषण के लिए सामंतवादी, पूंजीवादी व्यवस्था ही जिम्मेदार है । अतः सामान्यजन को इससे निटपने के लिए संगठित होकर इस शोषक व्यवस्था के विरुध्द संघर्ष करने की जररतत है। तभी वे चैन की साँस ले सकेंगे ।

## संदर्भ ग्रंथ:-

१) पहला गिरमिटिया-गिरिराज किशोर, प्र. १९९९,
२)देशी बाण- डॉ. चंद्रकांत बांदिबडेकर
३) गिरीराज किशोर का उपन्यास साहित्यः एक अनुशीलन- डॉ सुरेश चांगदेव सालुंके
४)उपन्यास शिल्पी - गिरीराज किशोर- डॉ. ए. अरविन्दाक्षन,

## क्रिकेट - क्रिकेट - क्रिकेट

डॉ. घनश्याम का. ढोकरट : अधिव्याख्याता, मु. शा. शि.मंडळाचे शारीरिक शिक्षण महाविद्यालय, वडाळा, मुंबई ३१.

पश्चिम बंगालमध्ये क्रिकेट वर्ल्डकपचा श्रीगणेशा झाला व सर्व भारतभर बल्ले-बल्ले इंडियाची सुरुवात झाली. ऑलम्पिक स्पर्धेपेक्षा कितीतरी अधिक पटीने क्रिकेट वर्ल्डकपचा गाजावाजा होत आहे आणि पुढेही होणार आहे. भारतात क्रिकेटला मिळालेला प्रतिसाद हे त्यांचे मुख्य कारण असु शकते आज क्रीडाक्षेत्रातील सर्व खेळापैकी सर्वात जास्त आवडणारा व खेळला जाणारा खेळ म्हणजे क्रिकेट. भारतातील तरुण पिढीला तर या खेळाचे वेडच लागल्यासारखे दिसते. रविवार म्हटल तर एका मैदानात जवळपास ८-१० संघ खेळतांना आपणास दिसतात. क्रिकेटची नशा इतकी चढली की वन डे मॅच (२०-२०) असेल तर त्या दिवशी मोठी मंडळी व तरुण वर्ग हमखास कामावर दांडी मारतात किंवा कामावर जरी गेले तर तिथे काम कमी व क्रिकेटवर चर्चा चालल्याचे आपणास पहावयास मिळते. विशेष म्हणजे वन डे च्या दिवशी मुंबई उपनगरी रेल्वेत अजिबात गर्दी दिसत नाही. प्रवास हा सुखकारक होतो

क्रिकेटबद्दलच इतक प्रेम जे जनमाणसात पहावयास मिळते ते जर टिकवून ठेवावयाचे असेल तर क्रिकेटला सट्टेबाजापासुन मुक्त केले पाहिजे, सट्टेबाजांनी जो विळखा भारतीय क्रिकेटला घातला आहे तो काढणे आवश्यक आहे, किंबहूना ती आजच्या काळाची गरज आहे. सामना सुरु होण्यापासून ते सामना संपेपर्यंत प्रत्येक क्रिकेट प्रेमीच्या / क्रिकेट रसिकांच्या मनात त्या सामन्याबद्दलची उत्सुकता वाढत असते. सामन्याचा निकाल आपल्या मनाच्या बाजुने असेल तर आनंद वाटतो परंतु सामन्याचा निकाल मनाच्या विरोधात गेला तर मग मात्र मनात पाल चुकचुकते मनात कुठेतरी असे वाटते की हा सामना फिक्स तर केला नसेल ना ? या सामन्याचे अगोदरच मॅच फिक्सींग झाले नसेल ना ? असे एक नाही अनेक प्रश्न मनात रेंगाळत असतात.

सामना हारल्याचे मनाला दु:ख तेवढे होत नाही परंतु जेव्हा कळते की हा सामना सट्टेबाजांनी फिक्स केला होता तेव्हा मात्र मनावरचा पर्यायाने क्रिकेटचा विश्वास उडतो कारण आज क्रिकेट जगतात सट्टेबाजांनी जो धुमाकूळ घातला किंवा क्रिकेट खेळाला जी पकड बसवली ती पाहता त्यांना आवरणे दिवसेंदिवस अवघड झाल्याचे दिसते. मोठ्या सामन्याना सुरुवात होण्यापूर्वी बुकीचे अटक सत्र सुरु होते तरी सुद्धा काही घटना ऐकीवात येतात आजपर्यंत ज्या बुकीनां पकडले त्यांचे काय झाले? कुणालाच माहित नाही आणि यापुढे असे होऊ नये याकारता कोणत्या उपाय योजना आखल्यात त्याही कोणाला माहित नसतात. सर्व सामान्यांना पडणारा प्रश्न म्हणजे मॅच फिक्स कशी केले जाते कोण पैसे लावतो किंवा कोणीही पैसे लावण्या इतके ते सोपे आहे का ? बुकी म्हणजे काय त्यांना पैसे कोण पुरवतो अशा अनेक प्रश्नाचा उलगडा या लेखाच्या माध्यमातून करण्याचा प्रयत्न या ठिकाणी केला आहे.

मॅच फिक्सींग म्हणजे नेमके काय ? मॅच फिक्सींग म्हणजे मॅच खेळण्या अगोदर सामन्याचा निकाल निश्चीत करणे. मॅच फिक्सींग मध्ये चांगल्या खेळाडूला विकत घेतले जाते. त्याच्या कौशल्याचा दुरुपयोग केला जातो त्याला बुकी जसे म्हणेल त्याप्रमाणे खेळावे लागते थोडक्यात आपले कौशल्य विकावे लागते. यामध्ये जो

प्रमुख सट्टेबाज (फायनांन्सर) असतो तो हारणान्या संघावर पैसे लावतो किंवा कोणी किती पैसे कोणत्या संघासाठी लावले त्यानुसार प्रमुख सट्टेबाज पैसा लावत असतो त्यानुसार खेळाडूंना विकत घेत असतो या धंद्यात प्रमुख सट्टेबाजाचे नुकसान होत नाही तर नुकसान होते ते आम जनतेचे ज्यांना या सट्टेबाजांची खेळी समजत नसते. या सट्टेबाजाराचा व्यवहार कसा चालतो पैशाची देवाण-घेवाण कशी होते या बाबत थोडक्यात पाहुया या व्यवहाराचे दोन प्रकार आहेत पहिला प्रकार म्हणजे ज्यात एकदा लावलेल्या बोलीत कोणताही बदल करता येत नाही, यामध्ये नाणे फेक जिंकणे, बॅटस्मन/बॉलर, धाव काढणे, विकेट घेणे इत्यादी बाबी पहिल्या प्रकारात येतात. दुसन्या प्रकारात सामन्याच्या शेवटच्या क्षणापर्यंत बोली लावली जाते यांच्या टीम मध्ये फायनान्सर, मुख्यबुकी, बुकी, पंटर अशा व्यक्ती असतात.

फायनान्सर - मुख्यवुकी - बुकी - पंटर
त्यांची कार्यद्धती थोडक्यात अशी :- सामन्यावर सट्टा लावतांना पंटर (सट्ट लावणान्या व्यक्तीला पंटर म्हटले जाते) हार आणि जीत या दोन्ही बाबीवर पैसा लावू शकतो. बुकी पंटरचा एकंदर मुड/स्वभाव पाहून त्याच्याशी संपर्क साधतो व भाव निश्चीत करतो, ठरलेल्या भावाची/रेट जाणकारी तो मुख्य बुकीला देतो. आणि मुख्य बुकी फायनान्सरला देतो. सामान्या मध्ये जे घडण्याची किंवा होण्याची शक्यता जास्त असते त्याचा भाव कमी मिळतो आणि जे न घडण्याची शक्यता जास्त असते त्यावर भाव अधिक मिळतो भाव किती तय (ठरवायचा) करावयाचा हे मात्र फायनान्सर ठरवत असतो. कोणत्याही व्यक्तीला सट्टा लावणे इतके सहज सोप्पे नाही कारण सट्टेबाजीच्या या खेळात तोच पंटर/ग्राहक भाग घेऊ शकतो ज्याला बुकी ओळखत असतो विंनवा एखाद्या खात्रीलायक पंटरने या नवीन पंटराची शिफारस केली तरच त्या नवीन पंटरला प्रवेश दिला जातो म्हणजे त्याला खेळावर पैसा लावता येतो आणि पैशाची देवाण-घेवाण हि सट्टा जिंकणान्या व्यक्तीस संधाकाळ पर्यंत पैसे पोहचवले जातात तर हरणान्या व्यक्तीस पैसा देण्याकरिता २४ तासाचा अवधी दिला जातो. अंदाजे एक दिवसीय सामन्यामध्ये करोडो रुपयांचा सट्टा लावला जातो. या लेखामागचा उद्देश फक्त सर्व सामन्यांना या सट्टेबाजीत किती धोका आहे हे जाणून देणे इतकाच आहे. आज अनेक लोक या नादाने बेघर झाले आहेत. बन्याच लोकांना पोलीसांनी बेड्या ठोकल्यामुळे समाजात त्यांची नाचक्की झाली आहे त्यांचे कुटुंब उध्वस्त झाले आहे. म्हणून खेळाकडे खेळ भावनेचे पाहावे, खेळाचा मनमुराद आनंद लुटावा इतकाच संदेश या लेखाच्या माध्यमातून दयावा वाटतो.

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## खेळात भाग घेणान्या व खेळात भाग न घेणान्या विद्यार्थ्यांच्या मानसिक स्वास्थ्य, चिंता आणि शारीरिक सुदृढतेचा तुलनात्मक अभ्यास

डॉ. साळवी भास्कर धनाजी : (डायरेक्टर ऑफ स्पोर्टस्) मुलुंड वाणिज्य महाविद्यालय, मुलुंड, मुंबई. श्री भागवत कितेकर : पीईएस सिध्दार्थ कॉलेज ऑफ आर्ट्स एण्ड कॉामर्स, मुम्बई

## प्रस्तावना :

इ.स.पुर्व ७७६ ला प्राचीन ऑलोम्पीक सुरुवात झाली तेव्हापासून आधुनिक ऑलोंम्पीकची ( १८९६पर्यंत) आजतागायत शारीरिक शिक्षण व क्रीडा क्षेत्रात शारीरिक सुदृढते बरोबरच मानसिक स्वास्थाला देखील तितकेच महत्व दिले गेलेले आहे. बलशाली भारतासाठी निरोगी युवक ही काळाची गरज आहे. त्यासाठी भारताला निरोगी युवक देऊन बलशाली करण्यासाठी युवक हा शारीरिकदृष्टया व मानसिक दृष्टया निरोगी असणे अत्यावश्यक आहे. म्हणूनच प्रस्तुत संशोधनात शारीरिक तंदुरुस्ती बरोबरच मानसिक स्वास्थ्याचा देखील अभ्यास केला गेला आहे.
मानसिक स्वास्थ्य :
व्यक्तीला आपले नेहमीचे वैयक्तिक व सामाजिक व्यवहार सुखा समाधानाने कार्यक्षमतेने व आत्मविश्वासाने करता येणे हे व्यक्तीच्या मानसिक आरोग्याचे प्रमुख लक्षण आहे. योग्य मानसिक आरोग्य असलेल्या (लाभलेल्या व्यक्तीकडे) स्वतःचे निर्णय स्वतःच घेण्याची पात्रता असते. एकुणच अशा व्यक्तीचे जीवन समाधानी, आत्मविश्वासपूर्ण व कार्यक्षम असे असते.

मात्र समाजात दुर्दैवाने अशा सुखी समाधानी व मनोनिरोगी व्यक्तींची संख्या फार थोडी असते. बहुतेकांच्या पदरी काही ना काही निराशा असते. अपयश आलेले असते. काहींची शारीरीक व मानसिक परीस्थितीच विपरीत असते. त्यातूनच त्यांना मार्ग काढणे अशक्यप्राय असते. काही व्यक्तींना आपल्या समस्यांचे आकलन लवकर होत नाही. काहींना मनस्वास्थ्य कसे टिकवावे याचे शास्त्र व तंत्र अवगत नसते व त्यामुळे त्यांची मनःस्थिती नेहमीच अस्वस्थ असते. कॅनडातील शालेय विद्यार्थ्यांच्या एका तपासणीत असे आढळ्ठून आले की, दर पाच विद्यार्थ्यांपैकी एक विद्यार्थी कमी अधिक गंभीर काही ना काही मनोविकृतीने ग्रासलेला आहे.

काही शरीराने अत्यंत धडधाकट असतात पण मनाने अत्यंत संवेदनशील व हळवे असतात. सुखी व समृध्द जीवनासाठी केवळ शारीरिक तंदुरुस्त असून चालणार नाही तर मन देखील तंदुरुस्त असणे महत्वाचे आहे. म्हणजेच शारीरिक आरोग्या बरोबरच मानसिक आरोग्यही महत्वाचे आहे. 'मानसिक आरोग्य' ही संकल्पना मर्यादित अर्थाने वापरली जाते तर ‘मानसिक स्वास्थ्य' ही संकल्पना विस्तृत (व्यापक) स्वरुपात वापरली जाते. शरीर व मन या दोन्हींच्या आरोग्याचा त्यात समावेश आढळतो .

शरीर व मन यांच्या निकोप वाढींचे लक्षण म्हणजे उत्तम मानसिक आरोग्य होय. ज्या व्यक्तींना कोणत्याही शारीरीक व्याधी नसतात त्या सुखी समाधानी समायोजीत असतात त्यांचे मानसिक आरोग्य चांगले असते.

[^0]मानसिक आरोग्य व मानसिक स्वास्थ्य या संकल्पना परस्परांना पोषक असल्या तरी त्या दोन्हीमध्ये मुलभूत स्वरुपाचा फरक आहे. मानसिक आरोग्यामध्ये मानसिक स्वास्थ्याचा समावेश होईलच असे नाही. मानसिक आरोग्याचे विषमायोजन व विविध विकृती यांची लक्षणे जाणून घेणे आणि त्यावर चिकीत्सालय गोष्टीव्दारे उपचार करणे यांचा समावेश होतो.

१९ व्या शतकाच्या उत्तरार्धात वैद्यकशास्त्राच्या विकासाबरोबरच मानसिक विकृती निर्माण होतात हे लक्षात आले. यामुळे मनोरुगणांकडे पाहण्याच्या दृष्टीकोनात अमुलाग्र बदल झाला. मज्जासंस्था, मेंदूचे कार्य, ग्रंधी व त्यांचे कार्य यावर शास्त्रशुध्द पध्दतीने अभ्यास होऊ लागला. मानसिक विकृतीचे मूळ हे शरीरशास्त्रात असल्याचे संशोधकांनी मान्य केले. फ्राईड या मनोचिकीत्सकाने अबोधावस्था व मनोविकृती यांचा जवळचा संबंध असल्याचे स्पष्ट केले.
चिंता :
चिंता ही भिती व भावनेपेक्षा अधिक गुंतागूंतीची व व्यापक भावना आहे. चिंतेमध्ये धोक्याचा उगम निश्चित सांगता येत नाही. चिंतेमध्ये प्रतिकूल भावावस्था, संभाव्य धोक्याबद्दलची काळजी, भविष्यामधील संभाव्य धोक्याबाबत अंदाज करण्याची असमर्थता व स्वचित्तमग्नता या गोष्टी दिसून येतात. चिंतातूर असणान्या व्यक्ती सामान्य परिस्थितीमध्येसुध्दा भयग्रस्त व चिंतातूर असतात. सततची वाटणारी चिंता या व्यकोंना खिन्न, अस्वस्थ व नाउमेद करते. खन्या किंवा काल्पनिक तसेच पूर्वी घडलेल्या चुकांची उजळणी करीत बसतात. चिंतावस्थेची ही स्थिती दिर्घकाळ टिकून राहत असल्याने त्याचा परिणाम शारीरिक क्रिया व यंत्रणावर होतो. शरीर थरथर कापणे, श्वसनात अढथळे, घाम येणे इ.

चिंता विकृतीच्या कारणांमध्ये वेगवेगळे मत प्रवाह दिसून येतात, सिग्मंड फ्राईड यांच्या मनोविश्लेषण सिध्दांतनुसार लैगिक व आक्रमक स्वरुपाचे आवेग दडपल्यामुळे किंवा ते व्यक्त झाल्यावर त्यासाठी शिक्षा झाल्यामुळे चिंता निर्माण होते.

## बार्लोच्या मते - चिंतेच्या पातक्या :

१) बोधात्मक वा व्यक्तिनिष्ठ पातळी : बोधात्मक वा व्यक्तिनिष्ठ पातळीचा विचार केल्यास चिंतेमध्ये प्रतिकूल भावावस्था, संभाव्य धोक्याबद्दलची काळजी, स्वचित्तमग्नता, भविष्यातील वा आगामी धोक्याबाबत अंदाज करण्याची व धोके उदभवल्यास नियंत्रित करण्याची असमर्थता या गोष्टी दिसून येतात.
२) वर्तनात्मक पातळी : चिंतेमध्ये धोकादायक प्रसंग निर्माण होणार असल्यास तो टाळावा अशी एक तिव्र प्रवृत्ती असू शकते. चिंता व्यक्तिला संभाव्य धोक्याला सामोरे जाण्याच्या नियोजनासाठी तयार करते त्यामुळे चिंता भावनेलाही समायोजक मुल्य असते.
३) शारिरीक पातळी : शारिरिक पातळीवर चिंतेचे दिर्घकालीन अति जागृततेची अवस्था दिसून येते. चिंताभावनेत शारिरिक पातठी हा घटक समाविष्ट होतो.
संशोधनाचे ध्येय / हेतु :
खेळात भाग घेणान्या व खेळात भाग न घेणान्या विद्यार्थ्यांच्या मानसिक स्वास्थ, चिंता आणि शारीरिक सुदृढतेची तुलना करणे.
संशोधनाची उद्दिष्टये :
१) खेळात भाग घेणान्या व खेळात भाग न घेणान्या विद्यार्थ्यांच्या मानसिक स्वास्थ्याचे मापन करणे.
२) खेळात भाग घेणान्या व खेळात भाग न घेणान्या विद्यार्थ्यांच्या चिंतेचे मापन अभ्यास करणे.

## संशोधनाची गृहीतके :

१) खेळात भाग न घेणान्या विद्यार्थ्याच्या तुलनेने खेळात भाग घेणान्या विद्यार्थ्यांचे मानसिक स्वास्थ्य संतुलित असते.
२) खेळात भाग न घेणान्या विद्यार्थ्यांच्या तुलनेने खेळात भाग घेणान्या विद्यार्थ्यांच्या चिंतेचे प्रमाण संतुलित असते.

## संशोधनाची पध्दती :

१)नमुना (Sample) :

प्रस्तुत संशोधनामध्ये १०० विद्यार्थांची निवड केली त्यामध्ये ५० विद्यार्थी खेळात सहभागी होणारे व $५ ०$ विद्यार्थी खेळात सहभागी न होणारे निवडले. अशा प्रकारे संशोधनासाठी नमूना निवड करण्यात आले. २) साहित्य (Tools) :

प्रस्तुत संशोधनासाठी Sinha's Comprehensive Anxiety चाचणीचा उपयोग केला. या चाचणीमध्ये एकुण $९ \circ$ विधाने आहेत. प्रत्येक विधानाला ‘होय’ किंवा ‘नाही’ असे पर्याय दिलेले आहेत. या चाचणीची विश्वसनियता ०.८५ इतकी आहे आणि वैद्यता उच्च स्वरुपाची आहे.

तसेच मानसिक आरोग्य चाचणी वापरण्यात आली. ही चाचणी चं.ग.देशपांडे यांची आहे. यामध्ये एकूण $५ ०$ विधाने आहेत. प्रत्येक विधानाल ‘होय’ किंवा ‘नाही’ असे पर्याय दिलेले आहेत. या चाचणीची विश्वसनियता आणि वैद्यता उच्च स्वरुपाची आहे.
प्रदत्त संकलन (Data Collection) :
प्रस्तुत संशोधनामध्ये एकूण $१ ० 0$ खेळात भाग घेणारे व खेळात भाग न घेणारे विद्यार्थ्यांची निवड करण्यात आली. त्यानंतर त्यांना प्रथम मानसिक आरोग्य चाचणी व नंतर चिंतामापन चाचणी देण्यात आली. व त्यांना वर्गात व्यवस्थित बसवून चांगल्या प्रकारच्या सुचना देऊन दोन्ही चाचण्यांचे मापन करण्यात आले व अशा प्रकारे प्रदत्त संकलन केले.
परिवर्त्ये (Variable) :
स्वतंत्र परिवर्त्ये : १) खेळात भाग घेणारे विद्यार्थी
२) खेळात भाग न घेणारे विद्यार्थी

परतंत्र परिवर्त्ये : १) मानसिक आरोग्य
२) चिंता
३) शारिरिक सूदढता

संख्याशास्त्रीय विश्लेषण (Statistical Analysis):
खेळात भाग घेणान्या व खेळात भाग न घेणान्या विद्यार्थ्यांचे गुणांकाचे मद्यमान (Mean),
प्रमाण विचलन (S.D.) आणि 't' मुल्य (मानसिक स्वास्थ्य)

| खेळाडू | मद्यमान | एकुण | प्रमाण विचलन | D.F. | ' $\mathbf{t}$ मुल्य |
| :--- | :--- | :--- | :--- | :--- | :--- |


| खेळात भाग घेणारे | ४२.२५ | ५० | १.३ ६ | ९८ | ६.६ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| खेळात भाग न घेणारे | ३५.२ १ | ५० | १.५० |  |  |

$\circ . \circ १$ पातळीवर सार्थकता आढळून आली.
' $t$ ' मुल्ये $१ ५ . ६ ५$ इतके आले आणि $0.0 १$ वर सार्थकता पातळी दिसून आली म्हणजेच खेळात भाग न घेणान्या विद्यार्थ्यांच्या तुलनेने खेळात भाग घेणान्या विद्यार्थ्यांचे मानसिक स्वास्थ्य संतुलित असते. खेळात भाग घेणान्या व खेळात भाग न घेणान्या विद्यार्थ्यांचे गुणांकाचे मद्यमान (Mean),
प्रमाण विचलन (S.D.) आणि ' t ' मुल्य (चिंता)

| खेळाडू | मद्यमान | एकुण | प्रमाण विचलन | D.F. | 't' मुल्य |
| :---: | :--- | :--- | :--- | :--- | :--- |
| खेळात भाग घेणारे | २४.७८ | ५० | १.८१ | ९८ | १९.९ ३ |
| खेळात भाग न घेणारे | ३ ३.९ २ | ५० | १.४० |  |  |

$\circ .0 १$ पातळीवर सार्थकता आढळ्ठून आली.
' $t$ ' मुल्ये १९.९३ इतके आले आणि ०.०१ वर सार्थकता पातळी दिसून आली म्हणजेच खेळात भाग न घेणान्या विद्यार्थ्यांच्या तुलनेने खेळात भाग घेणान्या विद्यार्थ्यांचे मानसिक स्वास्थ्य संतुलित असते.
संशोधनाचे निष्कर्ष : (Result)
प्रस्तुत संशोधनात खालीलप्रमाणे निष्कर्ष दिसून आले.
१) खेळात भाग न घेणान्या विद्यार्थ्यांच्या तुलनेने खेळात भाग घेणान्या विद्यार्थ्यांचे मानसिक स्वास्थ संतुलित असते.
२) खेळात भाग न घेणान्या विद्यार्थ्यांच्या तुलनेने खेळात भाग घेणान्या विद्यार्थ्यांच्या चिंतेचे प्रमाण संतुलित असते. शिफारशी : (Recommendation)

आई वडीलांनी आपल्या मुलांना आरोग्यरक्षणाचे धडे देणे उदा: धुम्रपान न करणे, व्यायाम, चरबीयुक्त पदार्थाचे कमी सेवन करणे इ. त्यासाठी आरोग्याची संकल्पना जनमानसात रुजविली पाहिजे. आरोग्यविषयक निर्धारक घटकांची माहिती लोकांना दिली पाहिजे. विविध शैक्षणिक उपक्रमांमधून ही जाणीव निर्माण करणे जे शारिरिक व मानसिकदृष्ट्या सुस्थितीत आहे अशा व्यक्तिंनी दुसन्या व्यक्तिंना आरोग्य सुधारण्यासाठी योग्य ते मार्गदर्शन करणे.
संदर्भ ग्रंथ : (Reference)
१) डॉ. कादरी सय्यद जावीद क्रिडा मानसशास्त्र औरंगाबाद प्रकाशन, औरंगाबाद
२) डॉ. भारसाखळे शारिरिक शिक्षण, औरंगाबाद.
३) प्रा. सौ. वाटवे व सौ. अधिकारी, डॉ. चौधरी (२०००), मानसिक स्वास्थ्य आणि परिपोष, य.च.म.मुक्त विद्यापीठ, नाशिक.
४) प्रा. कुलकर्णी पी. के. १९९८, भारतीय सामाजिक समस्या, विद्या प्रकाशन, नागपूर.
५) प्रा. लेले सुमेधा व झंत विना (२००२), समायोजनाचे स्वरुप आणि परिपोष, य. च. म. मुक्त विद्यापीठ, नाशिक.
६) अपसामान्यांचे मानसशास्त्र: प्रा.अनघा पाटील, डॉ. मानसी राजहंस, डॉ. सुशिल सुर्वे, पुणे प्रकाशन, पुणे ३.

## श्रीमद् दासबोध - मानवी जीवनाचे व्यवस्थापन

## सौ. अविता विनय कुळकर्णी: माध्यमिक शिक्षिका, मुलुंड (पूर्व)

‘व्यवस्थापन’ही सद्य युगातील अती महत्त्वपूर्ण शब्दप्रक्रिया आहे. अगदी बालकाच्या जन्मापूर्वीपासून व्यवस्थापनाची जी सुरुवात होते. ती वृद्धापकाळाच्या मृत्यूला सामोरे जाईपर्यंत. नव्हे, नव्हे तद्नंतरही व्यवस्थापन असणे गरजेचे असते. व्यवस्थापनाअभावी कार्यात मेळ बसत नाही. अकौशल्य, गदारोळ व तत्सम अनेक उपद्रवी बाबींचा त्यात अंतर्भाव असू शकतो. जीवनातील प्रत्येक क्रियेत ‘व्यवस्थापन’ कौशल्याचे स्थान अनन्य साधारण आहे; व हे केवळ सद्यस्थितीतले नक्हे तर प्राचीन काळातही मानव ह्यास महत्त्वपूर्ण समजत आलेला आहे. युध्दे, चढाया, आक्रमणे कुशल व्यवस्थापनाशिवाय झालीच नाहीत.

दासबोध या ग्रंथात मानवी जीवनाचे व्यवस्थापन आढळते. ह्या ग्रंथाचा व्यवस्थापनशास्त्राच्या दृष्टिकोनातून अभ्यास केल्यास ह्यात दिलेल्या सूचनांचा, माहितीचा आपल्या जीवनात जीवन सुखकर करण्यासाठी प्रचंड उपयोग होऊ शकतो. सर्वांना प्रेरणादायी ठरलेला असा हा ग्रंथ आहे. इतिहास त्याची साक्ष आहे, ज्यांनी ह्या ज्ञानाचा उपयोग करून घेतला त्यांचे निर्णय कधीच चुकीचे ठरले नाहीत.

दासबोधाची बैठक आपल्या इतिहासकारांनीही घेतलेली आढळते. आद्य क्रांतिकारक वासुदेव बळवंत फडके गोंदवलेकर महाराजांना व अक्कलकोटच्या स्वामीसमर्थांना म्हणाले होते, "तुम्ही रामदास स्वामी व्हा, मी शिवाजी होतो; तुम्ही माझया हातात तलवार द्या, आपण इंग्रजांना या देशातून हाकलून देऊ." त्यांचे प्रेरणास्त्रोत छत्रपति शिवाजी महाराज व समर्थ रामदास होते. स्वातंत्रवीर सावरकरांचे प्रेरणास्थानही रामदास स्वामी !२ त्यांनी जोसेफ मॅझिनीचे चरित्र लिहिले, इटलीच्या स्वातंत्र्याचा इतिहास लिहिला, तेव्हा मॅझिनीची तुलना रामदासांशी केली. मॅझिनीला इटलीतला रामदास व रामदासांना भारतातील मॅझिनी म्हटले आहे.

गोपाळकृष्ण गोखले, ज्यांना महात्मा गांधी गुरूस्थानी मानत, त्यांना काँग्रेसच्या कार्यकर्त्यांची आचार संहिता तयार करावयाची होती. त्यांनी धुळ्याचे थोर समर्थभक्त ‘शंकर श्रीकृष्ण देव’ यांना बोलाविले व सांगितले, "दासबोधातील महंतांची लक्षणे मला लिहून द्या ! काँग्रेसचा आदर्श कार्यकर्ता कसा असावा याची आचारसंहिता करावयाची आहे व माइया डोळ्यासमोर दासबोधातील समर्थांचा महंत आहे." ${ }^{\text { }}$ दासबोधातील हे व्यवस्थापन त्यांनाही उपयुक्त झाले.

टिळकांनी मंडालेच्या तुरूंगात दासबोध ग्रंथ चौपन्न वेळा संदर्भासाठी मागविला अशी सरकारी नोंद आहे. टिळकांच्या त्या लेखनावर (गीता- रहस्यातील कर्मयोग) ग्रंथराज दासबोधाची छाप आहे. यशवंतराव चन्हाणांनी ‘कृष्णाकाठ’ या त्यांच्या आत्मचरित्रात म्हटलेलं आहे की दासबोधातील समास वाचल्याखेरीज आई त्यांना जेवायला देत नसे. यशवंतराव चव्हणांच्या नित्य वाचनांत दासबोध हा ग्रंथ होता. माजी केंद्रिय गृहमंत्री शिवराज पाटीलही नित्य दासबोध वाचतात. त्यांनी त्याचा इंग्रजीतही अनुवाद केला आहे.

आचार्य विनोबा भावे म्हणत, 'राष्ट्राचे अंदाजपत्रक असते, मग जीवनाचे अंदाजपत्रक असावे की नाही ? अन्यथा माणसाचे सारे आयुष्य वेड्यासारखे दिशाहीन कर्म करण्यात निघून जाईल.' ${ }^{4}$

शत वरूषें वयें नेमिले। त्यात बाळपण नेणता गेले।
तारूण्य अवघे वेचले। विषयांकडे ।1११.३.३।।
दासबोध हा ग्रंथ समर्थांची वाड्.मयीन मूर्ती आहे. समर्थांच्या परिणत-प्रज्ञेचा आविष्कार यात आहे. या

ग्रंथाचे २० अध्याय व २०० समास आहेत. समर्थांचे २ दासबोध आहेत. जुना दासबोध २१ समासी असून कमी प्रचलित आहे. दासबोधातून त्यांनी - १) परिभ्रमण, २) चाळणा, ३) दीर्घोद्योग, ४) जीविताविषयी अनासक्ती, ५) देहाभिमान, ६) देहाचे महत्त्व, ७) नम्रता व सावधानता, राजकारण, लेखन, वाचन, विवेक, वैराग्य, सर्वसमानता, क्षमाशीलता, परोपकार, उत्कट भक्ती अशा एक ना अनेक अमूल्य रत्नांची उधळण केली आहे.

दासबोध ग्रंथ कोणत्याही संस्कृत ग्रंथावरची टीका वा भाष्य नाही; तो त्यांच्या अनुभवजन्य अभ्यासाचा परिपाक आहे. या ग्रंथात काय करावे व काय करू नये अशा अनेकविध बाबींचा उल्लेख आहे. त्यालाच आज आपण Do's \& Don'ts नावाने संबोधतो; ह्या Do's \& Don'ts नेच मानवी जीवनाची आचारसंहिता तयार होते. ह्याच आचारसंहितेचा अभ्यास व्यवस्थापनात होतो. तद्नुसार श्रीसमर्थ हे खन्या अर्थी ‘लोकशिक्षक’ होतात.

## मानवी जीवनाचे प्रथम अंग : वैयक्तीक / प्रापंचिक अंग

विद्यार्थी व्यक्तीमत्व : जीवनाची खरी सुरुवात साक्षरतेपासून होते. विद्यार्थी कसा असावा यावर दासबोधात विस्तृत वर्णन आढळते. अक्षरे, शब्द, ओळी कशा असाव्यात हे त्यांनी प्रचितीरूपाने सांगितले.

जगामध्ये जगमित्र। जिन्हे पासी आहे सुत्र।
कोठे तरी सत्पात्र। शोधून काढावे।। १९.३.१९।।
एखादी गोष्ट खंबीरपणे पण तरीही नम्रपणे सांगण्याची हातोटी जोपासली पाहिजे.
२) कौटुंबिक व्यवस्थापन (Family Management) :-

मानवी जीवनात ब्रह्मचर्याश्रम, गृहस्थाश्रम, संन्यासाश्रम, वानप्रस्थाश्रम असे टप्पे आहेत. ब्रह्मचर्याश्रमातील कार्ये, अभ्यास, पाठांतर यात निपूण होऊन मनुष्य चरितार्थाला लागतो. त्याच्या

गृहस्थाश्रमाचा काल कसा व्यतीत करावा ते दासबोध सांगते.
आधी प्रपंच करावा नेटका। मग घ्यावे परमार्थ विवेका।
येथें आळस करू नका। विवेकीहो।।१२.२.१।।
केवळ परमार्थ करीत राहून, देवभोळेपणा करीत राहून काहीच साध्य होणार नाही. त्याकरिता पुरुषार्थ केलाच पाहिजे.

कुटुंब म्हटले की जमाखर्च (Budget) आलेच. कौटुंबिक बजेटचाही त्यांनी विचार केला आहे.
मेळविती तितुके भक्षिती। ते कठीण काळी मरोन जातिं।
दीर्घ सूचनेने वर्तती। तेची भले।१८.७.७।।

## सामाजिक व राष्ट्रीय अंग

लोकशिक्षण :- माजी शिक्षणसंचालक श्री. व्ही. व्ही. चिपळ्ठणकर सज्जनगडावरील भाषणात म्हणाले होते, "समर्थ रामदास आमच्या क्षेत्रातीलच एक शिक्षण शास्त्रज्र होते. त्यांनो महंताला केलेला उपदेश आज अनेक शिक्षकांना लागू पडतो ${ }^{3} "$.
दासबोधात समर्थ म्हणतात -
जितुके काही आपणासी ठावे। तितुके हळूहळू सिकवावे।
शाहाणे करून सोडावे। बहुत जन।।९९.१०.१४।।
शास्त्राभ्यास : समाजाला प्रगत करण्यासाठी अंधश्रद्धेचा बळी देऊन शास्त्र अभ्यासाची गरज आहे हे सत्य

समर्थांनी दासबोधातून विषद केले. मग ते अध्यात्मशास्त्र असो की जीवशास्त्र असो.

## वेळेचे व्यवस्थापन :-

ऐक सदेवपणाचे लक्षण। रिकामा जाऊ नेदि क्षण।
प्रपंच वेवसायाचे ज्ञान। बरे पहा।।१ १.३.२४।।
आपल्या आयुष्याचा कोणताही क्षण वाया जाऊ देऊ नये. आपल्या प्रपंचासाठी जो व्यवसाय आपण करतो, त्याचे उत्तम ज्ञान आपल्याला असावे. ‘प्रपंच वेवसायाचे ज्ञान बरे पाहे'. आपला वेळ ज्ञान संपादन करण्यात घालवावा.
मनुष्यबळ व्यवस्थापन :- (Human Resource Management)
माझे़च म्हणेे खरे असे म्हणून चालणार नहही. लोकांना बरोबर घेउन चालावे व त्यांना क्रमाक्रमाने शिकवावे.
म्हणोन सांगाती असावे। मानत मानत शिकवावे।
हळु हळु सेवटा न्यावे। विवेकानें ।१२.१०.४१।।
सर्वधर्म समभाव : ‘चिंता करितो विश्वाची’ म्हणणारे या समर्थांना विश्व म्हणजे महाराष्ट्रीय हिंदू समाज असा संकुचित अर्थ अभिप्रेत नव्हता.

खरा देव कोणत्याही जातीधर्मात बांधलेला नाही. कल्पनाशक्तीच्याही तो पार आहे. समर्थांच्या उदारमनस्कतेचे पुरावे काव्यात व कार्यात दोन्ही ठिकाणी आढळतात.

हरीकथानिरूपण, राजकारण, सावधपण व साक्षेप ही रामदासांची चतु:सूत्री आहे. इतर संतांप्रमाणेच आपल्या धर्मकल्पनेत हरीकथा निरूपणाला अग्रस्थान दिले होते. परंतु प्रपंच आणि परमार्थ यात नुसता भेद कल्पून प्रपंचाची अकारण हेळसांड करण्याच्या अनिष्ट व अज्ञानजन्य प्रवृत्तीवर त्यांचा विशेष कटाक्ष होता. त्यांनी समाजजीवनाला बळकटी आणण्याचे प्रयत्न केले. सामाजिक नीतीचा व्यापक दृष्टीने व विविध रीतीने परामर्श घेतला आहे.
संदर्भ :
१) चिंचोलकर सुनिल, दोन राष्ट्रगुरू, ज्ञानप्रबोधिनी- सोलापूर प्रकाशन, २००८, संपादक अमोल गांगजी.
२) प्राचार्य शेवाळकर राम, कल्याणी, रामदास स्वामी विशेषांक २००८, ओंकार ट्रस्ट, संपादीका श्रीमती रजनी काळे, प्रतिमा ऑफसेट, पुणे.
३) चिंचोलकर सुनिल, श्रीसमर्थाचे नीतीशतक, श्री. बा. ढवळे प्रकाशन, प्रथम आवृत्ती, इंदिरा प्रिंटींग प्रेस, पुणे, सप्टेंबर २००७.
४) चिंचोलकर सुनिल, समर्थ रामदासांचे व्यवस्थापन, प्रकाशक दिलीप महाजन, मोरया प्रकाशन, पाचवी आवृत्ती, मे २००९, डोंबिवली (पूर्व).
4) श्रीमद् दासबोध, के. वि. बेलसरे.

# Utilization of Grass Atripex Hortensis for Increased Biomass Productivity in Shrub Species 

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#### Abstract

: The experiment was aimed to investigate the total effect of environment developed at the experimental site on the biomass, dry matter and crude protein yield in grass species when cultivated under five sets of tree environment along with shrub land species. In centrums the trial conducted revealed that it suited to local conditions, harvest managements, sustainable regeneration and growth. It was initially slow to establish but did not pose any problem under tree environment and shrub setup.


## Introduction:

Considering needs of rural areas, the traditions when integrated with strategy and cooperation, then shrub land species can undoubtedly be considered to play an effective role for solving land use problem. The shrub x grass indeally suited to establishment were selected to understand the extent of production level $(1,2)$. The characters helpful towards soil improvement, humus accumulation, N fixation, nutrient enrichment were the parameters selected for study. The multistoried trees shrub grasses establish a close relationship on wasteland under silvipastural system which can be used as land protection, shelter and ground cover towards high biomass yields.

## Materials and Methods

The shrub land species namely Sesbania sesban, Leucean leucocephala, Sesbania grandiflora, Moringa oleifera, Gliricidia maculata with grasses viz.

Chloris guyana, Cenchrus ciliaris, Dicanthium annulatum and Atriplex hortensis and species were chosen for plantation to establish a multistoried biomass system with grass as land cover, shrub as sub-aerial component under five enviornments developed by the cultivation of trees $\left(\mathrm{E}_{2} \mathrm{~T}_{2}, \mathrm{E}_{3} \mathrm{~T}_{3}, \mathrm{E}_{4} \mathrm{~T}_{4}\right.$, and $\mathrm{E}_{5} \mathrm{~T}_{5}$, ) with shrub land species as browse : Desmodium gyrans, Desmanthus virgatus, Stylosanthes hamata, Sesbania Sesban and Medicago Sativa and grasses as intercultigen : Chloris guyana, Cenchrus ciliaris, Dicanthium annulatum and Atriplex hortensis.

The experiment was conducted in complete randomized block design with four replications. Each tree environment received five plant species which were later converted into shrub canopy. The design of experimental layout was conditioned to establish tree environment first. Then under growing shrubs followed by grasses as ground carpet for the effecient use of light, water and nutrients.

The intercultural practices were followed as and when required, watering and weeding operation were done till the plantation was established. Thus, each tree environment was developed as an integrated unit of biomass production with
the help of trees, shrubs and grasses as source of forage, fodder and fire wood through the establishment of multistoried plantation system. Thus each tree environment was a combination of $\mathrm{S}_{1}-\mathrm{S}_{5}$ (shrubs) as aerial and $\mathrm{G}_{1}-\mathrm{G}_{4}$ (grasses) and Amaranthus as ground canopy (Fig. 1, Table 1).

About 100 g of biomass from each replicate from tree environment $\left(\mathrm{E}_{1} \mathrm{~T}_{5}\right.$, $\mathrm{E}_{5} \mathrm{~T}_{5}$ ) was collected in triplicate and removed to oven, dried at constant temerature of $98+2 C$ for dry matter determination till constant weight, the percent dry matter was determined and total dry matter was calculated on dry matter percent basis and presented as $\mathrm{dm} \mathrm{kg} /$ area per harvest.

The N per cent analysis of the sample was done by microKjeldhal's method and reported as per cent N . The crude protein was calculated by multiplying $\mathrm{N} \%$ $\times 6$.

The freshly harvested leaf sample of the grass was analyzed for I, II and III year to confirm the findings.

| $T_{1} E_{1}$ | $T_{1} E_{1}$ | $T_{1} E_{1}$ | $T_{1} E_{1}$ | $T_{1} E_{1}$ |
| :--- | :--- | :--- | :--- | :--- |
| $S_{1} \times S_{2} \times S_{3} \times S_{4} \times S_{5}$ | $S_{1} \times S_{2} \times S_{3} \times S_{4} \times S_{5}$ | $S_{1} \times S_{2} \times S_{3} \times S_{4} \times S_{5}$ | $S_{1} \times S_{2} \times S_{3} \times S_{4} \times S_{5}$ | $S_{1} \times S_{2} \times S_{3} \times S_{4} \times S_{5}$ |
| $G_{1} \times G_{2} \times G_{3} \times G_{4}$ | $G_{1} \times G_{2} \times G_{3} \times G_{4}$ | $G_{1} \times G_{2} \times G_{3} \times G_{4}$ | $G_{1} \times G_{2} \times G_{3} \times G_{4}$ | $G_{1} \times G_{2} \times G_{3} \times G_{4}$ |

Fig. 1. Integrated unit of biomass production through the establishment of multistoried plantation under five environments developed.

H-Harvest $\mathrm{E}_{1} \mathrm{~T}_{1}$ Environment of tree Sesbania sesban, $\mathrm{E}_{2} \mathrm{~T}_{2}$-Environment of tree Leucaena leucocephala, $\mathrm{E}_{3} \mathrm{~T}_{3}$ Environment of tree Sesbania grandiflora, $\mathrm{E}_{4} \mathrm{~T}_{4}$-Environment of tree Moringa oleifera, $\mathrm{E}_{5} \mathrm{~T}_{5}$ - Environment of tree Gliricidia maculata, ANOVA-Analysis of Variance, S-Indicates shrub Sesbania sesban, $\mathrm{S}_{1-}$ Indicates shrub Leucaena leucocephala, $\mathrm{S}_{2}$-Indicates shrub Sesbania grandiflora, $\mathrm{S}_{3}$-Indicates shrub Moringa oleifera, $\mathrm{S}_{4}$-Indicates shrub Gliricidia maculata, $\mathrm{G}_{1}-$ Indicates grass chloris guyana, $\mathrm{G}_{2}$ - indicates grass cenchrus ciliaris, $\mathrm{G}_{3}$-Indicates grass Dicanthiym annulat $\mathrm{G}_{4}$, indicates grass Atriplex hortensis.

## Results and Discussion: <br> Biomass:

The studies on Atriplex as an intercultigen is reported for the first time from this centre (of study), when cultured in silivipasture system. The crop established and proved a good source of biomass produce. It has lush green leaves with high crude protein content and sustained to 3 harvests. An annual herb was cultivated with legume species. The observations on biomass yield under different environment is presented in (Tab.1-A).

The biomass yields on mean basis, indicated that under different environments yielded high biomass in the Y1 under E3 ( $59.6 \mathrm{Kg} / \mathrm{u} . \mathrm{a}$.) while lowest ( $40.6 \mathrm{Kg} /$ u.a.) in Y3 under E2 environment. The biomass yield during Y1 under E1 to E 5 environments were as high as ( $59.6 \mathrm{Kg} / \mathrm{u} . \mathrm{a}$.) and as low as ( $53.9 \mathrm{Kg} / \mathrm{u} . \mathrm{a}$.) were observed, while in the Y2, the biomass ranged between ( 40.9 to 58.9 $\mathrm{Kg} /$ u.a.) and in the Y 3 ranged as ( 40.6 to $56.1 \mathrm{Kg} / \mathrm{u} . \mathrm{a}$.). The high biomass yields
observed under E1 of the Y1, yielded low biomass in the Y2 in E1. The yield levels were maintained at low profile in E3, E4 and E5 in both the Y2 and Y3 years. Interestingly, in Y3, biomass yields were high under E1 and E4 and low in E2, E3 and E5.

The significant yield differences noticed under different years of observation indicated that different climatic conditions influenced the yield levels (Tab. 1-A).

The effect of En $\times \mathrm{Yr}$ was significant. High biomass was recorded in H 1 under E3 of Y1 while lowest in E2 of H1 in Y1. The yield level in different years and the environments significantly varied. Interestingly, in the Y1, high yields were noticed and subsequently declined in Y 2 and Y 3 . As high as ( $59.64 \mathrm{Kg} / \mathrm{u} . \mathrm{a}$.) and as low as ( $40.9 \mathrm{Kg} / \mathrm{u} . \mathrm{a}$.) were noticed on mean basis.

As regards the harvests effect, yields were significantly affected under different harvests and environmental conditions. The results presented on mean basis showed that H 2 of the Y 1 recorded maximum biomass ( $60.24 \mathrm{Kg} / \mathrm{u} . \mathrm{a}$.) followed by H1 ( $56.35 \mathrm{Kg} / \mathrm{u} . \mathrm{a}$.) and H3 ( $55.79 \mathrm{Kg} / \mathrm{u} . \mathrm{a}$.) harvest, while in.Y2, the yield was significantly low when compared with Y 1 , the low biomass was observed in the Y3.

Significantly, high biomass under E3 at H 1 of Y 1 and Y 2 was noticable. The yield was consistent in the E3 of harvest $\mathrm{H} 1, \mathrm{H} 2$ and H 3 while low in the same environment of Y3. The harvest H 1 and H 2 under E3, E4 and E5, yields were consistently high in Y1 and Y2 when compared with Y3. The environment E4 favoured high biomass during three years (Tab 1 A ) of trials.

The En $\times \mathrm{Hr}$ effect was significant and yields ranged as low as (48.4 to $65.0,39.7$ to 64.9 and 37.0 to $64.9 \mathrm{Kg} /$ u.a.) in Y1, Y2 and Y3 respectively.

As high as 65.0 Kg biomass / u. a. was recorded in E3 of Y2 which was at par with H 1 of Y 1 under E 3 . The biomass yields in H 1 were at par, with H 2 under E1 and E2 of Y1 in E1 of Y3 and E5 of Y1. Similarly, no significantly differences were observed between E 3 and E 4 at H 2 in the Y 1 and in E 4 at H 2 in Y 2 .

Table No. 1
A The effect of harvest on biomass yield $\mathrm{Kg} /$ u.a. under different environments Atriplex hortensis

| Year | Environments | H1 | H2 | H3 | Mean |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Y1 | E1 | 56.09 | 62.62 | 56.14 | 58.28 |
| E2 |  | 48.44 | 62.34 | 59.27 | 56.68 |
| E3 |  | 65.00 | 57.80 | 56.11 | 59.64 |
| E4 |  | 55.55 | 57.54 | 48.87 | 53.99 |
| E5 |  | 56.69 | 60.91 | 58.58 | 58.73 |
| Mean |  | 56.35 | 60.24 | 55.79 | 57.46 |
| Y2 | E1 | 55.79 | 40.51 | 39.75 | 45.35 |
| E2 |  | 40.31 | 42.02 | 40.45 | 40.93 |
| E3 |  | 64.92 | 55.85 | 56.21 | 58.99 |
| E4 |  | 55.49 | 57.49 | 58.83 | 57.27 |

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| E5 |  | 56.56 | 60.90 | 58.64 | 58.70 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Mean |  | 54.61 | 51.35 | 50.78 | 52.25 |
| Y3 | E1 | 48.51 | 62.36 | 57.47 | 56.11 |
| E2 |  | 45.92 | 38.92 | 37.00 | 40.61 |
| E3 | 48.14 | 47.98 | 47.66 | 47.93 |  |
| E4 |  | 55.90 | 55.26 | 47.46 | 55.21 |
| E5 | 40.37 | 42.03 | 40.42 | 40.94 |  |
| Mean |  | 47.77 | $\mathbf{4 9 . 3 1}$ | $\mathbf{4 7 . 4 0}$ | $\mathbf{4 8 . 1 6}$ |


| SE + CD | at | $\mathbf{0 . 0 5}$ |
| :--- | ---: | :--- |
|  |  |  |
| En |  | 0.135 |
| Yr | 0.104 | 0.373 |
| Hr |  | 1.040 |
| En X Yr |  | 0.230 |
| En X Hr | 0.233 | 0.289 |
| $\mathrm{Yr} \times \mathrm{Hr}$ | 0.181 | 0.647 |
| En X Yr X Hr | 0.405 | 0.501 |
|  |  |  |

The results further indicated that the crop showed differential performance under different harvests of the years and environments.

## Dry Matter:

The studies on dry matter yields presented ( Tab 1 B ). On mean basis, the yield differences observed were significant under different environments. Maximum dry matter was recorded under E4 of Y1 which was at par with Y3, in E3 and E4 of Y2 and Y3, E3 at H1 of Y3 thereby, indicated that Atriplex coexisted with Sesbania grandiflora and yielded high dry matter.

Similar results were observed under E4 and E5 in first two years, the yields markedly altered in three years. The maximum yields in Y 1 ( $13.57 \mathrm{Kg} /$ u.a. ) followed by Y2 ( $13.06 \mathrm{Kg} /$ u.a. ) and Y3 ( $12.3 \mathrm{Kg} /$ u.a. ). Although dry matter differences were significant yet were in narrow range.

The effect En x Yr was significant. The environment E3 yielded high dry matter followed by E4 and E5 all the 3 year except E5 of Y3 and E2 of Y2.

The effect of harvests under environmental conditions were significant and also between the harvest, significant differences were observed when Atriplex grown as intercultigen. The high dry matter and biomass yield was noticed at H 1 of Y 2 under E 3 environment and lowest under H 1 of H 2 in Y 3 under E 2 .
Table No. 1-B
The effect of harvest on dry matter yield $\mathrm{Kg} / \mathrm{u} . \mathrm{a}$. under different environments Atriplex hortensis

| Year | Environments | H1 | H2 | H3 | Mean |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Y1 | E1 | 14.02 | 14.17 | 13.00 | 13.73 |
|  | E2 | 12.44 | 13.72 | 13.70 | 13.29 |
|  | E3 | 15.21 | 13.13 | 13.13 | 13.82 |
|  | E4 | 14.37 | 14.18 | 13.30 | 13.88 |

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|  | E5 | 13.07 | 13.52 | 12.78 | 13.12 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mean | 13.78 | 13.74 | 13.18 | 13.57 |
| Y2 | E1 | 12.44 | 13.71 | 13.70 | 13.28 |
|  | E2 | 14.03 | 9.95 | 9.93 | 11.30 |
|  | E3 | 15.22 | 13.05 | 13.16 | 13.81 |
|  | E4 | 13.62 | 14.30 | 12.96 | 13.63 |
|  | E5 | 13.05 | 13.57 | 13.19 | 13.27 |
|  | Mean | 13.67 | 12.92 | 12.59 | 13.06 |
| Y3 | E1 | 12.42 | 13.71 | 57.47 | 56.11 |
|  | E2 | 14.05 | 09.92 | 37.00 | 40.61 |
|  | E3 | 14.38 | 12.38 | 47.66 | 47.93 |
|  | E4 | 13.75 | 13.70 | 47.46 | 55.21 |
|  | E5 | 09.95 | 10.66 | 40.42 | 40.94 |
|  | Mean | 12.91 | 12.07 | 12.12 | 12.37 |
|  |  | SE + CD | at 0.05 |  |  |
|  | En | 0.023 | 0.065 |  |  |
|  | Yr | 0.018 | 0.050 |  |  |
|  | Hr | 0.018 | 0.050 |  |  |
|  | En X Yr | 0.040 | 0.112 |  |  |
|  | En XHr | 0.041 | 0.112 |  |  |
|  | $\mathrm{Yr} \times \mathrm{Hr}$ | 0.031 | 0.086 |  |  |
|  | En X Yr X Hr |  |  |  |  |

Similarly, the yields were low in Y 3 at all the three harvests, interestingly; yields were high under E1 to E5 environments in both years at H 3 in Y 2 and Y 3 . The environment E2 did not favour dry matter accumulation during Y2. Similar results were observed in the Y3 of E5.

When the effect of En x Yr were observed, the .yields were at par) between Y1 and Y2 and ranged as (12.4 Kg/u.a. to $15.2 \mathrm{Kg} /$ u.a.), ( $9.9 \mathrm{Kg} /$ u.a. to 15.2 $\mathrm{Kg} /$ u.a.) and ( $9.9 \mathrm{Kg} / \mathrm{u} . a$. to $14.3 \mathrm{Kg} /$ u.a.) Y1, Y2 and Y3 respectively which signifies that the dry matter yields are not much affected under different conditions of Y1 and Y2 and to large extent are in the control of environment. ?
Table No. 1-C
The effect of harvest on crude protein yield $\mathrm{Kg} / \mathbf{u} . \mathrm{a}$. under different Environments Atriplex hortensis

| Year | Environments | H1 | H2 | H3 | Mean |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Y1 | E1 | 4.610 | 4.92 | 4.39 | 4.64 |
|  | E2 | 4.11 | 4.77 | 3.50 | 4.13 |
|  | E3 | 4.98 | 4.27 | 4.29 | 4.51 |
|  | E4 | 4.61 | 4.93 | 4.39 | 4.64 |
|  | E5 | 4.45 | 4.92 | 4.18 | 4.52 |
|  | Mean | 4.55 | 4.76 | 4.15 | 4.49 |
| Y2 | E1 | 4.11 | 4.77 | 4.55 | 4.14 |
|  | E2 | 3.28 | 4.31 | 3.70 | 3.76 |

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|  | E3 | 4.53 | 4.60 | 4.56 | 4.56 |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | E4 | 4.85 | 5.12 | 5.10 | 5.02 |
|  | E5 | 4.68 | 4.51 | 4.18 | 4.65 |
| Mean | 4.29 | 4.66 | 4.34 | 4.43 |  |
| Y3 | E1 | 4.11 | 4.77 | 3.55 | 4.14 |
|  | E2 | 2.37 | 2.51 | 2.60 | 2.49 |
|  | E3 | 2.96 | 3.50 | 3.10 | 3.19 |
| E4 | 4.11 | 4.03 | 4.29 | 4.14 |  |
| E5 | 1.85 | 1.92 | 2.00 | 1.92 |  |
| Mean | 3.08 | 3.35 | 3.11 | $\mathbf{3 . 1 8}$ |  |
|  | SE + CD at 0.05 |  |  |  |  |
| En | 0.009 | 0.025 |  |  |  |
| Yr | 0.007 | 0.019 |  |  |  |
| Hr | 1.007 | 0.019 |  |  |  |
| En X Yr | 0.016 | 0.044 |  |  |  |
| En X Hr | 0.016 | 0.044 |  |  |  |
| Yr X Hr | 0.012 | 0.034 |  |  |  |
| En X Yr Xr Hr | 0.027 | 0.077 |  |  |  |

The inter cultivation of Atriplex under different environments favoured high biomass and dry matter yield/u.a.

## Crude Protein:

The crude protein yields are important from nutritional point of view and are affected under different environmental condition and harvests. The observations presented (Tab. 1-C) indicate that different environments and years, significantly affected crude protein yield.

On mean basis, the environment E1, E3, E4 and E5 significantly yielded high crude protein in the Y1 and Y2 year respectively. However, narrow differences between the harvest were observed during Y 1 and Y 2 at $\mathrm{H} 1, \mathrm{H} 2, \mathrm{H} 3$ harvests.

On mean basis, E1 of Y1 yielded high crude protein and was at par with E5 followed by E2, E3 and E4, while lowest in E2 of Y2 and Y3 respectively. Significantly, low yields under E2 environment were observed in Y2, Y3 and Y1. The crude protein character was significantly affected in the Y3. The effect of environment on crude protein yield was found significant during first two years. In Y 1 and Y 2 the yields were high, followed by Y3.

The environment E4 was favourable for high crude protein yields in all the 3 years. Interestingly, (Tab. 1 C) the cultivation of Atriplex with Sesbania sesban (E1) high crude protein yields were noticed in all the 3 years. Its cultivation with Sesbania grandiflora and Gliricidia in first two years yielded significantly high crude protein, while in Y3 was low. Atriplex cultivation with E4 (Moringa) yielded high crude protein during 3 years period. Therefore, it can be concluded that an annual Atriplex is suitable with ( SG and GM) for Y3.

The En x Hr x Yr results indicated that on mean basis, the environment E4, at every year yielded high crude protein followed by E1, E3 and E5 respectively in
all the 3 years. As high as ( $5.1 \mathrm{Kg} /$ u.a.) crude protein was observed under, E4 of Y2 under H2 and H3 and lowest in E2 of H1 followed by E1, E4, E5 and E3 of Y1. Interestingly, high yields were noticed in E3 of Y1 in H1, while the yields were maintained at $\mathrm{H} 1, \mathrm{H} 2$ and H 3 of Y 3 under the environments studied.

A consistent high crude protein yields were noticed under E1 and E4 environment in all the 3 years. The results indicated that the crop Atriplex thrived well under silivipasture system, maintained high dry matter, biomass and crude protein yields under shaded condition were maintained.

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## Stress Problem in Athletes and Its Management

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#### Abstract

The present paper is highlighting the stress problem occurrence in daily life due to economic condition, family problems, workplace, and uncertain life style of mankind. Increasing cases of suicides, by youth due to frustration feeling of fear and negative thinking, pressure from parents alarming us to provoke, before the time lasts. The paper is an attempt to point some general issues related to stress, the root of the psycho-socio problem. It is highlighted, clearly by the authors, that what are the basic causes of stress and how to overcome stress in our day to day life. By doing proper relaxation exercises, dhyan chanting, yoga, and meditation will help to heel from stress, is concluded by the authors.


Key words: stress, psychological problem, yoga, management.

## Introduction

Life Is Full Of Joy Sorrows, Good And Bad News. When The Distress In Life Is Too Much It Is Called The Stress In Life. Stress Is Defined In Various Ways. Stress is the Result Of Dynamic Interaction Of The Individual With The Environment And Reflected By Former Feeling Of Threat. Stress Is Associated With Human Mind And Psych. It Is The Daily Tiffin Of Our Life. Stressful Situations Occur Most Frequently Due To Work Nature, Demand And The Pressure Of Limited Time To Finish It Off. Stress Is Excessive Speed Causing Pain And Leads To Ailments And Diseases. Stress Is The Diseases Which Affect At All Human Being I.E. School Going Students, Graduate, Postgraduate Student, Businessmen, Executives, Professionals, Teachers, Policemen, Politicians, To Every Body.

The Most Powerful Of Stress Is In Our Mind. It Is Not Only What We Think But Also The Fact That We Carry The Same Thought With Us For Days Together That Gives Rice To Distress. Even Though The Quality Of Our Entire Life Is Decided By The State Of Mind, Man Spends Incredibly Little Time Enhancing Or Even Maintaining Sound Mental Health. Stress Level May Differ From People To People.

## Effect of Stress over Body

Stress can be dividing into three stages.
The FIRST stage occurs immediately after exposure to stress. We can say that the alarm bell have started ringing.

- The muscles of the body become tense, there are blockages in the flow of energy in the meridians of the body,
- The rate of heart beats becomes faster, breathing become faster and asystematic, there can be profuse perspiration,
- The moth can become dry, in spite of your consuming gallons of water,
- The eyes could begin to dilate and,
- There could be a very un easy feeling in the stomach.

This is the stage when the body begins to prepare itself to respond to stress,
The second stage persist, the body now enters the SECOND stage,

- Blood pressure rises
- Blood sugar levels increase to provide additional energy to combat the stress.
If in the first two stages, the body is unable to resolve the stress, then it will enter the THIRD and last stage which is the stage of exhaustion. The body has run out mentally and physically to resist and is no longer able to cope with it which now takes its toll and becomes harmful stress.(B.A.Shernaz)


## Stress Types

- Financial worries
- Problems with children
- Physical injury and discomfort


## Stress has three sources:

(i) Environment- weather, noise, crowding
(ii) Body - the rapid growth of adolescence, ageing, illness, accident, poor diet and disturbance in sleep.
(iii) Thoughts- future prediction, unnecessary worries, negative and frightening thought

## Stress Related Problems

- Digestive problems
- Hyperacidity
- Burning pain
- Heaviness in stomach
- Heart burn
- Vomiting


## Causes

- Use of oily, spicy food
- Smoking
- Use of tea or coffee
- Use of fermented food
- Drink alcohol
- Use of drugs

How to Beat the Stress

- Meditation
- Be in a company of friends
- Dance
- Eat light and satvik food
- Use boiled and pure water to drink
- Use old wheat/rice
- Have fruit in diet
- Read motivational literature
- Have regular sleep
- Have dinner on time(early in the evening)
- Have a good word for people


## Music, Recreation, and Yoga

Stress as associated with mind music plays a vital role to over come from stress. Good classical, western, folk, Bhajans or traditional music can add the sweetness. Many researches proved that, music heal from any sickness. On the occasion of mental health week (October-3-10-2005) Mumbai, based doctors agree that the connection between mind and spirituality has had a reassuring effect for the city's stressed and strained minds. Doctors recommended many patients who have come out of illness to take up Vipasana to strengthen them mentally. The reasons could be traced to social and scientific developments. Across the world, scientists studying the effect of alternatives such as Yoga, Meditation and Spirituality on the Nervous System have come up with encouraging results.

Sports, physical activities, and recreational programme are also very helpful to beat the stress. The light warming-up help to stimulate body muscles and free joint. The daily workout of any sport activity as per the capacity of person to person my cure the stress and remain the body fit and fine. The set of weight training, circuit training and other free arm exercises would keep body healthy and away from stress. The exercises also help to maintain digestion and provide sound sleep. Camping, light group activities, tour, watching drama, cinema are the traditional stress busters.

In Yoga, there are combination of some specific slow motion based exercise which includes heart beat, breathing, and body temperature. Yogic asana affect the internal organs and gives scientific affect over mental stress and physical ability of humans. It regulates human behavior with a piece of discipline and gives a sound and healthy environment and living. The asana exercise every part of the body, stretching and toning the muscles and joint, the spine and the entire skeletal system. They work for entire body and its internal organs, glands and nerves as well, keeping all the systems in radiant health. By releasing physical and mental tension they also liberate vast resources of energy. Relaxation will help to control anxiety, hypertension, and insomnia. Meditation can
help us to relieve stress and strain.

## Benefits of Yoga

- Maintain physical and mental fitness.
- Purified the blood.
- Maintain heart beats.
- Maintain body system.
- Relief from fatigue and stress.
- Strengthen the body parts and the muscles.
- Improve flexibility.
- Helps to regulate temperature.
- Helps to develop the quality of cleanliness, simplicity, purity which removes the bad ideas.
- Spiritual development.
- Good eating habits.


## Conclusion

Human body demands a proper set up of life style and work accordingly. Stressful situations occur most frequently due to the work demand. Every body has the right to live happy life, full of joy and prosperity. proper eating habits, regular exercise, walking, relaxing therapy, smiling, positive thinking, stopping the stretched thoughts, body awareness, meditation, chanting of Aum, will help to get rid of stress related problems.

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## Assessment and Management of Water Resources in Dhule Tahsil

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#### Abstract

The present paper has a bifocal aim. The first is the assessment of existing tapped ground and surface water sources and their potentials in respect of the present need of water of the Tahsil. Secondly the proper management of the existing sources and tapping of the potential sources.

The potential water sources from ground as well as surface water estimated. It is seen that at present 1016.93MCM water potential available in Dhule Tahsil out of which only 70.10 MCM sources tapped for drinking domestic and irrigation purpose, however 9.55 MCM water is only available for drinking and domestic purposes. The per capita per day water for drinking and domestic purpose is 36 liters of water. The minimum hygienic requirement of per capita per day water should not be less 100 liters. It means that 64 liters additional water is required for drinking and domestic purposes. 64 liter water per day per capita can be managed either from the existing as well as the potential sources of water, which are available. If the potential sources are tapped and conservative techniques utilized. The sufficient water can be made available for present and future demand of water of the Tahsil. Dhule Tahsil extends between $74^{\circ} 36 \mathrm{E}$ to $75^{\circ} \mathrm{E}$ Longitude to $20^{\circ} 43 \mathrm{~N}$ to $21^{\circ} 10 \mathrm{~N}$ Latitude it covers $1981.94 \mathrm{sq} . \mathrm{km}$ area and 718890 people dwelling in the Tahsil. Dhule Tahsil comes under monsoonal climatic regime and receives 500 mm of rainfall.

\section*{Introduction}

Water scarcity is the Global issue especially for, domestic and irrigation purpose. The minimum hygienic requirement of per capita per day is not less than 100 liters, but about 36 liters of water is available in the Dhule Tahsil. Certainly, some assessment and water management in the study area can solve this problem. Dhule Tahsil extends between $74^{\circ} 36 \mathrm{E}$ to $75^{\circ} \mathrm{E}$ Longitude and $20^{\circ} 43^{\circ} \mathrm{N}$ to $21^{\circ} 10^{\circ} \mathrm{N}$ latitude. Area covers $1981 \mathrm{~km}^{2}$. Methodology: To ascertain the potential of water resources, it grouped in two categories. 1) Surface water 2) Ground water

Thus, the water budget prepared. To serve this purpose the data collected from dug well, reservoir and minor projects, as well as rainfall data of past year has being utilized.


## Study area:-

Dhule Tahsil extends between E to $75^{\circ} \mathrm{E}$ Longitude and $20^{\circ} 43^{\circ} \mathrm{N}$ to $21^{0} 10^{\circ} \mathrm{N}$ latitude and covers 1981 sq . km area in Dhule District of Maharashtra. The ambrothermic diagram of the Tahsil indicates trixeric nature, suffering from strong aridity. Bioclimatically area lies in the drogues prone.

Zone deciduses
of -
OMBROTHERMIC DIAGRAM
AMRAWATI BASIN

Maharashtra with any nature vegetation.


Derived from Unpublished Ph.D. Thesis "Geomorphic Analysis of Panzara Basin " of S.M.Bhamare presented to University of Poona,1987

## Data base and methodology:-

The study is based on data of 2002 and 2003 of Dhule Tahsil available in District statistical hand book. The climatic data for the same year is obtained from meteorological department of collage of Agriculture in Dhule population data proceed from the statistical handbook of Dhule year 2002-03. The location map is prepared from toposheet $1: 5,0000$ where as data deated to water is generated from imperial formula. The results obtained and analyzed. The result obtained and discussed.
Results and Discussions:-
Amongst various source of water resources in the basin, the rainfall and ground water are important. The rainfall is used for estimation of surface water sources. Besides surface storage in reserwirs tanks, lakes etc. also considered.

## Surface water:-

The rainfall data treated for estimation of surface water. The surface water in the area results from rainfall and there fore computed by the water
balance numerical causation suggested by R. N Mathur and K. S. Yadav, (1980), to find the available water for the given year.

Available water $=(\mathrm{P}-\mathrm{AE})$
Where
$\mathrm{P}=$ Annual Rainfall
$A E=$ Actual Evaporation.
The annual rainfall for the study area is 85.64 cm , and actual evaporation 34.33 cm , for the year 2002-2003. The available water for the same year is obtained as follows

Available water $=85.64-34.33$

$$
\begin{aligned}
& =51.31 \mathrm{~cm} \\
& =0.5131 \mathrm{Mets} .
\end{aligned}
$$

Volume of water surplus $=$ Area * Depth

$$
=1981.94^{*} 0.5131
$$

Hence, volume of surplus water $=1016.93$ MCM.
Ground water source:-
Ground water is another important source of water in Tahsil. There are about 4378 dug wells having a diameter 5 Mets and average depth of 10 meters which static water table is 3 meters bellow ground level.

Hence, the volume of water is 0.76615 MCM.
Besides there are about 41 minor irrigation reservoirs in the Tahsil having total stored capacity of 69.34 MCM of which, only 9.55 MCM is reserved for the domestic purpose.

The total population of the study area for last some decades is given bellow chart.

| Tahsil | Year | Total population |
| :---: | :---: | :---: |
| Dhule | 1951 | 230609 |
|  | 1961 | 299535 |
|  | 1971 | 38081 |
|  | 1981 | 483701 |
|  | 1991 | 603435 |
|  | 2001 | 718890 |

## Conclusion:-

The potential water sources from ground as well as surface water estimated. It is seen that at present 1016.93MCM water potential available in Dhule Tahsil out of which only 70.10 MCM sources tapped for drinking domestic and irrigation purpose, however 9.55MCM water is only available for drinking and domestic purposes. The per capita per day water for drinking and domestic purpose is 36 liters of water. The minimum hygienic requirement of per capita per day water should not be less 100 liters. It means that 64 liters additional water is required for drinking and domestic purposes. 64 liter water per day per capita can be managed either from the existing as well as the potential sources of water, which are available. If the potential sources are
tapped and conservative techniques utilized. The sufficient water can be made available for present and future demand of water of the Tahsil

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1) Statistical Handbook of Dhule year 2002-03
2) R. N Mathur and K. S. Yadav, (1980)
3) S.M.Bhamare (1987): "Geomorphic Analysis of Panzara Basin" Unpublished Ph.D. Thesis


# A Study of Secondary Personality Traits of Successful Indian Gymnasts 

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#### Abstract

: A study of secondary personality traits of successful Indian gymnasts was conducted on 71 male and 56 female national level gymnasts those who participated in 2004-05 on which the Cattell's 16 PF was administered. The Research scholar found the conclusions as Individual medalist Gymnasts have fond more anxiety it is because they may have fear or competition pressure to maintain the status and ranking of competition. They are low in adjustment; it may due to polished, shrewdness and low in unsatisfactory conditions regarding gymnastics apparatus for their precise performance. A significant difference is found in second order personality factors between below 8 years experience level Gymnasts and above 8 years experience level Gymnasts. Significant differences were found in second order personality factors between Male Gymnasts and Female Gymnasts.


## Introduction:

Psychology touches almost every facet of our lives, as society has become progressively more complex. Psychology has assumed an increasingly important role in solving human problems. Research on personality of sportsmen has been aimed at the identification of personality traits. The study of personality is a very recent phenomenon these investigation are directed towards determining traits, which could be correlated significantly with outstanding ability of sportsmen.

Personality, though a highly ambiguous term, which is difficult to define, has become a viable and useful concept for describing and categorizing behaviour in physical activities and sports. The reason for this is that personality, in its broadest context, can be interpreted as representing the total psychological structure of the individual. The personality of a person is integration or merging of all the parts of one's psychological life - the way one thinks, feels, acts and behaves. It is this combination that characterizes or distinguishes a person from other people and that represents the more permanent or enduring aspects of one's behavioural patterns.

In general, a person's personality is judged on the basis of the ways he interacts with other people in various situations and how they, in turn, view him. A person, for example, may project to other people very competitive or aggressive personality, or he may be very friendly, or retiring or self confident. Such attributes become even more consolidated into a person's psychological structure when other people react to him in such a way as to reinforce those traits, which are typical to him.

Alderman A.B.(1993) "When a person acts very aggressively in most situations, people view him as being aggressive; he, in turn, notes that they think
he is aggressive, and thus, gradually, he incorporates aggressiveness into his personality." Though such general descriptions of personality are useful in understanding the surface behaviour of people, a more in-depth analysis is necessary, if we are to gain insight into, why people behave the way they do. With this view point, just what are the psychological characteristics that makeup champion gymnasts? Can they be identified? How best can they be measured? Do they remain stable across different ability levels and age group? The answer to these types of questions would be considerably easier if we were only looking at physical variables. For example, there are only a couple of ways of measuring height, and these measures are both reliable and valid. There are many different methods of gaining psychological knowledge, including the administration of objective tests, the conducting of experimental researches in the field of psychological aspects such as, Attitude, Mental abilities, Personalities and its types, Personality traits, Anxiety, Frustration tolerance etc.

In the present status very few researches have been done in personality traits particularly Cattles second order personality traits to measure the role of psychological aspects to become a champion. Gymnastic, a sports which requires elite physical abilities at the same time demands perfect mindset or various personality attributes such as Intelligence, Emotionally Stable, Tough Mindedness, High self concept, Trusting, Control, Confidence, Leadership, Creativity, Adjustment, Independence etc. A successful gymnast spends much of time in attaining or developing mental and physical maturity to individual's optimum potential.

If at all the elite gymnasts are identical in their physical make up, the deciding factor to this crucial point is one's mindset. The scholar is in pursuit to study some of these personality traits and mental structure, which are deciding factors to be successful.

## Methodology:

The sample of this study consisted of 125 Gymnasts ( 71 male \& 54 female) Top level national gymnasts from different states were selected randomly through the national competition organised by Gymnastics Federation of India in the year $2004 \& 2005$. The age of the gymnasts ranged from 14 to 32 years. The elite gymnasts were chosen from different states and classified in 5 zone of India.

| Sr.No | Zone | State |
| :--- | :--- | :--- |
| 1. | East | W.Bengal, Manipur, Tripura, Assam, Bihar |
| 2. | South | Andra Pradesh, Karnataka, Kerala, Tamilnadu |
| 3. | West | Maharashtra, Rajasthan, Gujarat |
| 4. | North | Delhi, Punjab, U.P., Hariyana, Chandigarh |
| 5. | Central | M.P., Chattishgarh, Orisa, Jharkhand |

## Material Used:

Cattle's 16 PFQuestionnaire (1991) was used for measuring different personality factors of each individual gymnast. This test was designed to measure 16 personality factors (traits) \& second orders 8 personality factors of each individual gymnast, as identified by Cattle. The following information of individual
gymnasts collected through data bank. It consist of age, sex, state, entry age, experience level, medals achieved in junior and senior national competitions, International participation and achievement, etc.

The scoring of the completed questionnaire was done according to the method mentioned in the manual of 16 PF (1991 Edition) with the help of two scoring keys of A Form. Raw scores obtained were converted into sten scores. Mean, SD, T Test, and (ANOVA) F Test were used to determine differences of each personality factor among the various variables, to draw the conclusion. F Test was used to seek interrelationship between the various variables and T Test was used for LSD.

## Results and Discussion:

Table No. 1: Second Order Personality Traits of Individual Medalist and Team Medalist Gymnasts

| INDIVIDUAL MEDALIST/TEAM MEDALIST |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | A |  | B |  | T-TEST |
| ORDER <br> FACTOR | MEAN | D | MEAN | D |  |
| Extraversion | 5.080 | . 607 | 5.644 | . 394 | 2.07* |
| Anxiety | 6.142 | . 132 | 5.513 | . 326 | 2.73* |
| Tough-poise | 5.384 | . 329 | 5.583 | . 239 | 0.85 |
| Independence | 5.750 | . 099 | 5.884 | . 114 | 0.66 |
| Control | 5.650 | . 951 | 6.568 | . 090 | 2.45* |
| Adjustment | 4.728 | . 460 | 5.345 | . 561 | 2.20* |
| Leadership | 5.160 | . 241 | 5.960 | . 324 | 2.37* |
| Creativity | 5.592 | . 130 | 5.645 | . 174 | 0.25 |

Significant at 0.05 Level
Table no.1: Reveals that there is significant difference in eight second order personality factors between individual medalist and team medalist Gymnasts. Five factors of them have shown significance difference i.e. Extraversion-t= 2.07, Anxiety- 2.73, Control-2.45, Adjustment - 2.20, and

Leadership- 2.37, $\mathrm{p}=>0.05$. No significance difference were found in Tough poise $-\mathrm{t}=0.85$, Independence -0.66 , and Creativity -0.25 .

These differences may found due to success. Individual medalist Gymnasts have fond more anxiety it is because they may have fear or competition pressure to maintain the status and ranking of competition. They are low in adjustment; it may due to polished, shrewdness and low in unsatisfactory conditions regarding gymnastics apparatus for their precise performance. Studies of personality have been conducted mainly on personality traits of successful and unsuccessful athletes. Biduiph (1954) has reported significant differences in some of the personality traits of successful and unsuccessful athletes. Kroll and Carison (1967) have reported no differences between more successful athlete in wrestling and karate. William and her associates (1970) reported that high level female achievers in US national fencing championship differed from low level achievers on only few traits. Uppal and Gill (986) found that highly skill male badminton player where more suspicious, neither less intelligent nor more intelligent and neither tough minded nor tender minded as compare to poorly skilled male badminton players who where less intelligent, tough minded and neither trusting nor suspicious.

The above cited information by the different research workers supported the findings of the study. The hypothesis of the present study was that there is no significant difference in second order personality factors between individual medalist and team medalist Gymnasts. But, on the basis of the result of the study, this hypothesis mainly stands rejected; it may be possible that, differences in Individual medalist and Team medalist Gymnasts personality traits are due to self-esteem, high super-ego strength, competition anxiety level, and self perceptual capacities of Gymnasts.

Table No. 2: Second Order Personality Factors of National Participation Below 8 Years and Above 8 Years:

|  | NATIONAL PARTICIPATION |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | Below 8 Years | Above 8 Years | T-TEST |  |  |
| SECOND ORDER FACTORS | MEAN | D | MEAN | SD |  |
|  | 5.328 | .433 | 5.748 | 1.466 | 1.39 |
| Extraversion |  |  |  |  |  |
|  | 5.555 | .429 | 6.526 | 1.166 | $2.23^{*}$ |
| Anxiety |  |  |  |  |  |
|  | 5.522 | .311 | 5.433 | 1.327 | 1.04 |
| Tough-Poise | 5.893 | .016 | 5.604 | 1.082 | 0.80 |
|  |  |  |  |  |  |
| Independence | 6.373 | .923 | 5.574 | 2.182 | 1.14 |
|  |  |  |  |  |  |
| Control | 5.281 | .409 | 4.437 | 1.635 | $2.45^{*}$ |
| Adjustment |  |  |  |  |  |
|  | 5.805 | .450 | 5.041 | 1.170 | 0.33 |
| Leadership |  |  |  |  |  |

ISSN 0975-5020

|  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Creativity | 6.207 | .965 | 5.163 | 0.989 | $5.69^{*}$ |

## Significant at 0.05 Level

Table No. 2 reveals the following statistical analysis: Less experienced gymnast and more experienced gymnast are similar in following second order factors: Extraversion, Tough poise, Independent and leadership. It shows that both are average in all above factors which are not extreme. But less experienced Gymnasts scored average in Anxiety and more experienced Gymnasts scored above average. They are moderate on anxiety.

Since anxiety could be situational, but it probably that there are some maladjustments, i.e., they are dissatisfied with the degree to which they are able to meet the demands of life and to achieve what they desire. Very high anxiety is generally disruptive of performance. Less experienced gymnast scored above average in control. It shows that they have moderate super ego controls. They tend to conform to expectations that others have of them or to expectations that they have of themselves. They are quite reliable and perceived to be rigid or moralistic.

More experienced Gymnasts scored below average in adjustment. It shows that they are moderate apprehensive and emotionally reactive. They may found difficult to cope with the competition situation. Less experienced Gymnasts scored above average in creativity. It shows that they are moderate imaginative and experimenting. Creative people are usually, self sufficient, sometimes high scored are so imaginative that they control see the practical limitations on implementing a creative idea. It may happened to gymnast because their high expectation regarding the skills. The differences were found in Extraversion, Tough poise, and Creativity ( $\mathrm{t}=3.39 ; 2.04 ; 5.69 ; \mathrm{p}>.05$ ) factors respectively.

The hypothesis of the present study was that, there is no significant difference in second order personality factors between below 8 years experience level Gymnasts and above 8 years experience level Gymnasts. But, on the basis of the result of the study, this hypothesis mainly stands rejected; it may be possible that, differences in below 8 years experience level Gymnasts and above 8 years experience level Gymnasts personality traits are due to different experience, familiar to the national competitions, stagnant in competition pressure.

Table No. 3: Entry Age Wise Second Order Personality Traits:

|  | ENTRY AGEWISE |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | Up to 7 Years |  | Above 7 Years | T-TEST |  |
| SECOND <br> ORDRER <br> FACTORS | MEAN | SD | MEAN | SD |  |
| Extraversion | 5.453 | 1.631 | 5.384 | 1.377 | 0.25 |
|  |  |  |  |  |  |


| Anxiety | 5.513 | 1.416 | 6.013 | 1.097 | $2.19^{*}$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Tough- |  |  |  |  |  |
| Poise | 5.613 | 1.247 | 5.395 | 1.301 | 0.95 |
| Independence | 5.939 | 1.064 | 5.724 | 1.144 | 1.08 |
| Control | 6.523 | 2.129 | 5.884 | 1.991 | 1.72 |
|  |  |  |  |  |  |
| Adjustment | 5.429 | 1.699 | 4.773 | 1.312 | $2.40^{*}$ |
|  |  |  |  |  |  |
| Leadership | 5.848 | 1.456 | 5.435 | 1.202 | 1.72 |
| Creativity | 5.676 | 1.086 | 6.040 | 1.200 | 1.76 |

- Significant at 0.05 level

Table no. 3 reveals the statistical analysis. With regards to second order personality factors of Entry age up to 7 years and Entry age above 7 years Gymnasts: No significant differences were found in: Extraversion $t=0.25$, Toughpoise $t=0.95$, Independence $t=0.95$, Control $t=1.79$ and Leadership $t=1.72$ and Creativity $\mathrm{t}=1.76$. Significant difference were found only in Anxiety $\mathrm{t}=2.23$, Adjustment $i=2.45, p=>0.05$.

The Gymnasts who started their gymnastics activities at the age of $4,5,6$ and 7 years research scholar called them Entry age up to 7 and those who started their gymnastics activities of the age of $8,9,10$ and 11 years called them Entry age above 7 years. Both are similar in following second in following second order factors. Extraversion Tough Poise, Independence leadership, creativity.

But they differ in Anxiety factor. It shows that they are moderate on anxiety. Probably they are some maladjustment i.e., they are dissatisfied with the degree to which they are able to meet the demands of life and to achieve what they desire. Entry age up to 7 Gymnasts have moderate superego controls that is they have internalized the rules of the milieu in which they function. They are quite reliable because they do not bend the rules. It may found due to impact of 'catch them young'. Entry age above 7 years Gymnasts have traits that indicate the possibility of moderate neurotic maladjustment. They tend to be apprehensive and emotionally reactive. A person who gets a low score would find it difficult to cope with daily life.

Entry age above 7 years Gymnasts also showed moderate self-sufficiency, often through not necessarily, they are rather serious and not very out going. ( $\mathrm{t}=2.40 ; \mathrm{p}>.05$ ) (Adjustment). The hypothesis of the present study was that, there is no significant difference in second order personality factors between Entry age up to 8 years Gymnasts and Entry age above 8 years Gymnasts. But, on the basis of the result of the study, this hypothesis mainly stands, partially accepted, it may be possible that, no differences in Entry age up to 8 years Gymnasts and

Entry age above 8 years Gymnasts personality traits are due to, same experience of competition nature of gymnastics, difference in Anxiety because of handling of competition pressure from the early childhood.

Table No. 4:
Second Order Personality Factors of Male and Female Gymnasts

|  | BOYS/GIRLS |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | BOYS |  | GIRLS |  | T-TEST |  |
| SECOND ORDER | MEAN | SD | MEAN | SD |  |  |
| FACTORS | 5.121 | 1.493 | 5.809 | 1.438 | $2.57^{*}$ |  |
| Extraversion | 6.227 | 1.154 | 5.157 | 1.204 | $5.00^{*}$ |  |
| Anxiety | 4.824 | 1.100 | 6.396 | 0.892 | $8.51^{*}$ |  |
| Tough-Poise | 5.421 | 1.194 | 6.369 | 0.685 | $5.17^{*}$ |  |
| Independence | 5.514 | 2.073 | 7.104 | 1.726 | $4.52^{*}$ |  |
| Control | 4.486 | 1.457 | 5.904 | 1.280 | $5.63^{*}$ |  |
| Adjustment | 5.035 | 1.205 | 6.435 | 1.093 | $6.64^{*}$ |  |
| Leadership |  |  |  | 1.121 | 1.60 |  |
| Creativity | 5.480 | 1.162 | 5.813 |  |  |  |

- Significant at 0.05 . level

Table No. 4: reveals statistical significant difference between male gymnasts and female gymnasts in Extraversion, Anxiety, Tough-poise, Independence, Control, Adjustment, and Leadership ( $\mathrm{t}=2.57$; 5.00; 8.51; 5.17; 4.52; 5.63; 6.64; $p>.05$ ) factors respectively.

Female Gymnasts have shown moderate tough-poise, Independence, Control, and Leadership qualities. They tend to be bold, hard people. Hence, even though they are able to make decisions quickly. They are independent, and also have strong super ago controls more than compared with Male Gymnasts. Major difference found between Male and Female Gymnasts was that Toughpoise factor. Male Gymnasts have shown moderate Anxiety and Female Gymnasts have shown average Anxiety. This may be due to performing low risky skills by female Gymnasts in national level competition.

The hypothesis of the present study was that, there is no significant difference in second order personality factors between Male Gymnasts and Female Gymnasts. But, on the basis of the result of the study, this hypothesis mainly stands, rejected, it may be possible that, differences in Male Gymnasts and Female Gymnasts personality traits are due to obtain the advanced or elite status of recognition, and receives peer group and adult accolades to develop
personal confidence from earned achievement. The Gymnast then begins to develop his or her own philosophy of competition, usually reinforced by personal success, while patterned after emulated Gymnastics champions.

These sex differences in general may be due to biological differences or a reflection of cultural perception of the sex differences for competitive gymnastics. Effects of sex and group behavior on personality of athletes have been revealed in a number of studies: (Peterson et al. 1967, Rushall, 1967., Meredith and Harris, 1969., Foster, 1972), while comparing personality characteristics with male swimmers with female swimmers found that females where socially bold, noisy and unrestrained, whereas males appeared to be self centered and individualistic.

Woman in athletic competitions appear to be more AchievementOriented.(Neal 1963, Ogilvie - 1968), Tough minded (Ramsay-1962., Malumphy - 1968., Ogilvie - 1968., Bird- 1970., Mushier - 1970), Creative - (Bird - 1970., Musher - 1970), Aggressive (Neal - 1963 ., Ogilvie - 1968., Foster- 1969), Dominant (Ramsay 1962., Mushie-1970., Oglvie - 1968, 1973., Williams et al., 1970), Intelligent (Bird-1970, Mushier - 1970., Johnson- 1972). These researches compared personality traits across sports groups as well as compared team with individual sports participant studied. Out standing athletes and compared the women athletes with non athletes (Foster - 1969, Kane - 1966)

The result of these studies have generally shown that a few similar traits are being projected by women athletes in various sports such as fencing (Williams et al. 1970) Basket ball and Golf (Johnson - 1972). Swimming (Ibrahim-1967, Kane - 1966, Ogilvie-1968). Track and Field (Kane-1968), and Field Hockey (Acapore - 1968, Johnson - 1972). The above-cited information by different research workers supported the findings of this study.

## Broad Conclusions:

The Research scholar found the conclusions, which are given below as summary:

The following conclusions are arrived from the statistical analysis through which some characteristics are found in various variables.

1. There is significant difference in second order personality factors between Individual medalist Gymnasts and Team medalist Gymnasts. These differences may found due to success. Individual medalist Gymnasts have fond more anxiety it is because they may have fear or competition pressure to maintain the status and ranking of competition. They are low in adjustment; it may due to polished, shrewdness and low in unsatisfactory conditions regarding gymnastics apparatus for their precise performance.
2. There is significant difference in second order personality factors between below 8 years experience level Gymnasts and above 8 years experience level Gymnasts in Extraversion, Tough poise, and Creativity, these differences in Gymnast's personality traits are due to different experience, familiar to the National competitions, tackling of competition pressure.
3. No significant differences were found in second order personality factors of Entry age up to 7 years and Entry age above 7 years Gymnasts Extraversion,

Tough-poise, Independence, Control, Leadership and Creativity, only significant difference were found in Anxiety and Adjustment. Differences in Entry age up to 7 years and Entry age above 7 years Gymnasts personality traits are due to, same experience of competition nature of gymnastics, difference in Anxiety because of tackling of competition pressure from the early childhood.
4. Significant differences were found in second order personality factors between Male Gymnasts and Female Gymnasts in Extraversion, Anxiety, Tough-poise, Independence, Control, Adjustment, and Leadership factors. These sex differences in general may be due to biological differences or a reflection of cultural perception of the sex differences for competitive gymnastics and may due to nurture of the Female Gymnasts.

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# Effects of Exercise and Yoga Schedules on Nostril Dominance in Relation to Athletic Performance 

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## Introduction :

Enrichment in athletic performance and creating new records has become the fascinating tendency in modern sports. Explosion of scientific researches has evolved various techniques and strategies to enhance top performance in world sports. Scientific methods of sports training, in fact, facilitate significantly one's efficiency in sports performance (Cumming, 1969; Matveyev, 1981). Sports coaches also use appropriate training strategies or scientific schedules to improve the performance of sportsmen. Although various researches in the area of exercise-physiology have explained the role of respiration in sports performance (Byrne-Quinn et al., 1971; Martin et al., 1979), a very few sports coaches are aware of it. Even during the regular schedules of sports training, generally, athletic coaches do not consider the importance of control of respiration (i.e., control of breathing). On the contrary, literature revealed that control of respiration has good relationship with various motor abilities (Campbell, 1958; Ganguly \& Bhole, 1985; Lioyd, 1963; Martin et al., 1979). Oftenly, individual's demonstration telecast through Indian television also revealed that by controlling respiration an individual could tolerate the heavy weight of loaded truck for few seconds. This, in turn, indicates that control of respiration or controlled breathing has real significance in improving strength and power that might enhance top performance in sports.

## Statement of the Problem :

Generally, sudden breath holding helps to improve sports performance especially which are anaerobic in nature. Research in Yoga reveals that the training in control of respiration has significant relationship with grip strength (Moorthy \& Ganguly, 1982). Moreover, in our Indian tradition it is a superstition that the activation of "Pingala-Nadi" (Right Nostril Dominance or Control of breathing through right nostril) has close association with individual's better concentration, excellent digestive power and efficiency of work. Simultaneously, the activation of "Ida-Nadi" (Left Nostril Dominance or Control of breathing through left nostril) has relation with weakness or laziness or dullness in over all performance. The balanced condition of "Pingala" and "Ida" Nadis leads to an activation of an equilibrium state called "Susumna-Nadi" (both nostrils are equally dominated or control of breathing through both nostril) which has relation with all works concerning with higher conscious level.

The above literatures, traditional claims and superstitions in turn suggest that control of respiration, especially control of breathing through activation of
"Ida-Nadi", "Pingala-Nadi" and "Susumna-Nadi" (over all nostril dominance) may be useful in improving the performance in athletics. Review of literature on sports sciences also indicates non-availability of any research reports in this area except More (2001). So also, the effect of nostril breathing (specially, nostril dominance) on physical performance of athletes is not known. Even no attempt has been made so far by any other researcher to investigate the efficacy of any schedule of exercises and / or yoga on changing one's nostril dominance that may lead to enhance athletic performance. Therefore, the present investigation entitled "Effects of Exercise and Yoga schedules on Nostril Dominance in relation to Athletic Performance" has been undertaken.
Objectives of the Study

- To design some "Schedules of Exercise and Yoga" and to evaluate their efficacy in favour of interchanging one's nostril dominance voluntarily.
- To determine the degree of relationship between the scores of nostril dominance and performance in selected track and field athletics.
- To predict the performance scores in athletic events on the basis of different conditions of nostril dominance (left nostril, right nostril and both nostril).


## Delimitation

Subjects: Junior College level students volunteered in this study.
Age : This study was delimited to male students with the age ranged from 17 to 19 years.

## Athletic Events

Selected Track and Field events were delimited here as dependent variables. The running event was restricted to 100 M Run only, whereas throwing event was Shot Put and Jumping event was Long Jump.

## Significance of the Study

- This study may help to establish the applicability of nostril dominance in the field of games and sports.
- Present investigation may contribute knowledge that breathing style may influence one's athletic performance.
- Physical Education professionals and sports coaches may take advantage of the results of this study. They may consider the technique of nostril dominance (or breathing style) in sports training schedules.
- During participation in athletic events, an athlete may aware of his or her nostril dominance to achieve better performance.
- The coaches and athletes will get readymade schedule of exercises for interchanging one's nostril dominance that may enhance athletic performance.


## Operational Definitions

## Ida-Nadi

When we experience vital energy (prana) flowing towards the left side of our body, we are generally left nostril dominated. This state is known as activation of Ida-Nadi.

## Pigala-Nadi

When we experience vital energy (prana) flowing towards the right side of
our body, we are generally right nostril dominated. This state is known as activation of Pingala-Nadi.

## Susumna-Nadi

When we experience vital energy (prana) flowing through the middle part of our body or the energy is distributed equally on both sides of our body, we are generally both nostril dominated. This state is known as activation of SusumnaNadi.

## Nostril Dominance

We breathe day and night even during sleep. Breathing pattern changes generally after each 1 hour (approx.) from right nostril to left nostril or vice-versa. When flow of breathing is more through right nostril, we call it right nostril dominated. When flow of breathing is more through left nostril, we call it left nostril dominated. Similarly, if the flow of breathing is equal (approx.) through both the nostrils, we call it both nostril dominated.

## Assumption

- It has been assumed that control of respiration may be associated with the ability of strength and power at physical level.
- This study assumed that control of respiration may be beneficial for strength and power that may attribute performance in track and field events, viz., throwing, jumping and sprinting.
- As both the techniques of control of respiration and nostril dominance represent a voluntary process, it has been assumed that nostril dominance may be effective for improving track and field performance.


## Hypotheses

The present investigator reviewed research literature, analysed the traditional concept of "Ida-Nadi", "Pingala-Nadi" and "Susumna-Nadi", and considered some superstition of Indian culture prior to the inception of this topic. Based on the above, it has been hypothesized that-
$H_{1}$ : The schedules of exercise and yoga would help to inter-change one's level of nostril dominance voluntarily.
$\mathrm{H}_{2}$ : There would be significant relationship between scores of nostril dominance and the scores of performance in selected athletic events.
$\mathrm{H}_{3}$ : Performance scores in selected athletic events would be higher during right nostril dominance.
$\mathrm{H}_{4}$ : Performance scores in selected athletic events would be lower during left nostril dominance.
$\mathrm{H}_{5}$ : Performance scores in selected athletic events would be lying in between high and low ability during the dominance of both nostrils.
$\mathrm{H}_{6}$ : There would be significant difference in athletic performance scores during right, left and both nostril breathing.

## Methods

This study was conducted in three phases. In Phase-I, separate schedules of Exercise and Yoga were designed scientifically.

In Phase-II, an experiment was conducted to evaluate the efficacy of the scientifically designed schedules of Exercise and Yoga towards the time required in inter-changing the subjects' nostril dominance (i.e., from right nostril - both nostril - left nostril or vice versa) and maintenance ability in particular nostril dominance. For this, 60 students aged 15 to 19 years studying in Chhatrapati Shahu Maharaj Sainik School, Udgir, Dist. Latur, Maharashtra, were divided randomly into four equal groups viz., Groups A, B, C and D. Thus, each group consists of at least 15 students. Group-A received a training of selected exercises, Group-B treated with Yoga, Group-C was exposed to a training of both Exercise and Yoga, and Group-D remained as controls. All these training programmes were imparted with a view to record one's highest efficiency in maintaining particular nostril dominance (right nostril or left nostril or both nostrils) voluntarily. Duration of training to each group was for a minimum period of 6 weeks.

In Phase-III, all the subjects of the experimental groups were exposed to perform selected track and field events viz., 100 M run (running event), Long Jump (jumping event) and Shot Put (Throwing event) during each nostril dominance (right, both and left). Then the prediction of athletic performance on the basis of the types of nostril dominance was studied.

Nostril dominance was measured by a mirror-technique (developed in Kaivalyadhama, Lonavla), which bears accepted level of reliability and validity. The scores are expressed in terms of percentage.

Standard methods were used to measure selected athletic events. The athletic events included in this study were throwing (shot put), jumping (long jump) and sprinting ( 100 M run) respectively. The scores of throwing and jumping ability were recorded in terms of distance in meters whereas the scores in running event in terms of time in seconds.

Each subject's nostril dominance was assessed prior to participation in each athletic event. Each subject participates in each event three times separately by three conditions of nostril dominance (viz., left nostril, right nostril and both nostril respectively). For examples, a subject participated in 100 M run thrice separately during the dominance of left nostril, right nostril and both nostril respectively. Nostril dominance of the subjects was changed from one nostril to other by Yoga-Danda technique, if the subjects do not possess appropriate nostril dominance prior to the participation in each event.

## Drop outs

During the experiment, the investigator recorded the attendance of the subjects participated in the respective group of the experiment. Attendance (i.e., above $80 \%$ ) was quite satisfactory. However, out of 120 subjects, there were 5 dropouts (i.e., 1 from yoga group, 2 from exercise group and 2 from control group. It is amazing that no dropout is recorded in yoga plus exercise group.

## Facilities Arranged

1) Play Field: Track for 100 M run, Shot Put Sector, and Long Jump pit.
2) Equipments:

- Stop Watch to measure time in seconds for 100 M run.
- Measuring tape to assess distance in meters for shot put and long jump events.
- Shot put.
- Lime for marking field, iron nails, etc.
- Nostril Dominance Apparatus.

The above facilities were made available by the investigator.

## Statistical Analysis

ANCOVA followed by Scheffe's post hoc test was employed to compare the group-wise data regarding maintenance of maximum duration of one's nostril dominance. Multiple Step Up Regression analysis was done to determine the degree of relationship between nostril dominance and performance in selected track and field events and to predict the athletic performance on the basis of one's level nostril dominance.

## Results

The phase-wise results have been summarized below:

## Results of Phase-I (Designing Exercise and Yoga schedules)

The training schedules of exercises and yoga formulated and designed in this study were found authentic and valid to alter nostril dominance. Regular practice of these schedules is expected to enhance the one's ability to quickly change nostril dominance and retain longer maintenance time in the dominance of both nostrils. The schedules have content validity.
Results of Phase-II (Experiment)
The result of within group comparison revealed that -

1. Regular practice of the scheduled Exercise for a period of 6 weeks -

- could alter nostril dominance very quickly ( $C D=0.47, \mathrm{p}<0.01$ ),
- could not retain the dominance of both nostrils for a longer period of time ( $C D=0.17, p>0.05$ ).

2. Regular practice of the scheduled Yoga ( $C D=0.35, \mathrm{p}<0.05$ for a period of 6 weeks -

- could alter nostril dominance very quickly ( $C D=0.38, p<0.05$ ), and
- could retain the dominance of both nostrils for a longer period of time ( $\mathrm{CD}=0.43, \mathrm{p}<0.01$ ).

3. Regular practice of the scheduled Yoga plus exercise for a period of 6 weeks helped to -

- alter nostril dominance very quickly ( $C D=0.33, \mathrm{p}<0.05$ ), and
- could retain the dominance of both nostrils for a longer period of time ( $\mathrm{CD}=0.55, \mathrm{p}<0.01$ ).

4. The control group could not-

- alter nostril dominance very quickly ( $C D=0.14, p>0.05$ ), and
- retain the dominance of both nostrils.

The result on changing nostril dominance between-group-comparison
revealed that -

- The Exercise group could alter nostril dominance very quickly than Yoga plus exercise group ( $C D=0.42, p<0.01$ ) and Yoga group ( $C D=0.37, p<0.05$ ).
- The Yoga plus exercise group could alter nostril dominance very quickly than Yoga group ( $\mathrm{CD}=0.31, \mathrm{p}<0.05$ ).
- Thus, Exercise group was found better in changing nostril dominance faster than the Yoga plus exercise group and Yoga group.
The result on retaining nostril dominance for a longer period of time between-group-comparison revealed that -
- The Yoga plus exercise group could retain the dominance of both nostril for a longer duration of time than Yoga group ( $C D=0.50, \mathrm{p}<0.01$ ) and Exercise group ( $\mathrm{CD}=0.54, \mathrm{p}<0.01$ ).
- The Yoga group was found better to retain the dominance of both nostril for a longer duration of time than Exercise group ( $C D=0.36$, $\mathrm{p}<0.05$ ).
- Thus, both Yoga plus exercise group and Yoga group were found effective in retaining the dominance of both nostrils for a longer duration of time than the Exercise group.
Thus, result of ANCOVA followed by Scheffe's post hoc test revealed that the selected "Yoga plus exercise training" and "Yoga training" were effective in maintaining the dominance of both nostrils for a longer period of time, whereas, the "Exercise training" could not help
Results of Phase-III (Regression and prediction)
The result on the relationship of nostril dominance and athletic performance revealed that -
- Left nostril dominance had significantly low relationship with 100 M run ( $r=0.13$ ), Long Jump ( $r=0.10$ ), and Shot Put ( $r=0.09$ ) performance.
- Right nostril dominance had high relationship with 100 M run ( $r=0.54$ ), Long Jump ( $r=0.60$ ), and Shot Put ( $r=0.66$ ) performance.
- Both nostril dominance had high relationship with 100 M run ( $r=0.77$ ), Long Jump ( $r=0.76$ ), and Shot Put ( $r=0.74$ ) performance.

The result on the prediction (regression) of athletic performance on the basis of nostril dominance revealed that -

- Performance ability in 100 M running event was orderly explained by left nostril dominance ( $\mathrm{R}^{2}=0.1148$ ), right nostril dominance ( $\mathrm{R}^{2}=0.3165$ ) and both nostril dominance ( $\mathrm{R}^{2}=0.9249$ ) of the selected subjects respectively.
- Performance ability in Long Jump event was orderly explained by left nostril dominance ( $\mathrm{R}^{2}=0.2062$ ), right nostril dominance ( $\mathrm{R}^{2}=0.7281$ ) and both nostril dominance ( $\mathrm{R}^{2}=0.9492$ ) of the selected subjects respectively.
- Performance ability in Long Jump event was orderly explained by left nostril dominance ( $\mathrm{R}^{2}=0.1865$ ) right nostril dominance ( $\mathrm{R}^{2}=0.7155$ ) and both nostril dominance ( $\mathrm{R}^{2}=0.9242$ ) of the selected subjects respectively.

The result on contribution of nostril dominance towards the improvement in athletic performance further indicates that -

- Left nostril dominance could not contribute to enhance the performance in 100 $M$ run (increased $R^{2}=0.1723, p>0.05$ ), Long Jump (increased $R^{2}=0.1860$, $p>0.05$ ) and Shot Put (increased $R^{2}=0.2074, p>0.05$ ).
- Right nostril dominance could contribute to enhance the performance in 100 M run (increased $R^{2}=0.6512, p<0.01$ ), Long Jump (increased $R^{2}=0.6923$, $\mathrm{p}<0.01$ ) and Shot Put (increased $\mathrm{R}^{2}=0.71237, \mathrm{p}<0.01$ ).
- Both nostril dominance could contribute to enhance the performance in 100 M run (increased $R^{2}=0.7751, p<0.01$ ), Long Jump (increased $R^{2}=0.7614$, $\mathrm{p}<0.01$ ) and Shot Put (increased $\mathrm{R}^{2}=0.7527, \mathrm{p}<0.01$ ).

All the hypotheses were tested and found sustained in compliance with the above results.

## Conclusion

Present investigation could warrant the following conclusions:

- Exercises help to change one's nostril dominance very fast, but could not contribute to maintain the dominance of both nostrils for a longer duration of time.
- Yoga helps to change one's nostril dominance moderately and could also contribute to maintain the dominance of both nostrils for a longer duration of time.
- Yoga plus exercise training helps to change one's nostril dominance very fast and also contributes to maintain the dominance of both nostrils for a longer duration of time.
- Thus, Yoga plus exercise training was better than yoga and exercise in altering nostril dominance within shortest possible time and also could maintain the dominance of both nostril for a comparatively longer period of time.
- Further, left nostril dominance has no significant relationship with the selected track and field events. However, right nostril dominance could show significant relationship with running Long Jump and Shot Put. Here it is interesting to note that both nostrils dominance has statistically better significant relationship with almost all the selected track and field events.
- Further, left nostril dominance could not predict one's athletic performance, whereas, right nostril dominance could predict the performance. However, both nostril dominance was more effective in improving athletic performance.


## Recommendations and Further Suggestions

The present report of investigation recommends that -

- Since both nostril dominance contributes added advantage in exhibiting athletic performance, the coaches of games and sports may incorporate this knowledge of nostril dominance as a strategic training to enhance sports performance.
- The athletes participating in track and field events must consider the principles of nostril dominance for exhibiting good performance.
- The knowledge of nostril dominance is to be incorporated in the area of games and sports.
- The results of the present investigation may be re-confirmed by conducting further experimental research.
- Further research in similar lines for women subjects and on other athletic events may be organised to enlighten more ideas on nostril dominance.


## Contribution to the Knowledge

- This study will contribute to evolve a strategy of manipulation of nostril breathing for the improvement of the performance in any sport with special reference to track and field athletics.
- The Knowledge "Nostril Dominance" belongs to traditional yoga being experimented in this study would be directly helpful as a strategic technique in the arena of world sports.
- In recent days, of course, the scientists of physical education and sports in world over are involved with different research activities, the research on the area of nostril dominance and sports performance is a new but challenging one. The present research is, without doubt, first of its kind that added new information to the quantum of knowledge about the efficient mechanism of nostril dominance for explaining the sports performance.


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# Status of Private Fitness Centers in Pune City 

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In the ancient world in all countries there was importance for physical ability. In military and police recruitment chance was given for appointment to the physically able and having good personality candidate. Under the circumstances people have started thinking about improving the personality of their family members and also all round development, muscle movement (expansion and contraction) is taught and done. The first Fitness Center was started in Pune in 1923.

There is no difference in the intention or purpose of places of body exercises and Fitness Centers. There is stress on increasing physical ability as well as social qualities. In the present age of science various mechanical devices have been introduced and used and as a result the physical movement of toiling and labour has been reduced. Man is becoming mentally and physically weak and feeble. His capacity is being reduced gradually. Hence Fitness Centers have been started in the lanes and sub-lanes.

Present Scenario of the Private Fitness Centers in Pune City.
The present scenario related with various aspects of Fitness Centers is as follows-

Table No. 1

| Sr. | Particulars | No of the Fitness <br> Centers (115) |  | Percentage \% |  |
| :---: | :---: | :---: | :--- | :--- | :--- |
|  |  | Yes | No. | Yes | No. |
| 1 | Fitness Centers suffer from <br> some problem | 104 | 11 | 90.43 | 9.57 |

$0.43 \%$ of the Fitness Centers suffer from some problem or the other. Only $9.57 \%$ of them are doing well without having any problems.

Table No. 2

| Sr. | Particulars | No of the Fitness <br> Centers (115) |  | Percentage \% |  |
| :---: | :---: | :---: | :--- | :--- | :--- |
|  |  | Yes | No. | Yes | No. |
|  |  | 89 | 26 | 77.39 | 22.61 |

1) The main factor is most of them are not registered 'Fitness Centers. Only $22.61 \%$ have registered with the Charitable Commissioner, which is a primary responsibly of every Fitness Centers owner: The non-registered Fitness Centers are not answerable to anybody. If the number of members reduces due to lack of space, qualified instructors and financial problems, they can down the shutters any time.
2) Almost all of them are pretending to do that I wonder how many of them are really striving for it. With limited infrastructure and facilities, most of them are looking at Fitness Centers as a successful and profitable
commercial activity under the garb of social cause.
3) The basic problem with most of the Fitness Centers is the lack of space. More than half the owners agree that they do not have enough space. But the commercial aspect has found a very lucrative solution, which is to make different time slots. Due to this, the number of members also increases.

Table No. 3

| Sr. <br> No | Particulars | No of the Fitness <br> Centers (115) |  | Percentage \% |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  | Yes | No. | Yes | No. |
|  | Open space outdoor from <br> warm up exercises | 34 | 81 | 29.57 | 70.43 |

1) The need of basic infrastructure is so drastically Ignored that most of the Fitness Centers are situated in some building. More than $70.43 \%$ of the Fitness Centers do not have any open space outdoor for warm-up exercises. Most of the Fitness Centers do not have a swimming pool. Another major problem is the 'dearth of trained instructors. Only half the Fitness Centers in the city have appointed qualified instructors.
2) Despite all these problems, all city Fitness Centers need to be complimented for acquiring best of the equipments. All the Fitness Centers have modern equipment. Be-sides, four per cent Fitness Centers have still preserved the traditional fitness equipments.
3) Most of them do not necessarily attend the Fitness Centers because they are fitness consciousness. Instead, joining a Fitness Centers is one of the latest trends in the society these days. Majority of those attending the Fitness Centers do it either to maintain their status or for the weight loss. Only a handful of them go to a Fitness Centers exclusively for physical fitness.
4) In Pune city health clubs having facilities of saunas or steam baths are very few. Fitness Centers giving toilet or bathroom facilities are more in number.
5) Boys are using Fitness Centers more than men, women and girls.
6) $30 \%$ private Fitness Centers spend less than the average annual income, $31 \%$ private Fitness Centers run into profits and $69 \%$ Fitness Centers face financial problems.
7) $98 \%$ Fitness Centers have instructors for men and $54 \%$ have appointed separate instructors for women.
8) Private Fitness Centers from where participants are selected for district level or other competitions is negligible.

The Suggestions Regarding Private Fitness Centers:

1) To get legal status all private Fitness Centers should make their registration.
2) Fitness Centers should be started where plenty of space and land available.
3) There should be a separate place for the exercise for males and females. If it is not possible there should be separate timings and batches for both
4) If there is no playground of the Fitness Centers they should take it on rental basis from other Fitness Centers or colleges.
5) Fitness Centers should purchase modern updated equipments which are available in the market.
6) All Fitness Centers of the close vicinity should make joint efforts to build swimming tank where the space is available.
7) Fitness Centers should not take more or unrealistic fees from their members.
8) Fitness Centers should utilize their funds for purchasing new articles, equipments, and their maintenance, honorarium for the coach, for the rent, repairing of the articles and to pay different taxes.
9) All private Fitness Centers should appoint trained coaches.
10) All coaches should attend refresher course once in three years. The association of Fitness Centers or any other such body should conduct such course.
11) To get more guidance in the learning and teaching process Fitness Centers should contact and made video-films available of well known International personalities in the field of sports and body building.

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# A Study of Mental Health among College Going Students 

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#### Abstract

The aim of present study was conducted to find out whether the mental health of college going students was related to their area of residence and gender. The sample consisted of 200 college going students from varies college of Jalna district. Subject will be selected male and female as well as rural and urban area college students was $1: 1$ ratio. $2 \times 2$ balanced factorial design was used to analysis of data. The tool used mental health check list developed and constructed by Pramod Kumar. It was found that there was significant difference between male and female college going students. There was not found significance difference between rural and urban college going students. There was no interaction effect of area of residence and gender on mental health in college going students.

\section*{Introduction:}

Education plays a vital role for the progress and welfare of the society and nation. In the education process teacher and students is the main pillar. Basically good teachers emotionally, psychologically adjust verb well the emotional and psychological establishment of teachers hence corves on everlasting effect on students. The aim of education is the all round development of personality. Physical, spiritual, moral, emotional and mentally development of students by education. Now days it is supposed that present day education is doing only mental development of children. In real sense, present day education is only providing some information to students and developing very few mental abilities mental health of students in higher education is more important than other similar or dissimilar age groups of general population as they are more prone to mental illness.


Mental Health:
The world health organization defines health in terms of physical, mental and social wellbeing. Because most develop countries operate with score resources, they have concentrated on physical health. Mental health refers to satisfactory functionally in cognitive, emotional and social domain mental health certainly cannot be defined,
"The absence of mental disease or disability."
The concept of mental health originated early in the present century, the term mental health can be expressed in dictionary of psychology, "A state of good adjustment with a subjective state of wellbeing, rest for living and the feeling that one exercising his talents and abilities."

The term mental Health refers to those behaviours, perception and feelings that determine a person's overall level of personal effectiveness, success,
happiness and excellence of functioning as a person - (Kornhause 1965) . Horwitz and schrid :

Mental Health includes a number of dimensions: Self esteem, realization of one's potential, the ability to maintain fulfilling meaningful relationship and psychological well being.

Karl Mennigner - The Human mind (1945)
"Mental Health is the adjustment of human beings to the world and to each other with a maximum effectiveness and happiness. It is the ability to maintain an even temper on alert intelligence, socially considerate behavior and a happy disposition."

The modern age is rightly described as on age of distress. There has been an alarming rise in magnitude of mental disorder and today millions of people all over the world are adversely affected by mental health problem. W.H.O. in its world health report 2000-2001 has stated that $20-25 \%$ of the world population is effected by mental problems at some time during.

Mental health is supremely important without which one cannot call oneself a healthy person. Mental health determines ones attitude and approach towards life. Mental health is very important for college students. Because college life is very important to students' future life. This attitudes present study focused on college going students' mental health.

## Aim and objectives of the study:

1. To find out the effect of gender on the mental health status of college going students.
2. To find out the effect of area of resident on the mental health status of college going students.

## Hypothesis:

1. There are significant differences in between male and female college going students in respect of mental health.
2. There are significant differences in between Rural and Urban College going students in respect of mental health.

## Method:

## 1. Design of the study:

$2 \times 2$ balanced factorial design was used.
The present study was a $2 \times 2$ factorial design utilizing the variables of sex and area of resident of the college students. The two types of area of resident rural students and urban students on the basis of their area of resident males and female college students as the two levels of under variable:

| A Area |  |  |
| :---: | :---: | :---: |
|  | a1 | a2 |
| b1 | a1b1 | a2b1 |
| B2 | a1b2 | a2b2 |

a1 b1 = Rural area male students
a2 b2 = Rural area Female students.

A2 b1 = Urban area Male students.
A2 b2 = urban area female students.

## 2. Variables Under the study:

A. Independent variables :
i) Area of resident

- Rural and Urban
ii) Gender
- Male and Female
B. Dependent variables
i) Mental Health


## 3. Sample:

The purposive sampling method was adopted in selecting the sample of the study. Majority of the respondents were in the age group of 18 in 25 years. The sample consisted of 200 college going students from varies college of Jalna district. Subject from Jalna District College going students Male and Female as well as a rural and urban subject was 1:1 ratio.

| A Area |  |  |  |
| :--- | :---: | :---: | :---: |
|  | Rural (a1) | Urban (a2) | Total |
| Male(b1) | 50 | 50 | 100 |
| Female (b2 | 50 | 50 | 100 |
|  | 100 | 100 | 200 |

## 4. The Measuring Tool:

The Hindi version of the 'Mental Health Check List is constructed and standardized by Pramod Kumar by the investigator was used for the study. It consists of 11 items presented in a 4 points rating format. The reliability of the check-list was estimated through test -retest and split half reliability method. Index of reliability consequently 0.81 and 0.83 the content validity of the mental health check list adequately assured as only those symptoms which showed 100 percent agreement amongst the judges regarding their relevance to the study of mental health were selected

## 5. Procedure of data collection:

All subject was cited comfortably in arrangement was made in a class room. After that Hindi version of mental health check list consisting 11 items along with instructions was administered on male and female subject. Both the resident area was subject were asked to fill the mental health check list without omitting a single item. Data was collected and the items were scored by assigning numerical values. Data was analyzed using analysis of variance.

## Results:

Table No. -1 Summary of Analysis of variance for mental health in Relation to area and Gender.

| Sr. <br> No. | Source of <br> Variance | Sum of <br> Squares | DF | M.S. | F. | Point |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. | ASS (Aria) | 40.5 | 01 | 40.5 | 1.82 | N.S. |
| 2. | BSS(Gender) | 158.42 | 01 | 158.42 | 7.12 | Both the level |


| 3. | ABSS | 38.62 | 01 | 33.62 | 1.51 | N.S. |
| :---: | :--- | :--- | :---: | :---: | :---: | :--- |
| 4. | Within S.S. | 4360.44 | 196 | 22.25 | - | - |
|  | Total | 4592.98 | 199 |  |  |  |

$$
F=(1,196)=3.89 \quad(0.05)
$$

$$
=6.76(0.01)
$$

The findings of the study are shown in table. ANOVA results shows that main effect of Gender came out to be significant. The effect of resident it was found non significant. However interaction of area and gender it was found non significant.

## Discussion:

The results of the F-ratio for area effect are 1.82, which is less than table value of 6.76 at 0.01 level against $1 / 196$ degree of freedom. Hence, the hypothesis No. 2 is rejected and results of the F- ratio for gender effect is 7.12 which is more than table value of 6.76 at 0.01 level against $1 / 196$ degree of freedom. Hence, the hypothesis No. 1 is accepted. F value for interaction effect between Gender and Aria of resident on the variable of Mental health is 1.51 which less than table value of 6.76 at 0.01 level.

The results are found their are significant difference between male and female college going students in respect of mental health. The results that male college going students (mean value - 20.00) exhibit significantly better mental health as compared to their female counter partners ( mean value $=21.78$ ) These findings gain strength from results of studies conducted by Sarah Basu (2009), Sahoo and Lisa (2009), Nanda (2001) Srivastava (1987) and Ravichandran and Rajendran (2007). One of the possible reasons for gender difference in mental health status could be that female teachers experience the burden of dual responsibilities of home and education compare to male students because leading to greater stress and hence poor mental health. The better mental health of student the specific role of the school, family, society and teachers. It is suggested that it the teacher concentrates on the mental health of the students.

The aim of education is the all round development of personality. Aim of the education develop students physical, spiritual, moral, emotional and mental health their was college should be positive and constructive experience so that maladjustment among students can be prevented Because prevention is always better than cure, students should not be compared un necessarily. Children marks should be compared with their previous marks, not with marks of other students. Female college students should promote general adjective habits, emotional stability and awareness towards own work. There should be prevision guidance and counseling services in college level female students.

## Conclusion:

1. Their was significant difference between male and female college going students in respect of mental health .Male college going students level of mental health is high than the female college going students.
2. Their was not found significant difference between rural and urban college going students in respect of mental health.
3. Their was no interaction effect of area of residence and gender on mental health in college going students.

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# Effect of Aerobic Training on Body Mass Index of the Sedentary Obese Women from Shirala Taluka 

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#### Abstract

There are many drastic changes in every field due to high Information technology and the facilities like internet the whole world is just at click distance. Every Profession has many benefits because of this quick and easy access to reach the proper subjective. Can the thin or fat women, without glowing skin and low or high body weight look really beautiful? Is beauty related to big breasts and face? And can she become attractive and look smart with these specialties? In my opinion the answer to all the above questions is absolute no. If the women are not healthy and free from disease she cannot look charming and attractive. She has to take aerobic training to become slender and supple. In spite of her body weight, proportionate body figure, and the beauty spots. Beautiful body with diseases is a strange. Poet can say in his poetry about the sharp live eyes. Natural beauty after the rainy season cannot be compared with the artificial showers of water used for gardening. After all the beautiful women is basically at first a human being So the fitness, free from disease and accepted aging changes in the body can be decorated with the treatments. Then only she can look quite smart. Women in the real sense of their natural delicate style are genius. That is why it is rightly said that the aerobic training that Goodbye to fatness and well come to fitness

Here in this paper the aim of the study is to investigate the effect of aerobic training on the body mass index on sedentary obese women from Shirala. Forty obese women were selected randomly and equally divided in two groups- Control and Experimental groups. The Experimental group was administered and given aerobic training five days in a week for a period of 10 weeks. The control group was not involved in any aerobic activity regarding body health. Once in two weeks the load was increased. five days in a week for a period of 10 weeks. The control group was not involved in any aerobic activity regarding body health. Once in two weeks the load was increased. The Body Mass Index (BMI) was selected as variable. With the collecting data the "t" ratio was analyzed. Due to the training programmed given to sedentary obese women from Shirala taluka. It was very interesting that the BMI is positively influenced. The aerobic training helped the subjects to decrease the Wight and BMI slightly. To decrease the magnitude of obese mild training of aerobic exercise is badly needed.Keywords-- Fatness and


Fitness, Spontaneous activity, aerobic training, Information technology and Body Mass Index (BMI

## Introduction

We know that Sports and Physical Education is an indispensable area for the development of personality of individual. The role of sports leader is mandatory by activity which is continues process regarding sports expression with skill, strength, speed, suppleness, stamina and money. These are the main roots of the good Leadership. Necessity is the mother of invention. Human beings are the most vital part of the organization. Effective use of the human force depends upon the administration. We can get the results from the people in the organization in two ways by exercise of authority and by getting support of the people. The second method has a better and greater effect over the motivation of people. It is possible only when one of them becomes leader in real sense. A sport is an innate quality of human society and it has achieved a universal status in modern family. Other form of social activity has become an integral part of educational process, many people participates in sports activity for health and fitness. We know that diet plays a vital role in the maintenance of good health, preventions and cure of diseases. The body can't perform metabolic, hormonal, physical, mental or chemical functions without proper diet. 'The science which deals with importance of diet and its effects on the body is Dietetics.'

Nutrition is the process of taking food into the body and absorbing the nutrients in those foods. Good nutrition is also concerned with Protein, Carbohydrate, Lipids, Vitamin, Minerals and other supplementary content in appropriate quantity required for healthy growth. It helps you to maintain health, strength and physique. The present generation is in constant quest for a remedy of every malady. Many physicians have manufactured the modern ultra drugs from the point of view of the weight reducing effects of common women. The weight reducing capacity of the women is minimum as compare to man. Reducing weight can be a natural activity and an enjoyable pastime for those women who are suffering from other disease.

Obese women who lead a fairly comfortable and carefree life may not have trim figure and good health. The women required actual participation in the sports which are easy to do in daily life piously. Competition in the every field has created a tendency towards more brainwork than physical work for a large group of people. They most probably take up tension-ridden jobs which results in obese of the human being. Aerobic exercise does not mean that one should do hard or strenuously exercises every morning which may result loss in body weight. Aerobic activity includes following items walking, swimming, cycling, rowing, skating, jogging, rope climbing, skipping, hopping with one leg. Waking is the best aerobic exercise that even a heart patient can do. Most of the obese women have at least some minor heart and lung ailments.
Material and Method:-
The aim of study is to investigate the effect of aerobic training on the body mass index on sedentary obese women. Forty common women were selected
randomly and equally divided into groups- Control and Experimental groups. The Experimental group was administered and given aerobic training programme five days in a week for a period of 10 weeks. The control group was not involved in any aerobic activity regarding body health. Once in two weeks the duration of aerobic training was increased. The Body Mass Index (BMI) was selected as variable. With the collecting data the ' $\mathbf{t}$ ' ratio was analyzed. Due to the training programme given to sedentary common women from Shirala Tahsil. It was very interesting that the BMI is positively influenced. The aerobic training helped the subjects to decreased the weight and BMI slightly that extent. To decrease the magnitude of obese mild training of aerobic is badly needed.

The subjects were given warming up exercise for a period of ten minutes before starting the training session. It included jogging, stretching, rotation at various joints, walking on heels and toes, forward bend, and backward bend, side word stretch, hip joints, stretching of calf and quadriceps muscle groups and Situps and push-ups. The details of the training schedule are given below.

| WEEKS | TRAINING SCHEDULE IN MINUTES |
| :--- | :--- |
| First two weeks | 5 min . stretching, 5min. jogging and 5 min. walking. |
| Three to four weeks | 5 min . stretching, 5 min . jogging and 10 min . walking. |
| Five to Six weeks | 10 min . stretching, 10min. jogging and 15 min . walking. |
| Seven to Eight weeks | 10 min . stretching, 15min. jogging and 20 min. walking. |
| Nine to Ten weeks | 10 min . stretching, 20min. jogging and 25 min. walking. |

After the training session the subjects were ask to go for limbering down exercises. This includes slowly jogging, stretching, walking rotation, standing as well as sitting exercises and so on. The BMI of the subject was calculated by measuring the height in meters and body weight in kilograms. The following equation was used to calculate the Body Mass Index.

> Weight (kg)
> BMI =-----
> Height $(\mathrm{m})^{2}$

Sum X


Conclusion dependent BMI values are as Anorexia < 17.5 to 19.1 is under weight, < 19.1 to 25.8 is desirable or normal weight, < 25.8 to 27.3 is overweight or marginal weight, < 27.3 to 32.3 is obese or over weight
< 32.3 to 35 is very obese or very over weight. < 35 to 40 severely obese weights.
< 40 to 50 morbidly weight. < 50 to 60 super morbidly weigh. To compare the mean difference between initial and final scores of experimental and control group test was employed with Body Mass Index.

## Results:-

Table1: Mean standard deviation, standard error and $t$ ratio of Experimental and control groups in Body weight and Body Mass Index.

| Variables | Groups | o. | Mean | Mean-diff | D | EM |  |
| :---: | :--- | :--- | :---: | :---: | :---: | :---: | :---: |
|  | Experimental | 20 | Initial <br> 87.65 | 1.15 | 40 | .83 |  |
| Body weight |  | 20 | Final <br> 86.50 |  | .37 | .82 | .45 |
|  | Control | 20 | Initial <br> 89.15 | 0.79 | .38 | .57 |  |
|  | Experimental | 20 | Final <br> 88.26 |  | , 31 | .55 | 40 |
|  |  | 20 | Initial <br> 29.79 | 0.47 | .58 | .10 |  |
| Final <br> Body <br> Index Mass | Control | 20 | Initial <br> 30.10 | 0.02 | .51 | .10 | .53 |
|  |  | 20 | Final <br> 30.08 |  | .67 | .10 | .50 |

In table no. 1 ' $\mathbf{t}$ ' value for experimental group in the case body weight was 8.45. This is significant in statistical terms. As well in the case of control group the ' $t$ ' value calculated was 1.40 which was lower than the required table value. This shows that significant reduction in the body weight of the experimental group by training programme. The calculated value for experimental group in body mass index is 5.53 which are slightly higher than the required table value at 0.01 levels. In the case of control group the calculated ' $t$ ' ratio was 1.50 which was lower than the required value. This again shows that the significant reduction the body mass index in the experimental group.

The yellow fats which are accumulated in the men while giving aerobic exercise reduces in large quantity but that of in case of the women the white fats does not reduces firstly in large quantity. That is why we see that the significant reduction of the body mass index in the experimental group is less as compare that of men. On the other hand body weight was deducted in the large scale.

Abstinence of reducing weight comes to those once only when they do the exercises properly by heart and with inn nest desire.

## Discussion:-

All the participants here I mean the subjects of the experimental group involved in this study has undergone regularly aerobic training programme for a period of ten weeks. Form the table it was evident that in the case of body mass index there were significant changes noticed after ten weeks to control group no changes were seen in the body mass index. Form the findings it is very clear and interesting to know that the sedentary obese women have positive influence upon their body mass index due to the training programme given to them. The aerobic training helped the subjects to decrease the weight and also helped them to keep the heart healthy.

## Conclusion:-

Women from the Shirala Tahsil were participated in the aerobic exercise resulted in the improvement of the body mass index as per the calculation of the 't' ratio

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# Physical Activity: A Biggest Necessity for Public Health 

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The importance of a physical activity program is linked to a higher equality of life as well as academic achievement. It is well documented that regular physical activity in childhood and adolescence improves strength and endurance, helps build healthy bones and muscles, helps control weights, reduces anxiety and stress, increases self-esteem and may improve blood pressure and cal activity and who have regular, sequential physical education are stronger students - physically and mentally. Numerous studies (Etnier et al. 1997; Keays \& Allisaon, 1995; NASPE/SPEC. 2001: NASPE, 2002: President's Council, 1984; Symons et al., 1997) provide data that adequate physical and physical activity strengths academic achievement. A recent study by the California State Department of Public Instruction provide compelling evidence that the physical well-being of students has direct impact on their ability to achieve academically.

People of modern are suffer greatly from disorders of stress (Benson, 1974, and Benson \& Klipper 1975; Brown, 1975). In fact they are the major causes of morbidity and mortality all over the world. Even now infective disorders take a great toll of lives in developing countries. But the disorders of stress and injuries are responsible for a large number of human tragedies in developed countries. The excessive stresses and strains affect adversely the quality of life. Further, people undergoing too much of stress and strain are more liable ot be affected by different types of infections than others because of poor immunological responses. The study of the causes and effects of stress is one of the most important subjects of investigation for a modern medical person. But very few scientists and medical men have taken much interest in this subject. (Jacobson, 1938; Levi, 1971; Pelletier, 1971; Udupa \& Singe, 1972; Bhushan, 1977; Etnier et al, 1997). About five decades ago Hans Selye reported to the world that stress causes marked changes in the entire body, but not many attempts were made to apply this knowledge in solving the problems of human sufferings. Selye earlier suggested that all the non-specific responses of stress such as hypertrophy of adrenal cortex, lymphopenia and GI ulcerations occurred as a result of excessive secretions of adrenocortical hormones. He further proposed that such a response was mostly due to stimulation of anterior pituitary gland which regulated the adrenal cortex. However this was not fully accepted by the physiologists. Cannon had postulated earlier that adrenal medulla and its hormone adrenaline were responsible for the appearance of various physiological changes in the body after any type of psychosomatic stimulation.

Exercise enhances the mind-body connection, which can improve your mood and physical health - and even lighten various psychological disorders. Improved depression, body image struggles, eating disorders, and
even physical problems such as back pain and asthma are some of the health benefits of exercise.

## The Health benefits of Exercise Improved body image

Women who involved in physical activity report more body satisfaction, less self-objectification, and greater satisfaction with physical appearance (compared to women who don't do yoga). Fewer symptoms of eating disorders are also reported by women who involved in physical exercise perhaps because exercise encourages one to listen to the body's feedback and learn to be sensitive to the bodily sensations. This in turn makes oOne less preoccupied with ones appearance, gives more positive views of the body, and helps incorporate healthy eating habits in ones life. A healthy body image is one of the health benefits of exercise.

## Physical activity as a preventive tool

Physical activity is considered as a gift by many due to its immense benefits and ability to provide cure for a wide range of diseases without having to intake medications. But aside from providing cure, physical exercise can also be used as a preventive too. With regular physical activity, it is believed that one can improve health and well being such that body is better able to fight off diseases. The discipline of exercise makes one think differently about ones mind and body by enhancing mind-body bond. People of any age or gender can benefit from the exercise. Its restorative mechanism is what makes exercise unique from other medical approaches or exercise trends that are currently practiced by various individuals. It emphasizes the promotion of a healthy well-being more than it focuses on trying to cure diseases. Indeed, prevention is still several ways better than cure and anyone who has tried can attest to this.

In fact, many who have adapted exercise as part of their regular fitness routine does so since it significantly improves their health maintenance system. One of its practical application involves stress reduction techniques that enable an individual to cope with daily stresses in ife that could have entailing impact on the health. Indeed, stress depletes the immune system's ability to fight off diseases so it is important to eliminate stress in the life. There are several methods involved in physical exercise that will provide with an effective stress management tool, such aerobic exercise, breathing exercises, and stretching exercise. Heart problems and cardiovascular diseases is one of the leading causes of death worldwide. Finding an effective cure against these type of diseases will greatly reduce to mortality rate. But regular exercise offers an even more effective approach to put a stop to the increasing number of people suffering from heart diseases. Hence, expert physical education suggest incorporating Aerobic exercise, calisthenics and resistance exercises into the daily life so that one can embark on an important lifestyle transformation that will improve the heart condition.

When an individual suffers from stress, it constricts breathing passage, creates tension in the heart muscles, and increase heart rate. When this happens, one simply has to start executing aerobic exercises to release pressure exerted
on the heart and its surrounding muscles. Performing aerobic exercises and positions are the subject of several health studies over the recent years. And these studies show somewhat similar results that indicate the ability regular exercise to improve the quality of life. This happens mainly due to the improved body composition and better fitness level. Moreover, these effects are equally significant as a complementary therapy for those that are undergoing conventional medical treatments. By regularly executing aerobic exercises, an individual is able to improve their muscular strength, produce a leaner body mass, and improve immune system. It also helps to improve one's level of self-esteem and produce a more positive body image, which greatly impacts their view of the self without suffering from any form of side effects.

It is so believed that exercise improves the health such that it equips oneself with the ability to fight off common diseases and other conditions. Whether it affects the physical health or internal organ system exercise is able to address various health issues, which is the key to improving the quality of life. So, what are these common health problems and how does exercise improve your body's ability to prevent them? All these questions need serious explorations scenically.

Chronic back pain or problem is a common complaint shared by several individuals. But Therapeutic exercise offers a great method to relieve your of any pain sensation or prevent back pain from developing. Back pain, particularly in the lower back area, is often caused by poor posture of remaining at the same position over a long period of time (which is likely with individuals sitting in their office desks for several hours each day) the aim of Therapeutic exercises is to add flexibility, provide proper toning, and increase strength in your muscles. All of these are important qualities that the body needs to eliminate pain in the back or some other parts of the body. And the best part about performing these therapeutic exercises is that they serve both as a way to prevent injuries or speed up the process of healing.

The ability to add strength and flexibility to your muscles and joints are obvious benefits that can be derived from strength and flexibility to your muscles and joints are obvious benefits that can be derived from stretching exercise people are aware that exercise provides benefit to your internal health system, as well. One of that is your digestive system. When you perform advanced stretches or curling exercises, it also internally massages your organs such that it facilitates for proper functioning of those organs. And when your internal or digestive organs are healthy, so is the rest of your body.

## Stress-Related conditions:

Anxiety and stress are normal bodily responses prompted by various external impulses. In fact, stress is considered as healthy as it enables the body to push beyond the limits and act according to what type of physical situation an individual is confronted with. But when present in an overwhelming amount exercise is not good for your health.

There are several ways to equip your body to cope with the effects of
stress or better yet manage stress before it begins to create devastating effects on the body. Exercises are very effective in helping you control stress and regulating your breath patterns. The Complete Breath technique is one of the breathing exercises that one needs to learn, especially when "stressed out". Simple concentration and paying close attention to the sound of the breathing and this enables to cam down the nerves and avoid panic attack. Daily or regular exercises and aerobic exercise also known to effectively reduce anxiety or depression caused by stress.

## Health Conditions Related to Aging Process

There is also a relatively new category of exercise that caters to the needs or older or aging individuals. This might appear as a bit surprising for many given that most people have this miscomputation that exercise requires a certain level of flexibility or physical skill. However, older individuals can experience several great benefits from therapeutic exercise such as improved dexterity, injury prevention, and reduced amount of pain in their joints, muscles, and ligaments as yoga exercises help to add flexibility into them.

## The health benefits of exercise

Regular exercise 45 minutes daily was connected to weight loss in subjects between the ages of 45 and 55 , according to a study funded by the National Cancer Institute. Aerobic exercise isn't about burning calories; it's more about becoming more aware of your body and when it's full of food, stress, or conversation. The health benefit of exercise with regard to weight loss is that it's easier to stop eating when your mind-body connection is strong. It's your body awareness that is improving, not necessarily the caloric burn. Regular exercise improves mindfulness and encourages a "gentle strength", which positively affects weight loss and weight management.

## The health benefits of exercise improved physical health

Research is proving connections between good physical health and exercise for instance, epileptic stress, back pain and fatigue caused by multiple sclerosis are all health problems that have been proven to be reduced by various types of exercise and that's just barely scratching the surface of all the scientific research about exercise and health.

Exercise seems to possess enormous health potential and serious scientific explorations and its inclusion in the school educational curriculum along with physical education is the need of time to enhance the quality of life of the people in general and nation as a whole.

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# Comparative Study of Open Book Exam \& Closed Book Exam 

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From the ancient time India has a great heritage of Education. Many years ago there was a "Gurukul" tradition where the student went for receiving education. Earlier student had real knowledge \& they can implement their knowledge by the situation, but this is not happening in present day. Student negative attitude is increasing in present situation \& that's why they use wrong technique \& ideas in the examination. Student's those factors damage the validity of Evaluation process, Students are scared about exam \& so it is responsible for their anxiety and negative attitude. In today's situation we are going for new approaches of Educational Evaluation. For gaining National \& self advancement we have to modify Educational Evaluation System. Because today's circumstances of Evaluation are very disturbing. Examination system is a perfect tool of Evaluation if we are going through proper way. If any errors are produce in Evaluation that directly affect on the system \& pupil's achievement that's why we have to perfect judgment towards examination. For these purpose examination or evaluation system should be firm \& healthy. On the basis of these purpose we must adopt new trends \& changes in evaluation system. For that researcher suggested Open Book Examination as a new approach towards examination. In open book examination system students have permit for writing answers from there course books, reference books, note book, hand book etc. With regards to present research, Researcher has decided to compare Open Book Exam with Closed Book Exam. The finding will help to study the effect of these to pattern of exam only on the score of students \& effectiveness of these to exam pattern.
" Comparative Study of Open Book Exam \& Closed Book Exam"

## Definition \& Key terms -

Open Book Exam: - An open book examination is one in which examinees are allowed to consult their class note, text books, and other approved material while answering questions.
Closed Book Exam: - A close book examination is one in which examinees are not allowed to consult there any of the material while answering question.
Objectives of Study -
To study the close book examination system.
To study the open book examination system.
To study and compare the effectiveness of Open Book Exam \& Closed Book Exam.
To suggest the ideas / recommendation
Hypothesis: - There is no significant difference between the score of student who gave their exam via Open Book Exam \& Closed Book Exam.

Delimitation: - This study was delimited only in Aurangabad city's B.Ed. Student in 2010-2011 educational year. This study was delimited only for the Open Book Exam \& Closed Book Exam examination system.
Design of the Study :-
Methodology - The present study is a quantitative research. For this research experimental design was adopted.
Sample: - The random sampling method has been employed to choose the student. The sample comprised of 112 B.Ed.(Bachelor of Education)
Trainee student for Open Book Exam \& another 112 B.Ed. trainee student for Closed Book Exam.
Tools: - For this research researcher utilized the self made tools which is standardized by 5 experts in the same field. The researcher knowingly made the objective type questionnaire for the purpose. It is based on 3 course subject of B.Ed. namely

1. Education in Indian Emerging Society
2. Educational Psychology
3. History of Indian Education

On the selected topics.

## Data Collection :-

After getting the prior permission of Principal of B.Ed. College researcher had collected students Open Book Exam scores \& Closed Book Exam scores. Then researcher had divided the students in a two equivalent groups on the basis of marks Mean \& S.D. was calculated. One group went through the Open Book Exam was assigned as experimental group \& another was assigned as controlled group which went through Closed Book Exam.

## Analysis of Data :-

Hypothesis: -
There is no significant difference between the score of student who gave their exam via Open Book Exam \& Closed Book Exam.

For present study we calculated one "t-test" was used to carryout inferential analysis. The detail of analysis is presented in below table.

| Group | N(df) | Mean | S.D. | T value | LOS |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Open Book <br> Examination | 112 | 18.11 | 1.92 |  | Non <br> Slosed |
| Cook <br> Boanination | 112 | 18.33 | 1.87 | 0.92 | Significant |

From the table it can be seen that the $t$-value was non-significant.
Hence, the null hypothesis is received. Therefore, there is no significant difference between mean score of examination with different pattern.
so, it was concluded that the examination pattern whether it is Open Book Exam or Closed Book Exam does not affect on score of students.

Conclusion :- From this research on the basis of Open Book Exam \& Closed Book Exam score $t$ value was calculated. At the 0.01 significant level calculated $t$ value was 0.92 the calculated $t$ value was less than table value (2.63).

Hence it can be seen that the null hypothesis is accepted.
There is no significant different between the scores of the exam with changing exam pattern in another word the examination pattern whether it is Open Book Exam or Closed Book Exam doesn't affect on the scores of students.

## Suggestions :-

1. The finding of the present research shows that there is no significant difference on score of examination with respect to examination pattern.
2. To quote in other word both the group obtained equal achievement Thus, if the question paper is drawn carefully, the benefits of exam pattern can serve as responsible factor for high results.
3. Changing exam pattern or by adopting Open Book Exam system it is also advantageous to administration by reducing expenditure their energy, money \& time to refrain the cheating in the traditional examination.

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## Rajdehar Fort

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There are a few forts on satmal ranges, one of them is Rajdehar. It is located in adjoining hilly area in one corner of Chalisgaon taluka, now in ruined condition.

The rule of Raja Ramdevrai came to an end as soon as Islams invaded on his kingdom. The contemporary dependant of Raja Ramdevrai who was Nikumbha his power also came to an end and whole Patna city devasted. Most of historians noted that there is not a hair of Nikumbha but it is not applicable. At the same time under the control of Nikumba one responsible authority was on the fort but without a few proofs there is no more to support it. The surnames of the Deshmukhs of Rajdehar are referred as Nikam. The honour of worshiping to the Deity is given to Nikam so it is clear that for the limited period Rajdehar was under the rule / control of Nikams. Today we can't imagine its past glory upon its visible condition.
Rajdehargaon:-
Rajdehargaon was situated at the foot of Rajdehar fort. There are a few remenants of village which are visible today as, a few white soil walls are in standing condition, but day after day white soil is used for bricks factory so that rigid changes are occurring there. Within a few days nothing will remain there to say something about its history to the students and research candidates about the fort as well as Rajdehar was once upon a time a prosperous hub.

## Shravan Lake:-

In the edge of Radhergaon there was a lake but today it is in a form of small dam. At the bank of lake there was a temple of Lord Shiva. The small inscription identifies the the temple but no one has read this inscription yet, its most of the part is ruined. There are some Shivpandis lying out of the temple.

## Location of the fort:-

The location of the fort is very amazing. It is situated on one of the Satmal ranges and perticularly on one tip point of rocky hill. One side of the fort is naturally protected. The selection of the spot for the construction is really perfect and amazing. So far as protection is concerned exactly it was like Devgiri fort, by standing on the observation point of the fort (Tehalani buruj) one can observe the surrounded area easily.

## The Remenants of fort:-

There is one path which goes through the valley to temple. It is at midpoint of the fort. Eastern side of the fort is called small fort, in the corner of small fort there is cave like place. It may be the Buddhist cave; today it is called observation point. By standing on one point of this place completely surrounded area of Rajdehar village came in eyesight.

At the entrance of the fort there is the basement of ruined temple. The picture of Lion and other animals are sculpted on the broken pillars. It means
there was a tradition that, before entering in the fort everyone must worship (take darshan) Lord Shiva.

Fort construction begins from the stairs of temple. There was not other option for entering in the fort without these stone stairs. Climbing the stairs the guards of the fort can easily observe it and defeat the enemy. Some stairs are on the side of patal dari.

There is plateau on the fort, which is the main place of the fort. The height of the fort is divided into two parts. Besides the valley in north direction there is huge rock where there are holes for pillars. It means there might be the building on the same rock. there is lord Shivas pind as well as Nandi in broken condition.

At the entrance of Divan there are some sculpted stones. If you stand on any one point of the fort you can observe the surrounded area clearly. One difficult path which goes to Lord Shivas temple on East side side which is called Adhai shidi. On the fort there is dipmala which was used for warning because from this temple a vast plane area visualize. Between the temple and fort there is a deep valley which is called as Gaon darsh and beside that another valley is called Patal Dari.

The valley which is in East of fort called Bhavani dari .lt is tremendous deep ravin in that same direction there is a temple of Patna Devi; in the edge this temple there is a tunnel, how much deep it is nobody knows it, but this tunnel reach to the temple of Patna Devi, it is one legend.

This is strong and very safe on the point of protection view. The storage of water is also done very systematically. There are three tanks constructed at three different points, one in west another in east and one on the top.

Today only the remenants of the water tanks are scattered beyond recall. In the course of time everything will be disappear.

These remenants are looking angshiously at the cowman, this neglected but glorious strong fort which is a strong source of the study of Maratha history but still no one is serious about it.

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# निर्मल वर्मा के नारी पात्रों की विशेषताएँ 

(विशेष संदर्भ कथा साहित्य)
सु. श्री. ज्योति मुंगल : शिक्षिका, पोद्दार इंटरनेशनल स्कूल, नांदेड़
निर्मल वर्मा ने नारी को न केवल समझा बल्कि उसे ‘ह्यूमन’ समझा है। ‘अज्ञेय’ के बाद निर्मल वर्मा ही ऐसे कथाकार हैं जिनके यहाँ नारी केवल एक वस्तु न होकर जीते - जागते ‘मन’ के साथ अपनी पूरी संवेदनाओं के साथ मौजूद हैं। यह और बात है कि यह प्रभाव अनको ‘कीट्स’ से मिला है। उनकी नारियों के इर्द - गिर्द अतिरिक्त संवेदनाओं की घनी पर्तों का आवरण चढ़ा होता है। जब आप उस आवरण की घनी पर्तों का तिलिस्म तोडेंगे तभी आपका निर्मल वर्मा की नारियों से सीधा परिचय होगा।

निर्मल वर्मा के समूचे कथात्मक लेखन में नारी पात्रों की भूमिका प्रमुख है - पुरुष पात्र प्राय: गौण हो जाते है। आमतौर से धारणा है कि लेखक अपने पूरे लेखन के दौरान अपने आपको अपने पात्रों के बीच छिपाता है। लेकिन निर्मल वर्मा के साथ ऐसा नहीं है। उन्होंने अपने आपको अपने नारी पात्रों के पीछे छिपाया। नारी के विषय में वे कहते है- "मै जिस चीज को पुरुष में थोडा बहुत समझौते के घेरे में पाता हूँ, वहाँ नारी के चरित्र में वह चीज अपनी सीमाओं से अलग पूरी नग्नता और संपूर्णता में मुझे दिखाई देती है।" - ?

निर्मल वर्मा के समकालीन कथाकारों ने अपनी नारियों को समाज के बदलते मापदण्डो के अनुरुप विद्रोही, स्वतंत्र और अपने अधिकारों के प्रति संघर्षशील, यौन स्वतंत्रता का हामी लेकिन कुंठाओं से भरा हुआ दिखाया है तो वही निर्मल वर्मा ने भी नारी को व्यक्ति स्वातंत्र्य के प्रति पूरी तरह सचेत, काम भावनाओं की पूर्ति के लिए पूरी तरह स्वतंत्र लेकिन किसी भी प्रकार की कुंठाओं से रहित दिखाया है। उनके चरित्र खास तौर से नारी चरित्र कहीं - कहीं जीवन की व्यर्थता में भी अर्थ खोजने की कोशिश करते दिखाई देते हैं, निरद्देश्य में भी एक उद्देश्य एक आस्था की तलाश उनमें है और इन तमाम अंर्तविरोध को लिए वे एक भविष्य की प्रतीक्षा करती हैं, क्योंकि भविष्य उनकी प्रतीक्षा कर रहा है। - "निर्मल की यह 'प्रतीक्षा' इतनी विशद है कि प्रेम की कहानी में प्रेम भावना का अतिक्रमण कर जाती है और अपने विस्तार में संपूर्ण मानव नियति का प्रश्न बन जाती है।" - ?

शायद यही आज का सबसे बड़ा प्रश्न है, जिसका सामना आज के हर युवक और युवती को करना पड़ रहा है। उसकी काली छाया कहीं बेरोजगारी के रुप में है तो दूसरी तरफ वह प्रेम के निजी क्षणों को भी निगल रही है। 'परिंदे’ की लतिका भी राह चलते - चलते अचानक सिर के उपर पक्षियों का बेड़ा उड़ते देखती है और अपने आप सोचने लगती है - "हर साल सर्दी की छुट्टियों से पहले ये परिंदे मैदानों की ओर उड़ते हैं, कुछ दिनों के लिए बीच के इस पहाड़ी स्टेशन पर बसेरा करते हैं, प्रतीक्षा करते हैं बर्फ के दिनों की जब वे नीचे, अजनबी, अनजान देशों को उड़ जाएँगे।" - ${ }^{\text { }}$

निर्मल वर्मा अपने पात्रों के आपसी रिश्तों को भीतर के बोझ की तरह लेते हैं। चाहे वे पति-पत्नी, भाई बहन, माँ - बाप हो या प्रेमिका। अपनी इस सोच को वे ‘कव्वे और काला पानी’ कहानी में उजागर करते है "हमारा परिवार और भाई - बहन आखिरी मौके पर पहुँच कर क्यों हम सब सूखे डंठल की तरह सुख जाते है, सारा प्रेम वहीं राख और रेत में दब जाता था और हम एक - दूसरे को अपनी हालत में छोड़ अलग हो जाते थे,

क्या यह उदासीनता अपने में पाप नहीं थी ? क्या इसी पाप से आतंकित होकर उन्होंने घर नहीं छोड़ा था ?" - ${ }^{\gamma}$ घर तो निर्मल वर्मा के कई पात्र छोड़ते है। ‘एक चिथड़ा सुख’ उपन्यास की ‘बिट्टो', ‘इरा’ ‘वे दिन’ की ‘रायना', ‘लालटीन की छत’ की ‘पहाड़ी औरत’, 'परिंदे’ की ‘लतिका’, लेकिन इन सबको पूर्णता नहीं मिलती एक अधूरापन ही शायद निर्मल वर्मा के अकेलेपन का कारण है। उनके समग्र कथासाहित्य में अकेलापन आया कहाँ से .... ? शायद यह आज के मनुष्य की त्रासदी है जो अकेलेपन के रुप में हमारे समक्ष केंद्रीय संवेदना के बतौर सामने आई है।

इस अकेलेपन का एक रुप हमें 'परिंदे' कहानी की ‘लतिका’ में मिलता है। "जब लड़कियों की आखिरी बस चली जाती है तब मन उचाट हो जाता है। खाली कारीडोर में घूमती हुई वह कभी इस कभी उसमें, वह नहीं जान पाती कि अपने से क्या करे, दिल कहीं भी टिक नहीं पाता, हमेशा भटका - भटका सा रहता है।"- ${ }^{4}$ निर्मल के यहाँ अकेलेपन भटका - भटका सा रहता है। जिसमें दो व्यक्ति संग चलते हुए भी अकेले हो जाते है। इस अकेलेपन के परिणाम स्वरुप उनमें अजनबीपन भी दिखाई देता है।

निर्मल की नारियाँ ‘बिंदास' बोल्ड है, वे चहारदीवादी में घुट-घुट कर जीने वाली नही है, वे प्रेम और त्याग की भी मूरत नही है। इस संबंध में ‘रात का रिपोर्टर' की ‘बिंदु’ 'वे दिन' की ‘रायना’ ‘एक चिथडा सुख’ की ‘बिट्ट्ट', ‘इरा' ‘लवर्स' की ‘नायिका', ‘अँधेरे मे’ की ‘पोनो’ 'आदमी और लड़की’ ‘लड़की' ‘धूप का एक टुकड़ा', ‘वीकेएंड’ की ‘नायिका’ आदि को देखा जा सकता है। उनकी नायिकाएँ अपने प्रेमियों के साथ सडको पर, रेस्ताराओं और खुले पार्को में चली आती हैं। वे बहुत भावुक है और न परंपरागत त्यागमयी, वे बिल्कुल सच्ची है जैसी कि वे हो सकती थी। उनमे कही कायरता नाम को भी नही है - 'डायरी का खेल' की बिट्टो तपेदिक की मरीज होने के बाद भी असहाय मरणोन्मुख कायरता नही है। निराशा, बीमारी और मृत्यु की आनिवार्यता के बावजूद उसमें जीवन की आवृत्ती मौजूद है- "मरने से पहले जी भरकर जीना चाहिए।" छ
'अतीत से लगाव', यह नारी पात्रों की प्रमुख विशेषता है। यह नारिया अतीत की परिस्थितियों से प्रभावित होने के कारण उसकी भयावहता को नहीं भूला पाती है। उनका वर्तमान अतीत का प्रतिपल है। अत: वे बार-बार अतीत की स्मृतियों में, खो जाती है यही कारण है कि निर्मल के नारी पात्रों में एक अजीब तरह की भटकन है। चाहे ‘वे दिन’ की ‘रायना’ हो या ‘एक चिथडा सुख’ की ‘बिट्ट्रो, ‘इरा’। जैसे उनके जीवन में कुछ खालीपन ? जिसे भरने के लिए भटकता अनिवार्य है, लेकिन वह खालीपन भरने के बजाय और भी नंगा और भी रक्त - रंजित हो उठता है। निर्मल के यहाँ अतीत का बहुत बड़ा महत्व है। उनके हर पात्र अपना अतीत है। एक ऐसा अतीत जो वर्तमान से जुड़ा हुआ है एक जादू की तरह स्मृती पुंज बनकर कौंधता रहता है और स्मृति की कौंध पात्र को अपनी तरफ खींचता है, तो दूसरी तरफ वर्तमान में संभावना है। निर्मल के नारी पात्र "तनाव दोनो तरफ से महसूस करते है। वर्तमान के प्रति उनमे ललक है पर आधे मन की या शायद आधे सेभी कम मन की। वर्तमान का ‘खुलापन’ उनकी दृष्टी में भटकता है, वही भीतर बांधता भी है पर स्मृति का पलड़ा ज्यादा भारी है। वे स्मृति में जिए गए सजीव रेशों से बुनी अपनी दुनिया के पास से पास तर रहना चाहते है।" " निर्मल की अधिकांश कहानियाँ यादों की कोठरी का प्रलाप है.....! वैसे निर्मल वर्मा की अधिकांश नायिकाएँ स्मृतिजीवी है।

निर्मल के सारे स्त्री पात्र जो घुमक्कडी करते फिर रहे है, अपने भीतर भुतैला जंगल लिए हुए है,

अकेलेपन का। उनका यह अपना चुना हुआ है। तकनीक, उदासी, अजनबीपन की पीड़ा, प्रेम उनके अपने निजी और बहुत आत्मीय अनुभव है और इन अनुभवो में वे किसी को भागीदार भी नहीं बनाते। "निर्मल वर्मा के नारी पात्रों में दोहरापन नही हे। वे खुले हुए भी है, लेकिन अपनी इंडिविजुआलिटी के साथ, वे अपनी अस्मिता, अपनी पहचान को खोकर जीना पसंद नही करते और न ही स्थितियों से घबराकर पलायन करते है; वे संघर्ष करते है, लेकिन उनका संघर्ष एक ‘मौन’ का संघर्ष होता है।" ${ }^{\prime}$

इसप्रकार निर्मल वर्मा के समग्र कथा साहित्य में चाहे वे उपन्यास हो या कहानियॉ उनमें निहित नारी पात्रों का सूक्ष्म अध्ययन करने पर यह ज्ञात होता है कि निर्मल की नारियाँ अपने समकालीन कथाकारों की नारियों की तुलना में अत्यधिक संवेदनशील, वर्जनाओं से दूर, लेकिन कुंठाओ से परे, अपने ही ‘मौन’ के वृत में बंद, स्मृतियों के सहारे अपना जीवन जीती है और यह उनकी अपनी विशेषता है।

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२) डॉ. नामवर सिंह - कहानी नई कहानी, पृ-६२
३) निर्मल वर्मा - परिंदे, पृ - १ ६९
४) निर्मल वर्मा-कव्वे और काला पानी, पृ - १४०
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६) वही, पृ-२९-३०
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८) डॉ. वंदना केंगरानी - निर्मल वर्मा के स्त्री विमर्श, पृ - २०४

## हिंदी का अंतर्राष्ट्रीय स्वरुप

डॉ.जोगेंद्रसिंह बिसेन : उपप्रधानाचार्य तथा प्रमुख हिंदी विभाग, दयानंद कला महाविद्यालय, लातूर .

आज विश्व में लगभग २८०० भाषाएँ बोली जाती हैं। जिसमें ९२ भाषाएँ मात्र साहित्यिक महत्व की हैं। व्यक्ति भाषा द्वारा अपने विचारों का आदान-प्रदान करता है। भाषा विचार विनिमय का साधन है। एक हजार वर्ष पूर्व अपभ्रंश की रोख से हिंदो का जन्म हुआ। स्वतंत्र भारत के संविधान में १४ सिंतम्बर १९४९ को राजभाषा समिति ने हिंदी को राजभाषा के रुप में मान्यता दी। भारतीय संविधान के अनुच्छेद ३४३ के अनुसार कहा गया कि भारत संघ की राजभाषा हिंदी और लिपि देवनागरी होगी। अनुच्छेद १२० में यह स्वीकार किया गया कि अनुच्छेद ३४८ के उपबंधों के अधीन रहते हुए संसद का कार्य हिंदी या अंग्रेजी में किंया जाएगा। परंतु यथास्थिति राज्यसभा का सभापति या लोकसभा का अध्यक्ष ऐसे रुप में कार्य करनेवाला व्यक्ति किसी सदस्य को, जो हिंदी या अंग्रेजी में अपनी पर्याप्त अभिव्यक्ति नहों कर सकता अपनी मातृभाषा में सदन को संबोधित करने की अनुजा दे सकेगा। आगे यह प्रावधान है कि जब तक संसद विधि द्वारा अन्य उपबंध न करें तब तक इस संविधान के प्रारंभ से १५ वर्ष की कालावधि की समाप्ति के पश्चात् ्यह अनुच्छेद ऐसे प्रभावी होगा कि, " अंग्रेजी में" ये शब्द उसमें से लुप्त कर दिए गये हो।

इसी प्रकार अनुच्छेद २१० के अनुसार विधान मंड़ल में प्रयुक्त होनेवाली भाषा के संबंध में प्रावधान है, राज्य के विधान मंडल का कार्य राज्य की भाषा या भाषाओं में या हिंदो में या अंग्रेजी में किया जाएग। संसद के समान ही इसकी अवधि $१ ५$ वर्ष दी गयी है और संविधान के लागू होने के १५ वर्ष की समाप्ति के पश्चात् यह अनुच्छेद ऐसे प्रभावी होगा की मानों ' अंग्रेजी में यह शब्द उसमें से लुप्त कर दिए गये हो। यह अनुच्छेद जम्मू कश्मीर पर लागू नहीं है और हिमाचल प्रदेश, मणिपुर, मेघालय, त्रिपुरा के विधान मंडलों के संबंध में यह अवधि २५ वर्ष की दी गयी। परंतु दुर्भाग्य से संविधान की स्वीकृति के पश्चात् भी संविधान के लागू होने के ६? वर्षों के बाद भी सही मायनों में हिंदी का प्रयोग राजभाषा के रूप में नहीं हो रहा हैं। फिर भी अपनी क्षमता के बल पर आज हिंदी देश में जनभाषा के रूप में विकसित होते होते माध्यम भाषा, संपर्क भाषा और संचार भाषा बनकर भारत में ही नहीं बल्कि भारत के बाहर भी अपना अस्तित्व निर्माण कर चुकी है।

बोलने वालों की संख्या की दृष्टि से सारे संसार में चीनी प्रथम स्थान, अंग्रेजी का द्वितीय स्थान तथा हिंदी का तीसरा स्थान है। वर्तमान समय में भारत विश्व का एक बड़ा प्रजातांत्रिक देश है। मानवीय मूल्यों और संस्कृती की दृष्टि से विश्व का पथदर्शक भी है। आज भारतीय ध्म, संस्कृती तथा मूल्यों को जगत् में पहुँचाने के लिए हिंदी हि सबसे बड़े माध्यम के रूप में सहायक है।
"'लगभग एक करोड़ बीस लाख भारतीय मूल के लोग विश्व के १३२ देशों में बिखरे हुए हैं, जिनमें आधे से अधिक हिंदी से परिचित ही नहीं उसे व्यवहार में भी लाते हैं।"

जहाँ थाईलैंड में हिंदी जाननेवालों की संख्या लगभग एक लाख है, वही बर्मा में भारतीय मूल के लोगों की संख्या लाखों में है। वे पूर्वी उत्तर प्रदेश तथा बिहार से संबंधित होने के कारण हिंदी का प्रयोग काफी करते हैं।

शिक्षा क्षेत्र में हिंदी :
भारत से बाहर लगभग १५० से अधिक विश्वविद्यालय में हिंदी अध्ययन अध्यापन की व्यवस्था है।

जपान के विश्वविद्यालयों में हिंदी का अध्ययन होता है। कोरिया में स्थित विदेशी भाषाओं का विश्वविद्यालय हाकुक में हिंदी के अध्यापन का कार्य चल रहा है। श्रीलंका, पाकिस्तान,स्वीडन, ऑस्ट्रेलिया, युगोस्लाविया, फ्रान्स,जर्मनी के विश्वविद्यालयों में हिंदो की पढ़ाई की जाती है। "क्रेम्ब्रिज विश्वविद्यालय में द्वितीय भाषा के रुप में हिंदी का अध्ययन किया जाता है।

मॉडर्न लँग्वेज असोसिएशन द्वारा किए सर्वेक्षण से यह पता चला है कि, युनायटेड स्टेट ऑफ अमेरिका के विश्वविद्यालयों तथा महाविद्यालयों में भारतीय भाषाओं का अध्ययन होता है। जिसमें हिंदो, संस्कृत,बेंगाली,उर्दू, तमिल, पंजाबी, कन्नड, मराठी आदि भाषाएँ हैं। इन भारतीय भाषाओं में प्रवेशित कुल छात्रों के लगभग ४७-४८\% छात्रों ने हिंदी के लिए नामांकन किया है और हिंदी का अध्ययन कर रहे हैं, अर्थात अमेरिका में भारतीय भाषाओं के अध्ययन के लिए प्रवेशित छात्रों में हिंदी सिखने वाले छात्रों की संख्या ही अधिक है। अमेरिका के कई विश्वविद्यालय जैसे केलिफोर्निया,शिकागो, टेक्सास, कोलंबिया आदि में हिंदी अध्ययन अध्यापन की व्यवस्था है।

पत्रिकाएँ :
कई देशों में हिंदी की पत्रिकाएँ निकाली जाती है। सूरीनाम में सरस्वती, आर्य दिवाकर पत्रिकाओं का प्रकाशन होता है। ऑस्ट्रेलिया के निकट एक छोटा द्वीप है फिजी, यहाँ से जय फिजी तथा शांतिदूत पत्रिकाएँ प्रकाशित होती हैं। गयाना से अमरज्योती, ज्ञानदा पत्रिकाएँ निकलती हैं। कनाड़ा में भारती, हिंदो संवाद नाम की पत्रिकाएँ प्रकाशित होती हैं।

## साहित्यिक अनुवाद :

हिंदी की कई साहित्यिक रचनाओं का विश्व की विभिन्न भाषाओं में अनुवाद हुआ है। जैसे रामचरित मानस,निर्मला, चित्रलेखा, मैला आँचल का चीनी में अनुवाद हुआ है तो गोदान, मैला आँचल, त्यागपत्र का फ्रांसीसी भाषा में अनुवाद हुआ है।

मनोरंजन के साधन :
फिजी, मॉरिशस, केनिया,युगांडा में भारतीय मूल के कई लोग रहते हैं परिणाम वहाँ हिंदी चलचित्र भी काफी देखें जाते है। इंडोनेशिया, थाईलैंड, हांगकांग, मलेशिया में हिंदी फिल्मों का अच्छा बाजार है। इराक, सऊदी अरब, मिस्र, लीबिया, अल्जीरिया आदि इस्लामी देशों का भी हिंदो फिल्मों के प्रति विशेष लगाव रहा है।

इंग्लैंड, सूरीनाम, जपान में महाभारत धारावाहिक काफी लोकप्रिय रहा।
शिक्षा, ज्ञान, बाजार, मनोरंजन के साथ संपर्क भाषा के रुप में भी हिंदी अंतर्राष्ट्रीय स्तर पर स्थान प्राप्त कर चुकी है। विश्व की दृष्टि से भारत यह बड़ा बाजार है, परिणामस्वरुप वैश्वीकरण के इस युग में भारत के बाजार में अपने अस्तित्व निर्माण हेतु विदेशी कंपनियाँ भी हिंदी को अपना रही हैं। राजनीति के कारण भले ही भारतीय दूरदर्शन अंग्रेजी में समाचार दें किंतु विदेशी चैनल हिंदी का ही अधिक प्रयोग कर रहे हैं। संविधान में राजभाषा के रुप में स्वीकृति के पश्चात् भी हिंदी को भारत में ही भारतीयों द्वारा सही सम्मान नहों मिल रहा है। स्वाधीनता के पश्चात् रूस में भेजे हमारे राजदूतों को रूस ने वापस भेज दिया क्योंकि उनके परिचयपत्र स्वभाषा में दिए नहीं गये थे। विदेशी हमें अपनी अस्मिता को जागृत करने हेतु सीख दे रहे हैं किंतु अभी भारत स्वभाषा को लेकर अस्मिताहीन अवस्था में ही है। डा.नामवरसिंह जी इस विषय में बड़ी अच्छी टिप्पणी करतें है-‘‘कभी कभी

लगता है कि भाषा के क्षेत्र में हिंदी एक सम्मानजनक पद पर तो है, पर व्यवहार में दूसरे दर्जे पर है और सारे अधिकार अंग्रेजी के पास है।"

अंतर्राष्ट्रीय स्तर पर हिंदी को और अधिक सार्थक रूप देने के लिए भारतीयों को विशेष कर हमारे देश के राजनेताओं को प्रयास करना होगा।

## संदर्भ ग्रंथ :

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२) WWW. cie.org.uk
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## भाषिक वैश्वीकरण में अनुवाद का महत्त्व

डॉ. पांडुरंग ज्ञानोबा चिलगर: सहाय्यक प्राध्यापक, हिन्दी विभाग, महात्मा फुले महाविद्यालय, अहमदपूर, जि. लातूर (महाराष्ट्र)

भारतीय सांस्कृतिक विचारधारा ‘वसुधैव कुटुम्बकम्’ के पालनार्थ अनुवाद को प्राथमिकता देना समीचिन है क्योंकि अनुवाद के द्वारा ही एक भाषा के ज्ञान को दूसरी भाषा के लोगों तक सहजता पूर्वक पहुँचाया जा सकता है। मनुष्य संसार की समग्र भाषाओं को पढ़, समझ एवं लिख नही सकता। इसीलिए समस्त संसार को सहजता पूर्वक जानने समझने के लिए अनुवाद से अच्छा और कोई माध्यम नहीं है, कि जिसके द्वारा हम अन्य भाषाओं से निकटता स्थापित कर सकते हैं।

मनुष्य एक सामाजिक एवं बुध्दिजीवी प्राणी है। वह निरन्तर अपने परिवेश का परिस्थितिनुकूल और अपनी क्षमता के अनुसार निरीक्षण एवं अध्ययन करता है। इसलिए वह समय मिलते ही अपने परिचित समाज से निकलकर अपरिचित समाज में पहुँच जाता है, जहाँ का वातावरण पूर्णत: भिन्न होता है। भाषा, बोली, व्यक्तिबोली, रहन-सहन, रीति-रिवाज-शैली, जलवायु आदि भिन्न महसूस होने लगते हैं। फलतः मनुष्य आपस में स्वयं को मिलाकर पुन: खोजने का प्रयास करता है। यही प्रयास उसकी जिज्ञासा को शान्ति प्रदान करता है। वह उसमें एकरुप होकर प्रत्येक वस्तु एवं परार्थ को जानना चाहता है। क्योंकि स्वभावत: वह जिजासु है। अतः जिजासु होना प्रकृति-प्रदत्त मूल प्रवृत्ति है, जिसे संसार की कोई भी महाशक्ति रोक नहीं सकती ।

इस कारण किसी भी देश की अबाध्य परिवर्तनीय सांस्कृतिक परंपराओं एवं साहित्यिक गतिविधियों से परिचय प्राप्त करने के लिए हमें अनुवाद के महत्त्व को जानना आवश्यक है। विश्व के विकसित देशों में अपनी भाषा, बोली, रीतो-रिवाज, शैली और परम्परा आदि का स्थान बनाने के लिए इसकी महत्ता सर्वोपरि है। अर्थात अनुवाद के द्वारा हम केवल दूसरी भाषाओं के ज्ञान भंडार का ही परिचय प्राप्त नही करते, बल्कि दूसरे देशों और उनकी संस्कृति को भी समझ सकते हैं।

वस्तुत: अनुवाद संसार की समग्र भाषाओं के भाषिक सौन्दर्य को आत्मसात करने का अनूठा माध्यम है क्योंकि शब्द योजना, वाक्य रचना, व्याकरण एवं लिपि आदि वैज्ञानिक दृष्टि से एक दूसरी भाषा से पृथक है। अनुवाद एक भाषान्तरित भागवत प्रक्रिया है जिसमें लिपि एवं शब्दों का चोला बदला जाता है पर अर्थ मूल का ही रहता है। अनुवाद से मनुष्य अपने क्षेत्र से बाहर निकलकर दूसरे क्षेत्र में विचरण करता है। अतः उसकी बौध्दिक एवं मानसिक स्थिति उसी में एकरुप हो जाती है। यह सुन्दर परिणिति ही अनुवाद की उपयोगिता सिध्द करती है। और अनुवाद से सही अर्थ में भाषिक वैश्विकरण का मार्ग सुगम होता है क्योंकि "भाषा मनुष्य के भावों और क्रिया कलापों से अपना संबंध रखती है किसी विषय के संबंध में जानकारी प्राप्त करने के लिए भी भाषा का सहारा लेना पडता है। अर्थात भाषा के सहयोग के बिना सब कुछ असंभव है।" ? इसलिए आज भाषिक वैश्विकरण में अनुवाद के बिना असंभव है।

विविधता में एकता के अन्वेषण का विजान, शिल्प और कला अनुवाद है। इसमें किसी भी प्रकार वी संदिग्धता नही कि, "अनुवाद दो भाषाओं की तह में जाकर मानवीय अस्तित्व के समान तत्त्वों को प्रकाश में लाता है। मानव की खोई हुई सार्वभौमिकता सामान्य भाषा की मिथकीय कल्पना यहाँ चरितार्थ होती है। अन्य संस्कृति के व्यतिरेक के कारण भाषाओं की सरंचना तथा अभिव्यक्ति भिन्न-भिन्न हो जाती है। एकता के बिंदु प्राय: नजर नहीं

आते। ऐसी स्थिति में बहुभाषा भाषिकों की बीच अनुवाद एक सुदृढ सांस्कृतिक सेतु का कार्य करता है। यह एक ऐसा सेतु है जिसके माध्यम से समय तथा दूरी के अन्तराल को पार किया जा समता है।" २ तात्पर्य यह है कि अनुवाद किसी भी देश-विदेश के साहित्य में एकता का सूत्र स्थापित करता है। भाषा के कारण की एक दूसरे की विच्छिन्न संस्कृतियाँ अनुवाद के भगीरथ प्रयत्न से अभिसिंचित होने के कारण हरी-भरी बनी रहती है और उनके जीवन में प्रवाह और गति, समृध्दि और उर्जास्विता देखने को मिलती है।

अर्थात अनुवाद निःसंदेह वह विपूल विस्तारवाली सतत प्रवाहमार्ग भागीरथी है, जो साहित्य के प्रवाह मार्ग को उत्तरोत्तर प्रशस्त करती चलती है। "इसलिए कह सकते है कि अनुवाद की जीवनधारा देश-विदेश की संस्कृतियों के संपोषण और संवर्धन के लिए उतनी ही अनिवार्य है जितनी मौलिक कला-सर्जनात्मक अपनी मौलिक कलाकृतियों के कारण ही नहों, वरन् भिन्न-भिन्न भाषाओं से अनूदित रचनाओं के लिए भी प्रख्यात रही है।"३

अनुवाद के महत्व को आँकने-समझने के लिए बाइबल के प्राचीन व्यवस्थान में ‘उत्पति ग्रंथ' के ग्यारहवे अध्याय की कथा अविस्मरणीय है। जैसे जब सृष्टि बनी, तब सारे संसार में एक ही भाषा एवं बोली थी। जब लोग पूर्व से आगे की ओर बढ़े, तब उन्हे शिनार प्रदेश में एक मैदान मिला और वे वहाँ बसने लगे। उन्होने आपस में कहा, "आओ, हम अपने लिए एक नगर बसाएँ और एक ऐसी मिनार बनाएँ जिसकी चोटी आसमान तक पहुँच जाए। इस प्रकार हम नाम कमालें और हमें बँटकर पृथ्वी पर इधर-उधर बिखरना न पड़े।"४

उस समय मनुष्य की एक भाषा होने के कारण बढ़ती हुई शक्ति का अंदाज ईश्वर को चला। ईश्वर मानवों की बढ़ती हुई शक्ति से चिन्तित हो गये और ईश्वर ने पृथ्वी पर आकार वहाँ लोगों के मन में एक ऐसा संभ्रम पैदा किया कि वे ईश्वरी शक्ति के सामने मनुष्य की भाषा एक नहीं रह सकी और वे बिखर गये और उनकी भाषा भी परिवेश बदलने के कारण परिवेशानुकूल बन गयी। तब शिनारवासियों ने मिनार बनाना छोड़ दिया और तभी से लोग उस मिनार को बेबेल की मिनार कहने लगे।

इस प्रकार मानव समाज, भिन्न-भिन्न धर्मो, राष्ट्रों, जातियों, भूखण्डो, वर्णो आदि में विभक्त हो गया। इस विभाजन से उत्पन्न हुई खाई को पाटने तथा भिन्न-भिन्न संस्कृतियों के भावात्मक एकीकरण के लिए अनुवाद एक महत्वपूर्ण सेतु बन गया।

अभिशप्त मानव पुत्रों ने मीनार तो नही बनाई, किन्तु परस्पर बिखरकर भी उन्होने मौलिक एकता स्थापित करने के लिए एक आश्चर्यकारी कला-शिल्पी के समान अनुवाद का अविष्कार किया। "यह अनुवाद का अविष्कार था जो मानवपुत्रों के लिए एक मनोवैज्ञानिक अनिवार्यता सिध्द हुआ। विदेशी अथवा अपरिचित देशी भाषाओं में संकलित ज्ञान-निधि के प्रति उनके मन का अतिशय जिज्ञासु होना स्वाभाविक था।" $५$

इसी जिज्ञासा से प्रेरित होकर ही अपनी-अपनी भाषाओं में देशी तथा विदेशी साहित्य को अनूदित करके एक दूसरे की संस्कृतियों के अविरत आदान-प्रदान का वे उपयोग करते है। यदि अनुवाद कला का अन्वेषण न हुआ होता तो वैजानिक अनुसंधानो के बावजूद विश्व सिमटकर आज एक परिवार सा न बन गया होता।

अत: निर्विवाद है कि अनुवादक का लक्ष्य व्यावहारिक और सांस्कृतिक ही अधिक होता है। वह संस्कृति के प्रसार और उसकी समृध्दि के लिए अनुवाद की उपयोगिता एवं महत्व को स्वीकार करता हैं और यह मानकर चलता है कि दृषिकोण में उदारता और व्यापकता लाने के लिए विचारों का आदान-प्रदान अनिवार्य है और वह

आदान-प्रदान अनुवाद के माध्यम से ही होता है। अर्थात्, अनुवाद से वैचारिक सांस्कृतिक एकांगिता का भय लुप्त हो जाता है और मानव जीवन में कूपमंडूकता नही रह जाती। अनुवाद इस बात का विश्वास दिलाता है कि, हम दूसरों की तुलना में कहाँ है ? हमारी क्या सीमाएँ है ? और हम उन्हें किस प्रकार लाँघ सकते है ? अनुवादक ही नही हम, आप भी इस तथ्य से अवगत है कि विश्व के सभी युग दृष्षा मनस्वी विचारक अपनी अपनी भाषाओं में ही निजी विचारों और भावों को अभिव्यक्त करते है। यह भी सत्य है कि उसे हमे और आपको भी मानना होगा। जिस व्यक्ति को संस्कृत का ज्ञान नहीं उसके लिए वाल्मिकी, कालीदास, पतंजलि आदि का समस्त रसोयुक्त काव्य सौष्ठव सर्वथा निरर्थक है और जो अंग्रजी नही जानते, उनके लिए शेक्सपिअर के नाटक और थॉमस हर्डी के उपन्यास तथा वर्डस्वथ का काव्य आदि अंग्रेजी साहित्य व्यर्थ है। "अबोधता की यह दीवार भाषा की विविधता के कारण खड़ी होती है और भाषा की इन विविधताओं में एकता अनुवाद ही लाता है। विचारों या भावों में कोई अन्तर नही होता, अत: जो अंतर आ जाता है, वह भी अनुवाद के द्वारा ही इस व्यवधान को दूर करने का अनुवादक का काम है।" इसके साथ साथ ही अनुवादक भाषिक वैश्विकरण का सार्थक समर्थन करता है।

अनुवाद का महत्त्व इस प्रकार है कि, अनुवाद साहित्यिक तथा सांस्कृतिक वैभव का समर्थ मापक है। यह राष्ट्रीय संस्कृति एवं राष्ट्रीय वैभव को विदेशी भाषाओं से आयात किए गए विचारवैभव से अधिकाधिक प्रस्फुटित करता है अर्थात संसार की प्रगति अनुवाद पर ही निर्भर है। अत: भाषिक वैश्विकरण में अनुवाद का अत्यन्त महत्व्व सिध्द होता है।

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## मानवाधिकार एवं महिलाओं की स्थिति

डॉ. माया एस. वाटाणे : सहा.प्राध्यापक, राजनितिशास्त्र विभाग, श्रीमती केशरबाई लाहोटी महाविद्यालय, अमरावती
प्रस्तावना :
प्राचीन काल से ही स्त्रियॉ अद्भुत शक्ति तथा दिव्य गुणों की प्रतीक मानी जाती रही हैं। समस्त मानव सृष्टि की, अधिष्ठाती स्त्री ही हैं। वैदिक काल में स्त्रियों को अत्यन्त सम्माननीय स्थान दिया गया। मैत्रयी, गार्गी, लोपमुद्रा सदृश्य विदुषी स्त्रियाँ हुईं, जिन्होंने अत्यन्त उच्च कोटि का आदर्श समाज के समक्ष रखा। पाश्चात्य देशों में भी स्त्रियों की अत्यंत दयनीय परिस्थिती सामने आया और तभी विश्व के समक्ष स्त्रियों से संबंधित मानवीय अधिकारों के संरक्षण का गहन प्रश्न उपस्थित हुआ। 10 डिसेंबर 1948 को संयुक्त राष्ट्र संघद्वारा मानव अधिकारकी घोषणा की गई। भारतीय संविधान के शिल्पकारों ने मानव अधिकारकी सुरक्षा के संदर्भ में संविधान के भाग 3 और 4 में विशेष उल्लेख किया हैं। मानव अधिकार की संकल्पना प्राकृतिक है। स्वयं आंतरराष्ट्रीय संघटना ने इसे स्वीकृती देकर स्थान प्रदान किया है। हमारे संविधान में भी उसे विशेष महत्व दिया हैं। किंतू आज चरमसीमा पर पहूँचे इस वैज्ञानिक युग में हमे मानव अधिकार की संकल्पना के बारे में सोचने के लिए विवश होना पड रहा है। सारा संसार आज विभिन्न समस्याओं से जूझ रहा है। उपभोक्तावाद की अंधी दौड में हम बेतहाशा दौडे चले जा रहे हैं। परिणामत: हम नासमझ उपलब्धियों के लिए अपने सुखो की खोज में लगे भौतिकवाद के चक्रव्युह में बुरी तरह फंसे हुये हैं। किंतु सत्य तो यह हैं की भौतिकवाद की स्पर्धा में समाज का बहुत बड़ा हिस्सा कमजोर लाचार हो रहा हैं। हमारे समाज का एक घटक जो मानवी हक्क की उपलब्धिओं से कोसों दूर जा रहा हैं। वास्तव में आज लोकतंत्र प्रणाली में उस घटक के मानव अधिकार क हनन हो रहा हैं। वह घटक हैं ‘महिला’।

मानव अधिकारों के समक्ष महिलाओंकी स्थिती का अध्ययन यह इस शोधालेख का मूल उद्देश हैं। आदिकाल से महिलाओं का स्थान समाज के उत्थान:-पतन का शिकार रहा हैं। महिलाओं ने सामाजिक प्रतिबंधो के बावजूद कभी जीजामाता, लक्ष्मीबाई बनकर अपना योगदान दिया तो कभी गांधीजी के आंदोलन में सामूहिक रूपसे सहभागी बनकर देश की आजादी के लिए कार्य किया। मॉ शारदा देवी, पंडित रमाबाई, अवंतिकाबाई, गोदावरीबाई, यशोदाबाई, ऐनी बेसेंट आदि ने सामाजिक राजनैतिक चेतना में अग्रणीय भूमिका निभाई। ${ }^{1}$ भीकाजी कामा, कालीबाई, कनकलता बरूआ, अंग्रेजो की गोली खाकर भी झण्डा उॅचा रखने वाली शौर्य गाथा के अभाव में स्वातंत्रता आंदोलन का वृत्तांत अधुरा है। ${ }^{2}$ जब देश स्वतंत्र हुआ तो संविधान निर्माण कार्य के लिए चुनी गई संविधान सभा में 17 महिला प्रतिनिधी चुनकर आई। बेगम इजाज रसूल, विजयलक्ष्मी पंडित, सुचेता कृपलानी, राजकुमारी अमृतकौर, बेगम शेहनवाज, सरोजीनी नायडू इनमें उल्लेख किया हैं। ${ }^{3}$

## स्वातंत्रोत्तर काल में महिलाओं की स्थिति:

20 वी सदी सम्पूर्ण विश्व में लोकतंत्र के वैश्वीकरण के लिए जानी जाती हैं। लोकतंत्र का विस्तार हुआ लेकीन सम्पूर्ण वैश्विक परिदृश्य महिलाओं के साथ न्याय नही करता। भारत का महिला प्रतिनिधित्व विश्व में 65 वे स्थान पर हैं। ${ }^{4}$ लोकतांत्रिक संस्थाओं के अतिरिक्त यदि शासकीय सेवाओं में देखें तो महिलाओंकी सहभागीता

1957 मे 2.51 प्रतीशत तथा 1991 में 7.58 प्रतिशत रही हैं। न्यायीक क्षेत्र में यदि देखे तो उच्च न्यायलय में 419 न्यायाधीशों में मात्र 14 महिला न्यायाधीष थी, केंद्र सरकार के सचिव स्तरीय अधिकारीयों में मात्र 2 प्रतिशत महिला अधिकारी थी।

## लैंगिक अनुपात :

2001 की जनगणना मे अनुसार लैंगिक अनुपात $1000: 133$ हैं। युनिसेफ के अनुसार वैश्विक अनुपात 1000:986 हैं। बिगडता लैंगिक अनुपात समाजशास्त्रीयों की चिंता को और ज्यादा बढ़ा देता हैं। महिला के गिरते लैंगिक अनुपात के लिए उत्तरदायी कारणों में मुख्यतः बालिका भुण हत्या, माता मृत्यू दर का अधिक होना सामाजिक, धार्मिक, सांस्कृतिक मान्यताऐं एवं परंपराऐ निम्न शैक्षणिक स्तर हैं। यु.एन.डी.पी. रिपोर्ट 1994 के अनुसार भारत में 40,000 बालिका भूरण हत्या की गई। ${ }^{6}$
शैक्षणिक स्तर :
महिलाओका शैक्षणिक स्तर राष्ट्रीयता स्तर से राज्य स्तर तक पुरुषों की अपेक्षा बहुत कम हैं। महिला साक्षरता दर 54.16 प्रतिशत हैं। बिहार में केवल 48 प्रतिशत हैं, मुस्लिम महिलाओं की साक्षरता मात्र 11 प्रतिशत हैं।
सामाजिक स्थिति :
सामाजिक जीवन में यदि देखा जाए तो महिलाओं की स्थिती पितृसत्तात्मक व्यवस्था के कारण गौण मानी जाती हैं। समाज की प्रत्येक बुराई का शिकार अबला समझकर महिलाओं को बनाया जाता हैं। दहेज प्रथा के निवारण हेतु कानुनी प्रावधान के बावजूद धन का शादियों में क्षमता से ज्यादा प्रयोग पुरुषों के वर्चस्व की सामाजिक उद्घोषणा का गैर कानूनी तरीका है जो कि सर्वमान्य सामाजिक कटु सत्य हैं। मानव संसाधन मंत्रालय के आकडों के अनुसार प्रत्येक 102 मिनट में एक महिला दहेज के कारण हत्या कर दी जाती हैं। इस वर्ष 7905 हत्या के प्रकरण दर्ज किए गए। अपराधिकरण महिलाओं के संदर्भ में बेहद चिंता का विषय हैं। प्रत्येव 54 वे मिनिट में बलात्कार की घटना, प्रत्येक 51 मिनिट में एक छेडछाड की घटना, प्रत्येक 26 वे मिनट में एक महिला के दुर्व्यहार, मार-पीट, पुरुषौं के घिनौने पौरुष की अभिव्यक्ति हैं। ${ }^{7}$ आतंकवाद, नक्सलवाद, देशाग्रस्त क्षेत्रों में प्रथम वेदना का शिकार महिला होती हैं। कही फतवे तो कही बिना लैंगिक भेदभाव के देता हैं। लेकीन भारत की महिला के विवाह का निर्णयकर्ता पुरुष ही हैं। आज वह पढ़ी-लिखी हैं। स्वतंत्र हैं किन्तु कही दहेज की तेज लपटों में तंदूर मे जलाई जाती हैं। तो कही स्कूल कॉलेज के चौराहे पर घसीटकर बलात्कार की शिकार बन जाती हैं। और कही माता-पिता की इज्जत का ही हवाला देकर मानसिक रोगो की परेशानी से जूझने को मजबूर की जाती हैं। यदि सच पूछा जाए तो वह आज भी चुपचाप अपने उपर होते अत्याचारों को सहन करती हैं। वह घर के संकुचित वातावरण से निकलकर बाहर तो आ गई हैं किन्तु रेलों में, बसों में, दफ्तरो में और तो और अपने गांव में भी असुरक्षीत हैं। आज पिता, पति और पुत्र का साया भी उसके साथ नही क्योंकी उसका दायरा बहुत बड़ा हैं। कहने को तात्पर्य यह है की, महिलाएँ आज भी असुरक्षित माहौल में जी रही हैं।

## मनवाधिकार का एक कदम :

भारतीय संविधान 26 जनवरी 1950 को लागू हुआ जो स्त्री पुरुष की समानता के आधारभूत सिद्धांत पर आधारित हैं। ${ }^{8}$ भारतीय संविधान के अनुच्छेद 14 में सभी को कानून के समक्ष समानता का मौलिक अधिकार

प्रदान है। राज्य किसी नागरिक के विरूद्ध धर्म, जाति, लिंग, जन्मस्थान आदि के आधार पर कोई भेदभाव नही करेगा। ${ }^{9}$ समाज की मुख्य धारा से जोडने के लिए अनेक कल्याणकारी योजनाएँ बनायी गयी। शैक्षणिक, सामाजिक, आर्थिक और राजनितिक क्षेत्र से जुडे पहलुओं को मजबूत किया गया ताकि महिलाएँ अपने अधिकारों तथा दायित्वों के प्रति जागृत होकर स्वावलम्बी और आत्मनिर्भर बन सके। ${ }^{10}$ महिलाओं को पुरुषों के बराबर अधिकार मिलने से नारी न केवल अबला से सबला तक का सफर तय कर रही हैं। बल्कि उसने घर की चार दिवारी से बाहर कदम रखना आरंभ कर दिया हैं।

मानवाधिकार प्रत्येक मानव की जरूरत हैं। इसके अभाव में व्यक्ति अपनी मूलभूत आवश्यकताओं की पूर्ति नही कर सकता। सैद्धांतिक पक्ष से जीवन स्वतंत्रता और मानवीय गौरव और सन्मान के अधिकार को मानवधिकार माना गया हैं। ${ }^{11}$ शेष सभी अधिकार नागरिक तथा सामाजिक, आर्थिक और राजनैतिक अधिकार इन मानवाधिकारों के साथ अटूट रुप से संबंधित हैं। लिंग भेद को देखते हुए भारत में 24 अप्रैल 1993 में 72 वा संवैधानिक संशोधन लागू किया गया जो पंचायती राज व्यवस्था में परिवर्तन के संदर्भ में महत्त्वपूर्ण स्थान रखता हैं। इस संशोधन व्दारा एक तिहाई पद महिलाओं के लिए आरक्षित कर एक ऐतिहासिक निर्णय लिया गया हैं। ${ }^{12}$

मानवाधिकार के कुछ विशेष प्रावधानों के बाद भी महिलाओं के सामाजिक, राजनीतिक दृष्टी से अपमानित किया जा रहा है। आज ग्रामीण महिलाओं को सरपंच बनाया जाता हैं। लेकिन अनेक बार उन्हें तो पंचायत के कार्यो में भाग नही लेने दिया जाता हैं। बल्कि उनके स्थान पर उनके पति कार्य करते हैं। इतना ही नहीं उनका अंगूठा या हस्ताक्षर भी अपने आपही कर लेते हैं। महिलाओं के साथ जीवन के हर पहल पर किसी न किसी प्रकार का शोषण हो रहा हैं। ग्रामीण महिलाओं के विरूद्ध बढ़ते अपराध पर नियंत्रण पाने के लिए पुलिस की भूमिका भी दुझूस्त नही है। आमतौर पर यदि महिलाए देर-सबेर पुलिस थाने में शिकायत लेकर आती हैं तो उन्हे वहाँ उत्पीडन का शिकार होना पड़ता हैं।
सुझॉव :

1) ग्रामीण महिलाओंके मानवाधिकारों की रक्षा के लिए स्त्रियों को आर्थिक, सामाजिक और शैक्षणिक आदि स्थितियों में सुधार करना होगा।
2) पिछड़ी दलित और अनुसूचित जातियों से संबंधित परिवारों की महिलाओं को समान कार्य के लिए समान मजदूरी दिलानी होगी।
3) कन्या भ्रुण हत्या, छेड़-छाड़, महिलाओं के अधिकारों का प्रयोग, मानसिक यातनाए देना, दहेज की लालसा, वधू का वध अथवा आत्महत्या के लिए मजबूर करना लड़के-लड़की में भेद करना आदि समस्याओं को रोकने के लिए आंदोलन करना होगा।
4) स्वयं महिलाओं को अपने मानवाधिकार के प्रति जागरुक होना होगा और अपने शोषण के विरद्ध आवाज बुलंद करनी होगी।
5) महिलाओ को अपने आपको स्वावलंबी और आत्मनिर्भर बनाना होगा। महिलाओं की अशिक्षा उनके विकास कार्य में सबसे बड़ी बाधा है, इसीलिए आधुनिक शिक्षा लेनी होगी।
6) महिलाओं का आर्थिक रूप से सक्षम बनाने, समाज सम्मानित में स्थान दिलाने, सामाजिक कुरीतियों के निवारण और महिला उत्पीड़न तथा शोषण को समाप्त करने की दिशा में सरकार को ठोस कदम उठाना चाहिए।
7) ग्राम सभाओं मे अधिक से अधिक महिलाओं की भागीदारी सुनिश्चित की जानी चाहिए। जिससे महिलाओं को समस्त विकास योजनाओं की जानकारी निरंतर प्राप्त हो।
8) मानवाधिकार के हनन करने वाले घटकों पर नियंत्रण रखना होगा।
9) महिलाओं के अधिकारों के बारे में समाज को जागृत करके उनहे सही राह दिखानी होगी।

## निष्कर्ष :

महिलाओं की स्थिति से जुड़े विविध आयामों का अध्ययन करने के पश्चात यह निष्कर्ष निकलता कि, महिलाओं की स्थिति आज भी चिंतनीय हैं। भारतीय संविधान के भाग तीन में मौलिक अधिकारों और भाग चार में राजनीतिक के निर्देशक सिद्धांतो के व्दारा स्र्री पुरुष की समानता की बात की है लेकिन वास्तविक धरातल पर देखें तो महिलाओं की पुरुषों के समकक्ष स्थिति कभी भी पूर्ण रुप से नही दिखाई देती है। अत: ग्रामीण स्त्रियों के मानवाधिकारों की रक्षा के लिए स्त्रियों को आर्थिक, सामाजिक शैक्षणिक आदि सुधार करना है। इसके लिए पुरुष मानसिकता को बदलना होगा। महिलाओंको अधिकार सिर्फ कागज पर ही ना हो बल्कि इसमें पूरे समाज की भागीदारी होनी चाहिए।
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## रोतकन्यांच्या आत्महत्या: कारणे व उपाय !

प्रा. डॉ. सुरेश आर. वराडे: वाणिज्य विभाग प्रमुख, कला, वाणिज्य व विज्ञान महाविद्यालय, बोदवड, जि. जळगांव (महाराष्ट्र)

भारत हा एक कृषिप्रधान देश असून भारतातील ६५\% लोकांचा रोती हा प्रमुख व्यवसाय आहे. भारतातील रोती व्यवसाय प्रामुख्याने पावसाच्या लहरीपणावर अवलंबून आहे. कधी अतीवृष्टी, तरी कधी अपुन्या पावसामुळे गारपिटीमुळे तसेच कधी रोगराई व किडीमुळे रोती उत्पादनावर प्रतिकुल परिणाम होतो. त्यामुळे रोतकज्यांना वारंवार रोती उत्पादनात घट येत असल्यामुळे आर्थिक नुकसानीस सामोरे जावे लागे. रोती हा ‘व्यवसाय’ असल्यामुळे याला देखील भांडवलाची गरज असते रोती क्षेत्रासाठी आवइयक भांडवल उभारण्यासाठी रोतकन्यांना कर्ज रुपाने भांडवल उभे करावे लागते.

निसर्गाच्या लहरीपणामुळ खोतकन्यांना रोती क्षेत्रातून अपेक्षित उत्पन्न न मिळाल्यास तो कर्जरुपी भांडवलाची परतफेड करु राकत नाही आणि थकबाकीदार होतो. म्हणुनच ए. डी. गोरवाले यांनी भारताच्या अनेक खेड्यांचा दौरा करुन निदर्शनास आणून दिले की, भारतीय रोतकरी "ऋणातच जन्मतो, ऋणातच जगतो व ऋणातच मरतो." परंतू आज आपल्याला म्हणावे लागत आहे की ‘रोतकरी ऋणात मरत नाही, तर त्याला मुद्याम मरावे लागत आहे. म्हणजेच आत्महत्या करावी लागत आहे.

आज रोतीसमोरील आव्हानांचे स्वरुप बदलले आहे. दरडोई रेतीचा आकार कमी झाला आहे. छोटया रोतकज्यांना पुरेसे उत्पादन व उत्पन्न हाती येत नाही. त्यामुळे रोतकन्यांचे जीवनमान उंचावण्या ऐवजी ते आत्महत्तेच्या मार्गाकडे झुकत आहेत. रोतकरीच आत्महत्या का करतो ? हा एक गंभीर तितकाच चिंतनीय विषय आहे. गेल्या काही काळातील घटनांचा आढावा घेतला तर असे लक्षात येते की संपुर्ण देशातच अनेक रोतकप्यांनी आत्महत्तेचा मार्ग स्वीकारलेला आहे. या आत्महत्तेमागील एकमेव कारण म्हणजे "सतत नापिकी" व त्यामुके रोतकज्यांच्या डोक्यावर वाढत जाणारा कर्जाचा भार. शेतकच्यांच्या कर्जबाजारीपणाचे प्रमुख कारण म्हणजे त्यांची "गरीबी". रोतीला लागणारी विविध उपकरणे खरेदी करण्यासाठी, विहीरी खोदण्यासाठी, तसेच रोतीत दुरुस्ती करण्यासाठी त्यांना कर्ज काढावे लागते परंतु नैसर्गिक आपत्तीमुळे पिके नष्ट झाल्यास तो कर्जाची परतफेड करण्यास असमर्थ तर ठरतोच तसेच रोतीत दुरुस्ती करण्यासाठी त्यांना पुन्हा कर्ज काढावे लागते. शिवाय त्यांच्या समोर आपल्या मुलांचे पोट भरण्याची असमर्थता आणि त्यांना मृत्युच्या तोंडात जातांना बघण्याचा क्लेश निर्माण होतो आणि या अपमान जनक परिस्थितीत जगणे त्याला असह्य झाल्यास तो स्वतःचे जीवन संपवून घेण्याच्या मार्गावर लागतो. याचाच परिणाम म्हणजे गेल्या काही वर्षापासून सतत वाढत जाणारे आत्महतेचे प्रमाण होय. विविध राज्यातील रोतकन्यांच्या आत्महत्या.

महाराष्ट्र, कर्नाटक, तामिळनाडू , गुजरात, राजस्थान, उडीसा आणि ‘इंडिया टुडे’ च्या सर्वेक्षणात प्रथम क्रमांकावर असलेल्या पंजाबमध्ये आतापर्यत $१ 0,000$ पेक्षा जास्त रोतकन्यांनी आत्महत्या केल्याचे दिसून येते. आधुनिक रोतीमध्ये अग्रणी पंजाब व हरियाणा मध्ये गेल्या काही वर्षात जवळ जवळ २ हजार रोतकन्यांनी आपले प्राण गमावल्याचे दिसुन येते. सन १९९७-९८ मध्ये आंध्रपदेशातील वारंगल जिल्हयात ५०० पेक्षा जास्त रोतकर्यांनी स्वेच्छा मरण स्विकारले. तसेच संपूर्ण आंध्रपद्रदेशात२००४ मध्ये मे ते सप्टेंबर या पाच महिन्यांच्या कालावधीत ४०० पेक्षा जास्त रोतकन्यांनी आत्महत्या केल्याचे दिसून येते.

महाराष्ट्रातील विदर्भाचा विचार केल्यास यवतमाळ जिल्हयात सर्वाधिक आत्महत्या झाल्या आहेत. विदर्भात आगस्ट ते सप्टेंबर २००६ या काळात कर्जानी व्याप्त १४४८ रोतकन्यांनी आत्महत्या केल्याचे दिसुन येते. तसेच आत्महत्या करणान्या अधिकांश रेतकच्यांचे वय ૪५वर्षापेक्षा जास्त नक्हते. मे २००७, जुलै २००८ पर्यत जवळ जवळ १६११ रोतकन्यांनी स्वतःला मृत्युच्या मुखात सोपविले. गुजरात मध्येही रोतकर्यांच्या आत्महत्यांना सुरूवात झाली आहे.

वरील प्रमाणे आत्महत्या करणान्या शेतकन्यांच्या सतत वाढत्या प्रमाणाची कारणे झोधुन काढणे व ती दुर करण्याचारी प्रयत्न करणे आज अत्याधिक गरजेचे आहे.
झोतकन्यांच्या आत्महत्येची कारणे :
१) शोतकन्यांवर सतत वाढत जाणारा कर्जाचा भार :

स्वातंत्र्य प्राप्तीनंतर ६०वर्षाच्या कालावधीनंतरही भारतीय शेतकज्यांची आर्थिक स्थिती फारशी सुधारलेली नाही. रोतीमध्ये उत्पादन कार्यासाठी किंवा शेतीची उपकरणे खरेदी करण्यासाठी तो कर्ज घेऊन भांडवलाची उभारणी करतो परंतु नैसर्गिक आपत्तीमुळे उत्पादन न झाल्यास परतफेडीला तो असमर्थ ठरतो व त्याच्यावरील कर्जाचा डोंगर सतत वाढत जातो. वाढता कर्जाचा भार व पायाभूत सोयीच्या अभावामुळे तो आपल्या कुटूंबीयांचे पोट भरण्यास असमर्थ होऊन आत्महत्तेचा मार्ग स्विकारतो.
२)नैसर्गिक आपत्तीमुळे सतत नापिकी :

निसर्गयुध्दा बहुतेक गरीब रोतकन्यांना साध देत नाही. दुष्काळ, पुर, अतिवृष्टी सारख्या विविध नैसर्गिक आपत्तीमुळे रेतकन्यांचे अतोनात नुकसान होते आणि तो आपल्या आवइयक गरजा देखिल पूर्ण न करू राकल्याने घोर निरारेमुळे आत्महत्तेस प्रवृत्त होतो.
३) वाढत्या लोकसंख्येमुळे घटती जमीन व कमी उत्पादकता :

भारताची सतत वाठत जाणारी लोकसंख्या घटत्या जमिनीस कारणीभुत आहे. शिवाय इहहरीकरण, भूमीरक्षण आणि कृषिभूमीच्या गैरकृषी उपयोगामुळे भूमीची उत्पादकता सतत घटत चालली आहे. त्यामुळे रोतकज्यांची आर्थिक स्थिती खालावून जीवन जगणे त्याला कठीण झाले आहे. या संबंधी एम.एस.स्वामीनारायन रिसर्च फाउंडेरान व्दारा प्रकाशित पुढील आकडेवारी गंभीर इइारा देत आहे.

उपलब्ध दरडोई भूमी

| वर्ष | दरडोई कृषी योग्य भूमी |
| :--- | :--- |
| १९९० | $0 . १ ९ ५$ हेक्टर |
| $१ ९ ९ ६$ | $0 . १ ७ ६$ हेक्टर |
| $२ ० 0 ०$ | $0 . १ ६ ३$ हेक्टर |
| $२ ० २ ५$ | $0.0 ८ ७$ हेक्टर |

૪)पायाभुत सोयोंच्या अभावामुळे उत्पादनात घट:

कृषी सिंचन क्षमतेचा अभाव, वीज, रासायनिक खते, कमी व्याजदरात कर्जपुरवठा करणान्या संस्थेचा अभाव, संशोधन व कृषी विस्तार सेवेचा अभाव इत्यादी सोयींच्या अभावामुळे कृषी उत्पादनास घट होत आहे व मुळात गरीब असणारा शेतकरी आणखीन गरीबीकडे वाटचाल करीत आहे.
५)उत्पादीत मालाला योग्य भावाच्या अभावी उत्पन्नात घट :

आज रोतकच्यांने उत्पादीत केलेल्या मालाला त्यांच्या उत्पादन व्यवसायानुसार योग्य भाव मिळत नसल्याने त्याचे उत्पन्न घटक जाते. शोतकरी उत्पादनाचा मालक आहे. पण किमत निर्धारक नाही. उत्पादन चांगले झाल्यास विपणनात त्याच्या मालाला योग्य किंमत मिळत नाही हा भारतीय अर्थव्यवस्थेचा दोष रोतकर्यांच्या आर्थिक स्थितीला नुकसानकारक आहे.
६) रोतकन्यांच्या आत्महत्येस मानसिक तणाव व निराशा कारणीभूत :

शोतकच्यांच्या आत्महत्येस मानसिक तणाव कारणीभूत असल्याचा निष्कर्ष मानसोपचार तंज्ञानी काढला आहे. शेतक्यां मधील निराइा, मानासिक तणाव निर्माण करून त्यांना आत्महत्तेस प्रेरीत करतात.
७)नापिकी परिस्थिती :

भारतीय रोती ही पूर्णत: निसर्गावरच अवलंबून आहे. रोतकन्याला निसर्गाच्या लहरीपणामुळे कधी-कधी आत्महत्या करावी लागते. कारण एखाद्या वेळेला अतिवृष्टी होते. त्यात संपूर्ण पिके व जमिन वाहून जाते. जमिनीचा कस वाहून जातो. तर कधी अजिबात पाऊस पडत नाही. सगळीकडे कोरडा दुष्काळ पडतो. उभी पिके करपून जातात. दोन्ही वेळेस रोतकन्यांच्या हातात काहीच शिल्लक राहत नाही. त्याला कुटूंबाचा चरितार्थ देखिल चालविणे कठीन होऊन बसते.
८)विजेची टंचाई :

ग्रामीण भागात रोती केली जाते आणि ग्रामीण भागात विजेची टंचाई असते. त्यामुळे पाण्याची उपलक्धता असली तरी विजेअभावी पिकांना पाणी देता येत नाही. शहरी भागात रोती कमी प्रमाणात केली जाते. शाहरांत औद्योगीक धंदे मोठया प्रमाणावर चालतात. त्यासाठी शाहरात विजेचा अधिक वापर केला जातो. याबाबत सरकार लक्ष घालूनही फारसा उपयोग होत नाही. वेळेवर पिकाला पाणी न मिळाल्यामुळे उत्पादनात देखिल फरक पडतो. उत्पादनासाठी केलेला खर्च देखिल वाया जातो.
९)कर्जबाजारीपणा :

भारतातील शेती व्यवसाय निसर्गावर अवलंबून आहे. त्यामुळे दर हेक्टरी रोती उत्पादन कमीच असते. त्यामुळे रेतकर्याला पिकांसाठी सतत कर्ज घ्यावे लागते. मात्र पिकांचे उत्पादन पिकांचे भाव याची खात्री नसल्यामुळे घेतलेले कर्ज वेळेवर परत करणे इाक्य होत नाही. कर्जाचा बोजा वाढतच जातो. हळ्बूहळू रोतकरी कर्जाच्या दृष्ट चक्रात अडकतच जातो आणि झेतकरी झेतीसाठी सावकरांकडून देखिल कर्ज घेतो. सावकारी कर्जाच्या फासात रोतकरी अडकला तरी त्याची सुटका होणे अराक्य असते. सावकार जरी रोतकज्याला तारणाशिवाय कर्ज देत असला तरी कर्ज देण्याच्या पध्दतीतील जाचक अटी, लबाड्या, फसवणूक इ. गैरप्रकारांमुळे शेतकरी सावकारांच्या जाळयात अडकत जातो. रेतकच्यांवरील कर्जाचा बोझा वाढल्याने सावकार रोतकज्यांचे घर व रोतजमीन हडप करतो. त्यामुळे रोतकन्याला धक्का बसतो व यामुळे तो आत्महत्या करतो. भारतीय शेतकरी कर्जात जन्मतो. कर्जात जगतो आणि कर्जातच मरतो.
१०)उत्पादन खर्चात वाढ :

नवीन आर्थिक धोरणाचा स्विकार केल्यापासून रेतमालाच्या उत्पादन खर्चात वाढ झाली आहे. सुधारित बी-बियाणे, इंधन व मजुरी इत्यादींचे तसेच रासायनिक खते किटकनाइाके यांचे सतत दर वाढत आहे. त्यामुळे

रोती क्षेत्रातील उत्पादन खर्च सारखा वाढत आहे. बन्याच वेळेला रोतकन्याला शेतीतून जे उत्पन्न मिळते. त्यातून रोतकन्यांचा उत्पादन खर्च देखिल निघत नाही. रेतकरी सतत कष्ट करतो. पुढील पिकात खर्च भरून निघेल या आरोवर राहतो. परंतु परिस्थिती कायम तरीच असल्याने होतकरी निराइ होतो व आत्महत्या करतो.
११) पाण्याची कमतरता :

भारतातील ऐोती ही पावसावर अवलंबून असल्याने भारतात जलसिंचनाच्या सुविधा अपुन्या आहेत. भारतात ३९\% रोतीला पाणीपुरवठ्याच्या सुविधा उपलब्ध असुन अद्याप ६९\% रोती कोरडवाहू स्वरूपाची आहे. आणि कोरडवाहू रोती पूर्णपणे पावसाच्या पाण्यावर अवलंबून आहे. तसेच कोरडवाहू रोतीची उत्पादकता कमी असल्याने येणान्या उत्पन्नातून रोतकरी आपल्या कुटूंबाचा उदरनिर्वाह करू शकत नाही.
१२)लघु उद्योगाचा अभाव :

भारतातील रोतीत कोरडवाहु रोतीचे प्रमाण अधिक आहे. त्यामुळे बारा महिने रोतीत रोजगार उपलब्ध होत नाही. अरा वेळी रोतकन्यांकडे जोड व्यवसाय असणे आवइयक असते. कुक्कुटपालन, मेंढिपालन, रोळीपालन, दुग्धव्यवसाय व रोतीवर आधारीत इतर व्यवसाय यामुळे रोतकज्याला उत्पन्नाचा दुय्यम स्त्रोत उपलब्ध होतो. अरा वेळी रोतीपुरक व्यवसायात न मिळणान्या उत्पन्नावर चरितार्थ चालविणे तसेच रोतीचा खर्च भागवणे राक्य असते. रोतीपुरक व्यवसाय ग्रामीण भागात सुरु करण्याबाबतच्या सरकारच्या उदासिनतेमुळे रोतकन्यांना हंगामानंतर काळात रिकामे बसावे लागते. तसेच रोतकय्यांमध्येही व्यवसाय करण्याच्या धाडसाचा अभाव, विपणाचे अज्ञान व पुरक व्यवसायासाठी आवइयक दर सोईची कमतरता इ. बाबींमुले रोतीपुरक व्यवसायांचा अभाव आढळतो.
१३) रोतकन्यांमधील वाढता कर्जबाजारीपणा हे त्यांच्या आत्महत्येचे एक प्रमुख कारण आहे.
१४) उच्च उत्पादन खर्च हा घटक ही रोतकच्यांच्या आत्महत्येस जबाबदार आहे.
१५) अपुन्या सिंचन सुविधा हेही कारण रोतकन्यांच्या आत्महत्येस जबाबदार आहे.
१६) शेतकरी वर्गावर रुढी, परंपरा व सामाजिक प्रथांचा प्रभाव आहे.
१७) मुक्त आयातीच्या धोरणाचा फटका ही रोतक न्यांना बसत आहे.
१८) ऐोतीमालाच्या किममतीतील चढ-उतार आणि रोतीमालाला मिळणारा अल्पभाव हे कारणसुध्दा ऐोतकज्यांच्या आत्महत्येस जबाबदार आहे.
१९) भारतात सर्वकष राष्ट्रीय कृषी धोरणाचा अभाव आहे.
२०) चलन वाठोमुळे रेतकच्यांची ढासळती आर्थिक स्थिती
२१) कौटुंबिक संघर्ष
२२) मुला-मुलींच्या लग्नाचा वाढता खर्च
२३) आरोग्य विषयक समस्या
२४) वाढलेली व्यसनाधिनता

इ.कारणे रेतकय्यांच्या आत्महत्येला जबाबदार आहेत. वरील कारणावरुन दिसून येते की कर्ज परत करण्याची ऐपत नसतांना उभी केलेली कर्ज, ती परत करण्यासाठी पुन्हा उभारलेला डोंगर शिवाय या कर्जाचा उत्पादन कार्यासाठी नीट उपयोग न केल्यास सतत वाढत जाणारा कर्जबाजारीपणा आर्थीक अरिष्ट ओढवून

घेण्यास कारणीभुत आहे.

| रोतकरी आत्महत्या |  |
| :--- | :---: |
| २००१ ते २००८ | ४५७८ |
| १ जाने. २००९ ते | ४९९६ |
| ३ १-१२-२००९ पर्यंत |  |

शेतकर्यांच्या आत्महत्येचे सत्र अद्यापही सुरूच आहे.यास़ाठी वेळीच पावले उचलण्याची गरज व्यक्त केली जात आहे.

शेतकच्यांना आत्महत्यापासून परावृत्त करण्यास शासनाने पुढीलप्रमाणे प्रयत्न करणे अत्यंत आवइयक आहे.

## ईोतकन्यांच्या आत्महत्या रोखण्यासाठी उपाय:

$\circ$ १) जलसिंचन सुविधांमध्ये वाढ आणि पाण्याचे व्यवस्थापन :
भारतात जलसिंचन सुविधाचा अभाव असल्यामुके रेतीतील उत्पादकता व उत्पन्न कमी राहते. पिकांसाठी घेतलेल्या कर्जाची वेळेवर परतफेड होत नाही. कर्जाच्या वाठत्या बोजामुळे रोतकरी त्रस्त होऊन आत्महत्या करतो. त्याकरिता झासनाने त्वरीत जलसिंचन प्रकल्प हाती घेणे आवइयक आहे. पावसाळात पाण्याचा योग्य वापर, जमिनीतील पाण्याचे पुनर्भरण सक्तीने करणे आवइयक आहे. तुषारसिंचन व ठिंबकसिंचन सारख्या सुधारित सिंचन पध्दतीच्या वापराला प्रोत्साहन दिले पाहिजे. जल सिंचनाच्या सुविधामुळे पिकांच्या उत्पादनात वाढ होईल. त्यामुळे रोतक य्यांवर कर्जाचा बोझा वाढणार नाही. आणि आत्महत्येचे प्रमाण कमी होऊ राकेल. २)कर्जपुरवठ्याचे स्वरूप :

कृषी आदानाच्या वाठत्या किमती, नफ्याचे घटते प्रमाण व रेतकच्यांच्या कर्जबाजारीपणा इत्यादींचा विचार करून रोतीला सहा प्रतिशत व्याजदराने पुरेसा कर्जपुरवठा होणे आवइयक आहे. तसेच सरकारने अनुदान देण्यापेक्षा परतफेडीची क्षमता निर्माण करण्याचे नियोजन करावे व सरकारने बि-बियाण्यांच्या तसेच खते इ. सुविधा पुरविणे आवइयक आहे.
३)कृषी कर्जासोबत उपभोग्य कर्ज :

रोतकरी जे कृषीसाठी कर्ज काढतो ते तो संपूर्ण कृषीसाठीच वापरतो. असे नसून ते कर्ज तो कौटुंबिक गरजांसाठीही वापरतो. त्यामुळे उत्पादनावर फरक पडतो आणि कर्जाचा बोजा दिवसेंदिवस वाढत जातो. परंतु जर कृषी कर्जा सोबत रोतकच्याला उपभोग्य कर्ज उपलन्ध करून दिले तर संपूर्ण कृषी कर्ज रोतीला वापरले जाईल आणि पुरेसे उत्पादन मिळेल व घेतलेल्या कर्जाची वेळेवर परतफेड केली जाईल आणि रोतकरी कर्जाच्या विळख्यात अडकणार नाही.
૪) इेतीपुरक लघुउघोगांना प्रोत्साहन :

आधुनिक रोतीच्या गरजा, कृषी क्षेत्रात खाजगी गुंतवणुक आकर्षित करण्यासाठी जीवनावइयक वस्तु कायदा आणि कृषी उत्पन्न बाजार समिती कायद्याला परिस्थितीनुरूप सुधारणा करणे आवइयक आहे.
५) होतकर्यांच्या आत्महत्येचे मुख्य कारण म्हणजे कर्ज व त्यावरील परतफेडीची समस्या होय, शासनाने यासाठी

अत्यल्प व अल्पभुधारक झेतकन्यांचे कर्ज त्वरीत माफ (सुट) करावे.
६)नवीन कर्जाचा शेतकय्यांना पुरवठा करतांना त्याचा वापर उत्पादन कार्यासाठीच होईल. यासाठी भांडवलाच्या ऐवजी वस्तुचा पुरवठा करावा.
७) होतीमध्ये आधुनिक तंत्रज्ञानाचा अवलंब करण्यावर भर देप्यात यावा. यासाठी सुधारीत बि-बियानांचा वापर रासायनिक खतांचा व किटकनाराककांचा वापर यंत्राच्या साह्याने होती करणे इत्यादी मार्गाच्या अवलंबासाठी शासनाने मार्गदर्शन करावे.
८)नैसर्गिक आपत्ती व रोगराई कीड यामुळे रोतकन्यांच्या पिकाचे नुकसान झाल्यास झोतकन्यांचे आर्थिक स्थैर्य राखण्यासाठी हेतुने केंद्र व राज्यशासनाद्वारे राष्ट्रीय कृषी योजना मोठया प्रमाणावर राखविण्यात याव्यात व त्यांना वेळ प्रसंगी आर्थिक सहाय्य देण्यात यावे.
९)भारतात कृषी विपणन प्रक्रियांवर अनेक बंधने असल्यामुळे रोतकज्यांना किफायतझीर किमतीपासुन वंचित राहावे लागते. त्याचे उत्पन्न घटते. यासाठी राज्याच्या कृषी उत्पन्न बाजार समितीच्या कायद्यात दुरूस्ती करणे, बाजारपेठ उभारणे, रोतमालाची साठवण, वाहतुक प्रक्रियेत सुधारणा घडवून आणणे, अत्यंत गरजेचे असते.
१०)सिंचन क्षेत्राचे व्यवस्थापन पाण्याच्या विविध सोयी बीज सुधार योजना कृषी संशोधन व विस्तार सेवा इत्यादी बाबी कृषी निविष्टांमध्ये महत्वाच्या असतात. यासारख्या आवइयक सोयी उपलब्ध करून दिल्यास कृषी उत्पन्नास नक्कीच वाढ होईल.
११)रोतकन्यांच्या आत्महत्येस मानसिक तणाव कारणीभूत आहे. यासाठी तणावातुन त्यांना मुक्त केल्यास आत्महत्या टाळण्यास बन्याच अंरी मदत होऊ राकते.
१२)रोतकन्यांची स्थिती सुधारण्यासाठी सर्वप्रथम "विपणन व्यवस्थ" भक्कम केली पाहिजे.
१३)रोतकर्यांमधील कर्जबाजारीपणा कमी करण्यासाठी त्यांना अल्प किंवा सवलतीच्या दराने कर्जपुरवठा होणे आवइयक आहे.
१४) रोतकन्यांना बिगर कृषी कारणांसाठीही कर्जपुरवठा झाला पाहिजे.
१५)नैसर्गिक बाबींमुळे रेतकच्यांचे होणारे नुकसान भरून काढण्यासाठी आकस्मिक निधी उभारला पाहिजे.
१६)बारामाही पाणीपुरवठ्याखालील जमीन वाढवण्याची गरज आहे.
१७)स्वस्त, अखंड व पुरेसा विज पुरवठा उपलब्ध होण्याची गरज आहे.
१८)पिक विम्याचे संरक्षण सर्व रोतकच्यांपर्यत पोहचवावे.
१९) रोतकन्यांच्या वाढत्या आत्महत्या रोखण्यासाठी "कंत्राटी" रोतीला उत्तेजन दिले पाहिजे.
२०) प्रत्येक गावात एक समुपदेशन केंद्न चालवण्याची आवइयकता आहे.

राष्ट्रीय रोतकरी आयोगाचे अध्यक्ष "डॉ. एम. एस. स्वामीनाथन" यांनी रोतकच्यांच्या आत्महत्या थांबविण्यासाठी काही उपाय सुचविले आहेत. कापसावरील आयात झ्रुल्कात वाढ करावी, कापसावर आगाऊ बोनस देण्यास यावा किंमत स्थिरीकरण निधी स्थापन करण्यात यावा, जमिनीतील पाण्याचे पुर्नभरण सक्तीचे करावे, कृषी कर्जावरील व्याजदर ४ टक्यापर्यत कमी करावे. विपणनासाठी आधारभुत संरचनेकरीता पतपुरवठा करण्यावर भर द्यावा, सहाय्यता गटाची प्रगती साधणे, किसान कॉल सेंटर्सची गरज पटवणे यासारखे उपाय डॉ. एम. एस. स्वामीनाथन यांनी सुचविले आहे. २००१ ते मार्च २००७ पर्यत विदर्भात सुमारे २९९०

रोतकज्यांची आत्महत्या केल्याने दिसुन येते. मात्र राज्य सरकारने काही विरोष केलेले नाही. मुख्यतः कर्ज आणि गरीबी मुळेच होतकरी आत्महत्या करीत आहेत. त्यासाठी सरकारची जबाबदारी आहे. पिक विमा योजना सर्वासाठी लागु केली पाहिजे. असे रोतकन्यांचे म्हणणे आहे. आत्महत्येच्या नेमक्या कारणाचा इोध घेण्यसाठी वेगवेगळया ईोतकच्यांचा अभ्यास कारणे गरजेचे आहे. कोणत्या झेतकज्यांना मोठा तोटा झाला त्याची गेल्या पाच वर्षातील पीक पध्दत व लेन्हीची पध्दत काय होती, त्या संदर्भात तज्ञांच्या शिफारही काय होत्या, रोतकज्यांनी कोणत्या प्रकारचे बियाणे वापरले, त्याच्या मालाचा दर्जा व उत्पादन किती होते, शेतकज्यांनी दरवर्षी किती वर्ज्ज घेतले, ते कोणाकडून घेतले. त्याचा व्याजदर किती होता, त्याची परतफेड करी केली इत्यादींचा तपास केला पाहिजे.

उपरोक्त घटकांचा शासन जोपर्यत गांभीर्याने विचार करणार नाही तो पर्यत रोतकच्यांच्या आत्महत्यांना नियंय्रण घालणे इक्य होणार नाही.

भविष्यामध्ये अशा प्रकारच्या आत्महत्येच्या घटना घडू नयेत या करीता शासनाने निरिचतच उपाययोजना करावयास पाहिजेत प्रामुख्याने रोतकन्यांसाठी सिंचन योजना प्रभावीपणे राबविणे अत्यंत आवइयक आहे. शासनाने रोतकज्यांना रोतीशी संबंधीत विविध प्रकारची अनुदाने द्यावीत की जेणे करून रोतकज्यांना आर्थिक स्थैर्य व सुरक्षितता प्राप्त होऊ इाकेल एकंदरीत सरकारने या आत्महत्यांच्या घटनांचा झोध व बोध घेऊन निरिचतच प्रभावी उपाययोजना करावयास पाहिजे.
"जगात सर्वात मोठे रोतीप्रधान राष्ट्र म्हणून नाव लौकीक असलेले आपले राष्ट्र खन्या अर्थाने रोतकरी प्रधान राष्ट्र आहे. रोती व मनुष्यबळाचा समन्वय हाच भारतीय अर्थव्यवस्था व ग्रामीण विकासाचा मुलाधार आहे. ६४\% मनुष्यबळ हे आर्थिक विकासाचे महत्वपुर्ण संसाधन आहे. रोती राष्ट्रीय उत्पन्न व रोजगार वाढीचे सर्वात मोठे क्षेत्र आहे. अशा या देशाचा रोतकरी उत्पादनात कुठे आहे. त्यांना उत्पादन खर्चा ऐवढे तरी मुल्य मिळते काय? शासनाच्या विविध योजनेने ओलित क्षेत्र निरिचत वाढेल काय? शासनाने राबविलेल्या योजना रोतकज्यापर्यत पोहचतात काय ? इत्यादी प्र३नांच्या उत्तरासाठी चाकोरीबध्द विचारांपासून थोडेसे दुर सरकून नित्याच्या व्यवहारासाठी लागणान्या अर्थनितीचा उहापोह व्हावयास हवा." उत्पादनावर आधारित मुल्य ठरविल्याची गरज अर्थशास्त्र आज हासनाला पटवुन देऊ शाकला नाही. नव्या अर्थव्यवस्थेची पुन्हा मांडणी कोणत्या पध्दतीने करता येईल याचा विचार झाला पाहिजे. तर समाजाला त्याचा निरिचतपणे लाभ होईल प्राध्यापकांनी सुध्दा ग्रंथाच्या पलीकडे जाऊन स्वतंत्रपणे भारतीय कृषी अर्थझास्त्राची मांडणी करणे आज गरजेचे आहे. शेतकर्यांच्या आत्महत्येच्या कारणांचे समाधान इोधतांना जर त्याच्या भुकेच्या अत्यंत पिडाजनक मानवी संवेदनेचा विचार केला, तर नक्कीच त्याच्या मुळापर्यत जाऊन त्याला नष्ट करण्याचा प्रयत्न करु, तेव्हा निरिचतच माइया देशांचा ऐोतकरी आत्महत्येचा मार्ग सोडुन नव्याने जीवन जगेल यात काही झांका नाही.

शोती व्यवसायात गुंतलेला जनतेच्या जीवनपध्दतीची सुरक्षितता राखण्यासाठी सुयोग्य यंत्रणा उभारणे हेच या देशासमोरील आव्हान आहे असे मला वाटते.

## संदर्भ सूची :

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३) वृत्तप्रीय टिपणे आणि तज्ञांची मते
४) ऐोतकन्यांच्या मतांचा परामर्ष
4) Report on farmer's Suicides In Maharashtra, 2006

## आरक्षण - एक चिकित्सक अभ्यास

प्रा. तातेराव पवळे : समाजरास्त्र विभाग, पीपल्स कॉलेज, नांदेड.
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## प्रस्तावना :

जगातील बहुतांश राष्ट्रामध्ये वंश, धर्म, वर्ग, राष्ट्रीयत्व, लिंग या आधारावर सामाजिक व आर्थिक भेदभाव होतांना दिसतो. यातून समाजात उच्च, निच्चता, श्रेष्ठ कनिष्ठत्वाची भावना निर्माण झाली. त्यामुळ समाजातील बहुतांश वर्ग मानवी हक्कापासून वंचित राहिला. जीवनाच्या सर्वच क्षेत्रात विशिष्ट वर्गाची मक्तेदारी निर्माण झाली. यातून असंतोष निर्माण होवून संघर्ष सुरू झाला. यासंघर्षामुळे राष्ट्रीय एकात्मता व राष्ट्रीय विकासाला बाधा निर्माण झाली. म्हणून विविध राष्ट्रांनी वेगवेगळ्या प्रकारच्या उपाययोजना करून देशातील सामाजिक, आर्थिक, रौक्षणिक, राजकीय अरा सर्वच क्षेत्रातील विषमता नाहीइी करण्यासाठी संधी, सवलत, भुर्दंड सहन करणे, नुकसान भरपाई करणे, सकारात्मक पुरोगामी कृती, समान संधी व रोजगार यासारख्या साधनांचा स्विकार केला. अल्पसंख्यांक, उपेक्षित, वंचित वर्गांना योग्य संधी देण्यासाठी आरक्षण उपलब्ध करून देण्याचे सकारात्मक धोरण व कायदेशीर तरतुदी सार्वजनिक व खाजगी उद्योग क्षेत्रांना लागू केल्या. विरोषतः अमेरिका, दक्षिण आफ्रिका, मलेशिया, ब्राजील, जपान या राष्ट्रांनी सकारात्मक धोरण (Affirmative Action) स्विकारून सर्वच क्षेत्रात आरक्षणाची अंमलबजावणी केली. सामाजिक, आर्थिक, राजकीय, रैक्षणिक क्षेत्रांतील विषमता नाहीरी करून समता प्रस्थापित करण्याचा प्रयत्न केला.

भारतातील आरक्षण चळवळीला ऐतिहासिक आधार असलेला दिसतो. भारतीय समाजात विविध प्रकारची विषमता आहे. धर्म, जात, भाषा, वर्ग, पंथ, प्रांत, लिंग या आधारावर विषमता निर्माण झालेली दिसते. विरोषतः वर्णव्यवस्था, जाती व्यवस्था व स्त्री-पुरूष असमानता यामुळे समाजाची ब्राह्लण, क्षत्रिय, वैरय, गुरुद्रसेच वेगवेगळया जाती, पोटजाती, उपजातीमध्ये विभागणी झाली आहे. यातून विशिष्ट वर्ण व जातींना विइोष अधिकार व सवलती बहाल करण्यात आल्या. जुद्र व निम्न जातींचे कार्यक्षेत्र हे अतिशय मर्यादीत करण्यात आले. त्यांना स्वातंत्र्य, समता, न्याय यासारखे हक्क नाकारले गेले. तसेच त्यांचा सार्वजनिक जीवनातील सहभागही नावारला गेला. त्यांना सामाजिक, आर्थिक, राजकीय, हैक्षणिक, धार्मिक अशा सर्वच क्षेत्रापासून वंचित ठेवण्यात आले. माणूस असून देखील त्यांना गुलामासारखे व जनावरासारखी वागणूक देण्यात आली. परिणामी समाजाता उच्चवर्णीय व उच्च जातीतील वर्गानी सर्वच क्षेत्रात १०० टक्के अधिकार प्राप्त केले. त्यामुळे त्यांची सर्वच क्षेत्रात मक्तेदारी निर्माण झाली. या सर्वांना धर्माचा आधार दिला गेला. त्यामुळे उच्चवर्णीयांनी उपेक्षित, दलित, आदिवासी, अनुसूचित जाती, इतर मागासवर्गीय आणि स्त्रिया यांच्यावर अन्याय, अत्याचार केला. त्यांचे शारीरिक, मानसिक, आर्थिक शोषण केले. ही झोषणाची परंपरा हजारो वर्षापासून चालू होती. यातूनच समाजात असंतोष निर्माण होवून समाजातील उपेक्षित व शोषित घटकांनी झोषणाचा प्रतिकार करून स्वतःचा सर्वांगिण विकास करण्यासाठी, संधी उपलळ्ध होण्यासाठी सवलतीची मागणी केली. यातूनच ‘आरक्षण चळवळ’ उदयास आली.

## आरक्षणाची संक्षिप्त पार्श्शभूमी :

भारतात आरक्षण चळवळीची सुरूवात ब्रिटीश काळात झालेली दिसते. या चळवळीत महात्मा ज्योतीबा

फुले, राजर्षी छत्रपती शाहू महाराज, डॉ. बाबासाहेब आंबेडकर, रामस्वामी पेरीयार यांचे योगदान अतिशाय महत्वाचे ठरते. आरक्षणाची मागणी महात्मा जोतिबा फुले यांनी सर्वप्रथम केली. त्यांनी हंटर कमिशान (१८८२) समोर मोफत व सक्तीचे प्राथमिक इिक्षण तसेच सरकारी नौकन्यामध्ये जातीवर आधारीत प्रतिनिधीत्व देण्याची मागणी केली.२६ जुलै १९०२ मध्ये राजर्षी छत्रपती हाहु महाराजांनी कोल्हापूर संस्थानात इतर मागासवर्वीयांसाठी (ब्नाह्मणेत्तर) 40 टक्के आरक्षण जाहीर करून म. फुल्यांनी सुचविलेल्या आरक्षण धोरणाची प्रत्यक्ष अंमलबजावणी केली. याचा परिणाम म्हणून देशातील इतर भागात स्थानिक सरकारने जसे १९१८ साली म्हैसूर, १९२१ साली मद्रास, १९२५ मध्ये मुंबईमध्ये आरक्षण धोरण जाहीर करण्यात आले. डॉ. बाबासाहेब आंबेडकरांनी १९४२ मध्ये ‘All India Depressed Class Federaion’ ची स्थापना करून अनुसूचित जातीजमातीसाठी रिक्षण व सरकारी नौकर्यामध्ये आरक्षणाची मागणी केली. भारत स्वतंत्र झाल्यानंतर डॉ. बाबासाहेब घटना समितीचे मसुदा समितीचे अध्यक्ष बनले. २६ जानेवारी १९५० रोजी भारतीय राज्यघटना (Indian Constitution) अंमलात आली. भारतीय राज्यघटनेत स्वातंत्य, समता, बंधुता, न्याय या मानवी मुल्यांचा स्वीकार करण्यात आला. प्रत्येक भारतीय नागरिकाला समान अधिकार व हक्क बहाल केले. तसेच सामाजिक, आर्थिक, रैक्षणिकदृष्टया मागास असलेल्या घटकांना विशेष सवलती व संधी देण्याची तरतूद राज्यघटनेत करण्यात आली.

भारत सरकारने मागासवर्गीयांच्या सामाजिक व आर्थिक स्थितीचा अभ्यास करण्यासाठी २९ जानेवारी १९५३ साली कालेलकर आयोग नेमला. त्यांनी देशातील २३९९ जाती मागासलेल्या ठरविल्या. त्यांच्या विकासासाठी काही शिफारसी सादर केल्या. परंतु या आयोगाच्या सदस्यामध्ये एकमत नसल्याने हा आयोग संसदेने फेटाळला. त्यानंतर पंतप्रधान व्ही. पी. सिंग यांच्या काळात जानेवारी १९७९ मध्ये मंडल आयोग स्थापन करण्यात आला. या आयोगाने ३७६६ जाती मागास म्हणून घोषित केल्या व त्यासाठी २७ टक्के आरक्षण देग्याची शिफारस केली. सरकारने मंडल आयोगाच्या शिफाररी स्वीकारून १३ ऑगस्ट १९९० पासून मंडल आयोगाची अंमलबजावणी करण्यास सुरवात केली. १९९५ मध्ये ७७ वी घटना दुरुस्ती करुन कलम १६(४)(अ) नुसार अनुसूचित जाती व जमातीसाठी विरोष तरतूद करण्यात आली. १९९८ मध्ये केंद्न सरकारने राष्ट्रीय नमुना सर्वेक्षण (National Sample Sarvey) केला. २००५ मध्ये ९३ वी घटना दुरूस्ती करुन खाजगी रैक्षणिक संस्थामध्ये अनुसूचित जाती जमातींना आरक्षण देणे बंधनकारक ठरवले. तसेच २००६ मध्ये सरकारी रैक्षणिक संस्थामध्ये ४९.५ टक्के आरक्षण घोषित केले. २००८ मध्ये भारतीय सुप्रिम कोटने 'Creamy Layer' या संकल्पनेच्या आधारावर आरक्षण देण्यात यावे असे सुचविले. तसेच ०८ मार्च २०१० रोजी संसदेत महिलांना ३३ टक्के आरक्षण मिळण्याचे विधेयक मांडले गेले. हे विधेयक राज्यसभेने मंजूर केले. सध्या या विधेयकावर लोकसभेत चर्चा चालू आहे. थोडक्यात भारतात वरीलप्रमाणे आरक्षण चळवळीचे स्वरुप हे काळानुसार बदलत असलेले दिसून येते. आरक्षण मिळविण्यासाठी ज्या पध्दतीने इतर मागासवर्गीयांनी चळवळी केल्या, त्याचप्रमाणे उच्चवर्णीय व उच्च जातीतील लोकांनी व विद्यार्थ्यांनी आरक्षण विरोधी चळवळी घडवून आणल्या. थोडक्यात, जनतेच्या सर्वच थरातून आरक्षण संदर्भात तीव्र प्रतिक्रिया उमटत आहेत.
आरक्षणाची संकल्पना :
आरक्षण ही संकल्पना अतिशाय गुंतागुंतीची व व्यापक आहे. ‘समाजातील सामाजिक, आर्थिक, राजकीय, रौक्षणिकदृष्ट्या मागास असलेल्या दुर्बल घटकांना स्वउन्नतीसाठी व आपले अधिकार उपभोगण्यासाठी

निर्माण करुन दिलेली विरोष संधी म्हणजे आरक्षण होय.' (कांबळे नारायण, २००८:२०६) 'आरक्षण' हा मराठी शब्द Reservation या इंग्रजी शब्दाचे भाषांतर आहे. आरक्षण हा शब्द संरक्षणात्मक विभेदीकरण, सकारात्मक, रक्षात्मक या अर्थानी वापरला जातो. अमेरिकेत निग्रोसाठी असलेले आरक्षण ‘रिवर्स डिसक्रिमिनेइान’ या नावांनी ओळखले जाते. थोडक्यात समाजातील दुर्बल घटकाना, मागास, झोषित, दुर्लक्षित लोकांना समान पातळीवर आणण्यासाठी त्यांना दिलेली विशेष संधी म्हणजे ‘आरक्षण’ होय.

According to Ashok Yadav, 'Reservation is a means to uplift the large community, to give opportunities to the deprived sections so that they may move upwards in education and jobs'.
‘आरक्षणाची संकल्पना ही सामाजिक न्यायाला गती देणारी सामाजिक न्याय प्रत्यक्षात मिळवून देणारी व समतेचे राज्य निर्माण करणारी एक व्यवस्था आहे. हजारो वर्षापासून दडपून ठेवलेल्या संधीची ती मागणी आहे.' आरक्षण ही संकल्पना आर्थिक विकास प्रक्रियेचे व समाज परिवर्तनाचे एक प्रभावी माध्यम आहे. हजारो वर्षापासून समाजातील दुर्बल घटकांना आपले अधिकार उपभोगता आले नव्हते ते उपभोगता यावेत यासाठी निर्माण करुन दिलेली विरोष संधी म्हणजे आरक्षण होय. (डॉ.गायकवाड माधव, २००८:१४५)

आरक्षणाच्या संदर्भात अथथनी पॅलट्टी यांचे मत अतिशय मार्मिक ठरते त्यांच्या मते, ‘The policy of reservation has a great implication for the Indian society. It has set in motion processes that are capable of transtorming a hierarchical society into an egalitarian one. The caste system effectively restricted privileges for a few upper castes and enforced difficult menial labour on the lowest castes'. (Palatty, 1992:82)

भारतीय संविधानात आरक्षणासंदर्भात ३४० वे कलम निर्माण केले. तसेच कलम १४,१५(१), १६(४), २४(२), ३८(२), ૪६ या कलमानूसार अनुसूचित जाती, जमाती व इतर मागासर्गीयासाठी प्रशासकीय सेवेत, रिक्षण क्षेत्रात व तसेच संसदेमध्ये काही जागा राखीव ठेवण्याची तरतूद केली आहे. या राज्यघटनेच्या ३४० व्या कलमान्वये सामाजिक व रैक्षणिकदृष्टया मागासलेल्या वर्गाच्या परिस्थितीचे व अडचणीची पाहणी करुन त्याचे निर्मूलन करण्यासाठी दर दहा वर्षाला आयोग नेमण्याचा राष्ट्रपतीला अधिकार दिला आहे. ७३ व्या व ७४ व्या घटना दुरूस्तीने पंचायती व नगरपालिकामध्येही मागास जातींना त्यांच्या लोकसंख्येच्या प्रमाणात राखीव जागाची तरतूद करण्यात आली. याच दुरुस्तींना पहिल्यांदाच महिलांसाठी १/३ जागा राखीव ठेवण्यात आल्या. विशेष म्हणजे अनुसूचित जाती जमातीच्या राखीव जागांच्या कोट्यापैकी १/३ जागा त्या त्या समाजातील महिलांसाठी राखीव ठेवण्यात आल्या.

## विइलेषणात्मक निर्वचन :

भारतात आरक्षणासाठी वेगवेगळे निकष किंवा काही घटक आधारभूत मानले आहेत. प्रामुख्याने यात जाती, धर्म, लिंग, व्यवस्थापन, राज्य झैक्षणिक संस्था यासारख्या माध्यमाचा समावेश होतो. भारतात आरक्षणासाठी इतरही काही आधार आहेत. जसे स्वातंत्र्य सैनिकाच्या मुला-मुलींना व नातवांना आरक्षण दिल्या जाते. तसेच एखादा नागरिक अपंग असल्यास त्याला आरक्षण दिल्या जाते. राष्ट्रीय, राज्य व आंतरराष्ट्रीय पातळीवर विरोष प्राविण्य मिळवणान्या खेळाडूस आरक्षण मिळत असते. तसेच अनिवासी भारतीयांना (NonResident Indians) काही रैक्षणिक संस्थमध्ये जास्तीचे झुल्क घेवून आरक्षण दिल्या जाते. सैन्यामध्ये काम करणान्या व रहहीद झालेल्या सैनिकांच्या कुटुंबाला आरक्षण मिळते. भारतातील काही देवस्थानाच्या ठिकाणी दर्शनासाठी जास्तीचे पैसे घेवून दर्शन घेणान्या व्यक्तीचे दर्शन आरक्षित केले जाते. बसमध्ये व रेल्वेमध्ये देखील

ज्येष्ठ नागरिकांना काही जागा राखीव ठेवल्या जातात. थोडक्यात भारतात आरक्षणासाठी वेगवेगळे आधार किंवा निकष ठरविलेले दिसून येतात.

## १. आरक्षणाचे गुण / फायदे :

आज संपूर्ण देशामध्ये आरक्षणाच्या संदर्भात चर्चा होत आहे. यातून आरक्षणाच्या संदर्भात अनुकूल व प्रतिकूल अशा दोन्ही स्वरुपाची मते मांडली जात आहेत. आरक्षणामुळे हजारो वर्षापासून सामाजिक, आर्थिक, राजकीय, रैक्षणिक, धार्मिक हक्कापासून वंचित असलेल्या उपेक्षित, मागास, अनुसूचित जाती, जमातींना स्वतःचा विकास करण्यासाठी संधी मिळाली. भारतीय राज्यघटनेच्या माध्यमातून स्वातंत्र, समता, बंधुता, न्याय या मानवी मूल्यांची प्राप्ती झाली. तसेच सरकारी व खाजगी रिक्षण संस्था, सरकारी नौकच्या, लोकसभा व विधानसभेत, स्थानिक स्वराज्य संस्था या सर्व घटकांमध्ये अनुसूचित जाती, जमाती व इतर मागासवर्गीय आणि स्त्रियांना राखीव जागा दिल्याने त्यांचा सार्वजनिक सहभाग वाढला. त्यामुळे वरील उपेक्षित व मागास घटकांच्या विकासाला चालना मिळाली आहे.

आरक्षणामुळे हजारो वर्षापासून सामाजिक, आर्थिक, राजकीय, रैक्षणिक, सांस्कृतिक, धार्मिक बाबतीत वंचित असलेल्या मागासवर्गीयांना विकासाची संधी निर्माण झाली. सामाजिक विषमतेला तडा जावून समानता प्रस्थापित होत आहे. समाजतील उपेक्षित घटकांना न्याय मिळाला आहे. आरक्षणामुळे समाजातील उच्च वर्णीयांची व उच्च जातीची मक्तेदारी नाहीशी होत आहे. मागासवर्गीयांनी आरक्षणाचा फायदा घेवून वेगवेगळ्या क्षेत्रात यइा संपादन केले आहे. त्यांच्यात आत्मविश्व्वास निर्माण झाला आहे. तसेच जाणीव जागृती निमार्ण झाल्याने त्यांचे कार्यक्षेत्र वाढले आहे. म्हणजे आरक्षणामुळेच भारत एक संतुलीत विकसित राष्ट्र होण्यासाठी वाटचाल करत आहे.

## २. आरक्षणाचे दोष / तोटे :

आरक्षणाच्या संदर्भात देशातील सर्वस्तरातून तीव्र प्रतिक्रिया उमटत आहेत. आरक्षणामुळे जातीव्यवस्था बळकट होवून जातीवादाला चालना मिळत आहे. गुणवत्ता डावलली जात आहे. तसेच आरक्षणामुळे मागासवर्गीयांना अवास्तव फायदा झालेला आहे. आरक्षण हे दलितांच्या पहिल्या पिढीलाच असावे. (डॉ. तेलतुमडे आनंद, २००८:२८) असाही आरक्षण विरोधी विचार मांडला जातो. मागासवर्गीयांना राखीव जागा ठेवल्यामुळेच उच्चवर्णीयांना नोकप्या मिळत नाहीत असाही आक्षेप घेतला जातो. रैक्षणिक क्षेत्रातील गुणवत्ता डावलून कमी गुण असलेल्या व्यक्तीस संधी दिली जाते. त्यामुळे गुणवत्ता ढासाळली आहे. हे भारताच्या भवितव्यासाठी धोक्याचे आहे. तसेच आरक्षणाच्या पाठीमागे केवळ राजकारण असते. प्रतिपादन केले जात आहे. राज्यघटनेमध्ये आरक्षणाची तरतूद केवळ दहा वर्षासाठी आहे, असाही आरक्षणाच्या कालमर्यादाविषयी अपप्रचार केला जातो. 'आरक्षण हे जातीयवाद व जातीय संघर्ष वाढविणारे आहे. त्यामुळे आरक्षण जातीऐवजी आर्थिक निकणाच्या आधारावर दिले जावे. असाही युक्तीवाद मांडला जातो. तसेच आरक्षणाचा लाभ फक्त मागासवर्गी-यातील अभिजन व श्रीमंत व्यक्ती घेतात. त्यांच्यातील गरीबांना, गरजवंताना त्याचा लाभ होत नाही, असाही आक्षेप घेतला जातो.' (डॉ. कुंभार नागोराव, २००८:८०-१०५)

आरक्षणामुळे उच्चवर्णीय व उच्च जातीतील व्यक्तीमध्ये मागासर्गीयविषयी तिरस्कार, घृणा निर्माण होत आहे. उच्चवर्णीयांचा राखीव जागांकडे पाहण्याचा दृष्टीकोण जर नाही बदलला तर त्याचे दुरगामी, विनाइाकारी

आणि भयानक परिणाम देइाला भोगावे लागतील, असेही समर्थन आरक्षणाबाबत केले जाते. सध्या आरक्षणा बरोबरच आरक्षण विरोधी चळवळही केली जात आहे. सध्या महिलांच्या संसदेतील ३ ३ टक्के आरक्षणाला विरोध केला जात आहे. समाजातील उच्चवर्णीय व उच्च जातीतील व्यक्ती नेहमीच आरक्षण विरोधी भूमिका मांडत असतात. IIT, AIIMS सारख्या क्षेत्रातील विद्यार्थी आरक्षण विरोधी चळवळी घडवून आणत आहेत. म्हणूनच स्वातंत्र्य प्राप्तीला ६३ वर्ष होवूनही आरक्षणाला पोषक आणि विधायक वातावरण निर्माण होऊ राकले नाही.

## आरक्षणाचे मुल्यमापन :

आरक्षण धोरणाच्या संदर्भात उच्चवर्णीयाकडून विरोध होत असला तरी समाजात समता आणि न्याय प्रस्थापित करण्यासाठी व मागासवर्गीयांना विकासाची समान संधी देण्यासाठी आरक्षण आवश्यक आहे. यासाठी आरक्षणाकडे पाहण्याचा नकारात्मक दृष्टीकोण बदलला पाहिजे. समाजातील आरक्षण विषयक गैरसमज दूर केले पाहिजेत. आरक्षणाला अनुकूल असे वातावरण निर्माण करणे आवइयक आहे. तसेच आरक्षणाची संकल्पना निटपणे समजून घेतल्यास त्याविषयी घेण्यात येत असलेले आक्षेप कसे चुकीचे आहेत हे स्पष्ट होते. आरक्षणामुळे संविधानाचे उल्लंघन होत नाही. तसेच समता व न्यायाच्या तत्वाला धोका पोहचत नाही, गुणवत्ता व वार्यक्षमता ढासाळणार नाही. आरक्षणामुळे समजामध्ये जातीवाद वाढण्यापेक्षा जातीची बंधने मागासवर्गीय आरक्षणाचा फायदा घेवून स्वतःचा विकास करत आहेत. म्हणूनच आरक्षण हे क्रांतिकारक परिवर्तनाकडे टाकलेले एक महत्वाचे पाऊल आहे. थोडक्यात, भारतातील आरक्षण धोरणाचा लाभ मागासर्गीयांना त्यांचा विकास करुन घेण्यासाठी निश्चितपणे झालेला आहे. तरी पण अद्यापही बहुसंख्य मागासवर्गीयांना आरक्षणाचा लाभ मिळालेला नाही. त्यामुळे मागासवर्गीयांतील मागासलेपणाची व्यापकता लक्षात घेता त्यांच्या सक्षमीकरणापर्यंत आरक्षण चालू ठेवणे हे न्यायसंगत आहे. विशेषतः भारताला जागतिक पातळीवर विकसित राष्ट्र होण्यासाठी समाजाचा संतुलीत, समान पातळीवर विकास होण्याची आवइयकता आहे आणि त्यासाठी आरक्षणाची आवइयकता आहे.
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## मराठी ग्रामीण कथेतील दलित जाणिवा, वेदना व विद्रोह

## प्रा. नरसिंग अप्पासाहेब कदम : महात्मा फुले महाविद्यालय,अहमदपूर

ग्रामीण कथेचा उदय आणि विकासाला सुरुवात झाली ती प्रादेशिक कथेबरोबरच झालेली दिसते. वासुदेव मुलाटे लिहितात, " "ग्रामीण कथेच्या उदयाचे श्रेय ग.ल.ठोकळ व र.वा. दिघे यांना द्यावे लागते. यानंतर चि.य.मराठे यांनी १९२५ पासून कथालेखनाला सुरुवात केली. " ? अशा पध्दतीने ग्रामीण जीवन रेखाटले जाऊ लागले. खरे तर याचे श्रेय महात्मा ज्योतीराव फुले,राजर्षी शाहू महाराज, डॉ.बाबासाहेब आंबेडकर आदींना द्यावे लागते. यांचे शैक्षणिक व सामाजिक कार्य आणि शासनाचे शिक्षणाचे खुले धोरण यामुळे शिक्षण खेड्यापर्यंत,तळागाळापर्यंत जाऊन पोहचले. महात्मा गांधीनी ‘खेड्याकडे चला‘ अशी हाक दिली नि साहित्यिकांची दृष्टी खेड्यांकडे वळली. खेडयातील कथाकार कथालेखन करू लागले.
‘दलित‘ या शब्दांच्या व्याख्या अनेकांनी केल्या व त्यातून वेगवेगळे विचार मांडले. यशवंत मनोहरांनी आपल्या ग्रंथातून म्हटले," शोषितांची जात शोषित, शोषणाच्या सामाजिक,आर्थिक व सांस्कृतिक इत्यादी सर्व प्रकारांनी काळोखलेले शोषितांचे सर्वच नातेवाईक घटक हे दलित होत. " ${ }^{\text {² }}$ दलित मध्ये अनुसूचित जाति, जमाती, बौध्द कष्टकरी जनता, कामगार, भूमिहीन शेतमजूर, गरीब, शेतकरी, भटक्या जमाती,आदिवासी आदींचा समावेश होतो.

दलित जाणिवेबद्दल संपादक प्रा.गो.म.कुलकर्णी लिहितात," बाबुराव बागुल यांच्या मते दलित जाणीव म्हणजे लोकशाहीची जाणीव. समता,स्वातंत्य, बंधुभाव व माणसाच्या मोठेपणाची जाणीव होय " ₹ दलित जाणिवेचा जर विचार केला तर ही जाणीव समाज जाणिवेत अनुरुप परिवर्तन करू पाहणारी जाणीव आहे.

जातीयतेमुळे किंवा अन्य कारणांमुळे झालेलं शोषण आणि त्याविषयी निर्माण झालेली चीड व या चिडीतून करावा लागणारा संघर्ष म्हणजे जाणीव होय असे दलित जाणिवेवद्दल म्हणायला हरकत नाही.

ग्रामीण कथेबद्दल डॉ.अंजली सोमण लिहितात,"‘रिभाऊंची कथा हा मराठीतील ग्रामीण कथेचा आरंभबिंदू असला तरी ग्रामीण कथेला सुस्पष्ट रुप देणारे पहिले कथाकार म्हणजे श्री म.माटे होते " ${ }^{\gamma}$ अशा पध्दतीने ग्रामीण कथेचा उदय आणि विकास झाला. अनेक ग्रामीण कथाकारांनी ग्रामीण कथा लिहिल्या. ग्रामीण चित्रणाची मांडणी केली. त्यातील काही ग्रामीण कथाकारांनी ग्रामीण कथेतून दलित जाणिवा मांडल्या त्यानुषंगाने जर त्यांचा विचार केला तर सर्वप्रथम आपल्याला श्री .म.माटे यांच्या कथांचा विचार करावा लागेल. डॉ.अंजली सोमण लिहितात,"‘उपेक्षितांचे अंतरंग" हा माटयांचा कथासंग्रह १९४१ साली प्रसिध्द झाला. त्यांनी ‘बन्सीधरा तू आजा कुठे रे जाशील ? अशा कथेतून दलित चित्रण मांडले ‘‘ बहुजन समाजातील लोकांचे चित्रण,सर्वसामान्यांचे चित्रण, दलितांचे चित्रण माटे यांनी आपल्या कथेतून केलेले आहे. बन्शीधर या पात्रातून कातकरी समाज म्हणजेच भटक्या समाजाचे वास्तव दु:ख त्यांनी चित्रित केले.

त्यानंतर व्यंकटेश माडगूळकरांनी दलित मनाचा विद्रोह आपल्या कथेतून मांडलेला दिसून येतो. डॉ.अंजली सोमण यांच्या मते," माडगूळकरांनी 'देवा सखा महार' ही दलित मनाचा उच्चवर्णाविरुध्दचा क्षोभ प्रकट करणारी कथा १९४७ साली लिहिली" ६ माडगूळकरांनी दलित जीवनावर लिहिलेल्या कथांची संख्या ही जवळ पास तीसपर्यंत आहे. त्यांनी आपल्या कथातून मांग, रामोशी, व्हलर, वडार अशा गावकुसाच्या बाहेर जीवन

जगणान्या पण गावकुसातील सर्व घडामोडींशी संबंधीत असणान्या उपेक्षित जातींचा दु:खाचा वेध घेतला आहे. भटक्या-विमुक्तांचे जगणे मांडले आहे.

प्रा.के.ज.पुरोहित यांनी आदिवासींचे चित्रण मांडले. संपादक अनिरुध्द कुलकर्णी लिहितात, "प्रा.के.ज.पुरोहित उर्फ शांताराम या कथाकाराने अनेक विषय मांडले पण त्यातील एक विषय म्हणजे "‘आदिवासी समाजाच्या चालीरितीत नैसर्गिक जगण्याची तत्वे शोधणे हा मांडला" आदिवासींच्या जीवनातील दलित जाणिवा त्यांनी चित्रीत केल्या. तर डॉ.गंगाधर पानतावणे लिहितात," बंधु माधवाची पहिली कथा ‘जावे त्यांच्या वंशा‘ १९५३ मध्ये ‘जनता‘ साप्ताहिकात प्रसिध्द झाली. दलितांच्या नशिबी येणारे हीनदीन जीवन, त्यांच्या व्यथावेदना, त्यांच्या मनातील विचार, विद्रोह यांना कथेच्या माध्यमातून बंधू माधवांनी प्रथम वाचा फोडली. "‘ बंधू माधवांनी दलितांच्या जीवनातील सुख दु:ख, वेदना विद्रोह मांडले. हीनदीन जीवन साकारले.

योगीराज वाघमारे यांनी दलित माणसांच्या जीवनातील होरपळीचे आणि उद्रेकाचे चित्रण मांडले. डॉ.वासुदेव मुलाटे यांच्या मते," अंधार या कथेतील ‘बायजा' माहेरच्या गावी बाबा साहेबांच्या जयंतीचे कार्यक्रम गावातील दलितांच्या भांडणापायी दोन ठिकाणी वेगवेगळे होणार असतील तर जयंतीसाठी आपण माहेरी येणार नाही असे भावाला सांगते." किंवा " दलितांच्या झोपडया घालून देण्याच्या, नवभूधारकांना जमिनी वाटून देण्याच्या शासनाच्या धोरणातून गावोगाव दलित सवर्ण संघर्ष निर्माण झाले. मजुरी बंद झाली. घरे जाळली गेली याचे चित्रण ‘परागंदा‘ या कथेत येथे. " $\stackrel{ }{ }$ या ठिकाणी योगीराज वाघमारे यांनी शासनाकडून मिळणान्या योजनामध्ये आमच्याच लोकांमध्ये भांडणे सुरू झालेले चित्रण केले. सार्वजनिक कार्यक्रमात फुटणारे फाटे असे विविध विचार मांडले.

अण्णाभाऊ साठे यांनी दलित वस्तींतील चित्रण मांडले. डॉ. वासुदेव मुलाटे लिहितात,"भूक हा अण्णाभाऊच्या चिंतनाचा विषय आहे. स्वानुभवाचा विषय आहे. माणूस पोटासाठी लाचार होतो. प्रामाणिकतेचा मक्ता काय या दरिद्री शोषित माणसानेच उचलावा" १० या प्रकारे अण्णाभाऊंनी अस्पृश्यांच्या जीवनातील अनेक हाल अपेष्टा साकारल्या. अन्यायाविरुध्द प्रतिकार करणारी, हसत हसत दु:खाला,मृत्युला सामोरी जाणारी जीवनाचे भाष्य रांगड्या भाषते सांगणान्या कितीतरी व्यक्तिरेखा अण्णाभाऊंनी आपल्या कथेतून मांडल्या. त्यानंतर शंकरराव खरातांनी लिहिलेली पात्रेही सोशिक आहेत.' रामा महाराची कथा‘ सारख्या कथेतून गावकीची कामं कशी करावी लागतात ते सांगितले. शंकरराव खरातांनी दलित शोषित माणसांच्या दु:खाला वाचा पोोडली. उपन्याच्या जीवनातील दु:ख, दारिद्रय, दैन्य,व्यथा - वेदना जीवन जगण्याची पध्दत त्यातील भयाण वास्तवता, रखरख, दैना चित्रित केली.

मराठवाडयातील चित्रण भास्कर चंदणशिव यांनी मांडले. मराठवाडयातील बोलीभाषेचा वापर करून वास्तव चित्रणाची मांडणी त्यांनी केली. अशोक देशमाने लिहितात, "भास्कर चंदनशीव यांच्या ‘जांभळढव', मरणकळा,नवीन वारुळ,बिरडं या कथा संग्रहातून तसेच दैनिक लोकमतमधून प्रकाशित करण्यात आलेल्या काही कथांमधून दलित शोषत वर्गात व्यथामय जीवन रेखाटले गेले. "?? भारत देश स्वतंत्र झाला तरीही माणसाला माणूस म्हणून जगता येत नाही. माणसाची माणसाकडून होणारी कुचंबना ,अवहेलना चंदनशिवांनी मराठवाडी बोलीतून मांडली. तर गणेश घांडगे यांनी ग्रामीण कथेतून दलित चित्रवाणी मांडणी केलेली दिसून येते. डॉ.वासुदेव मुंलाटे लिहितात," झळाया‘ या त्यांच्या कथेत धोडींबा आणि राई या दलित मजूरांच्या दारिद्रयाच्या वणव्यात कांहोली होणान्या कुंटुबाची व्यथा आभिव्यक्त झाली आहे. " ?२ दलिताला मजुरीने गेल्याशिवाय पर्याय नसतो. जर

मजुरीने काम मिळत नसेल तर काय खावे असा प्रश्न निर्माण होतो, ही व्यथा त्यांनी मांडली. नागनाथ कोत्तापल्ले यांनी ग्रामीण चित्रण मांडले. त्यातून दलित जाणीव मांडली. डॉ.वासुदेव मुलाटे लिहितात, "आपले पुरोगामित्व दाखविण्यासाठी सवर्ण पुढारी दलितांना जवळ करण्याचे नाटक करतात. परंतु त्याचे खरे रुप कसे दिसून येते हे ‘चक्रव्यूह‘ या त्यांच्या कथेत आढळते" "३ या ठिकाणी पुरोगामित्वाचा,दांभिकतेचा फुगा फुटतो व त्या मूळ स्वभावाचे दर्शन घडते.

जगदीश कदम यांनीही ग्रामीण कथालेखन केले. डॉ.गंगाधर पानतावणे लिहितात, ‘आभाळ‘ या जगदीश कदमांच्या कथेत एका दलित कृषी मजूरावर कोसळलेल्या भयंकर आपत्तीचे दर्शन घडते" ${ }^{\imath \gamma}$ दलित माणूस शेती कसून आपला संसार चालवतो. अडाणी असल्यामुळे त्याला बन्याच गोष्टींचे ज्ञान नसते. त्याच्यावर जातीमुळे तर संकटे ओढवतातच, परंतु निसर्ग त्याच्यावर संकट आणतो. हे चित्रण त्यातून साकारले व बा.बोधे यांनी दलित कुटुंबातील चित्रण मांडले. त्याबद्दल डॉ.गंगाधर पानतावणे लिहितात,"‘ ‘गराडा' या व.बा. बोधे यांनी लिहिलेल्या कथेत मायलेकीचे जीवन चित्रण मांडले. दलित कुटुंबात जन्म झाल्यामुळे जीवनात वाईट मार्गाने जावे लागते ते चित्रण मांडले." ${ }^{34}$ दलित कुटुंबातील व्यक्तींना दारिद्रयामुळे वाईट मार्गाचा अवलंब करावा लागतो हे चित्रण या ठिकाणी मांडले गेले. तर ताराचंद्र खांडेकर हे बदलती जीवनमुल्ये मांडतना दिसतात. डॉ. गंगाधर पानतावणे लिहितात." ‘विसावा' या कथेत ताराचंद्र खांडेकर नामाच्या रुपातून संसार चित्र व नठ्या दलित समाजाची सोनेरी बाजू दाखवून जाते" $१ ६$ ताराचंद्र खांडेकरांनी शिक्षणामुळे दलितांच्या जीवनामध्ये सोनेरी दिवस आलेले आहेत. त्यांचे जीवन सुखावह होत आहे हेच दाखवून दिले.

अशा प्रकारे मराठी साहित्यामध्ये अनेक ग्रामीण कथाकार झाले. त्यातल्या मोजक्या कथाकारांनी आपल्या कथामधून दलित जाणिवांची मांडणी केलेली आहे. दलित जीवनाचा वेध घेऊन अनेक समस्यांची मांडणी केली. त्यातून मार्ग काढून जीवन जगण्यात धडपडणारे लोकही दाखविले आहेत. विविध प्रश्न, समस्यानां सामोरे जाऊन आनंदी, सुखावह दिवस जगणारे लोकही यातून चित्रित केलेले आहेत. दलित जाणिवा, त्यांचे वास्तव दु:ख, हाल अपेष्टा वास्तवतेच्या पातळ्वीवरून मांडल्या आहेत.

## संदर्भ ग्रंथ

१) डॉ.मुलाटे वासुदेव - ग्रामीण कथा स्वरुप आणि विकास, साहित्य सेवा प्रकाशन, औरंगाबाद, प्रथमावृत्ती जानेवारी १९९२ पृ. १२
२) मनोहर यशवंत - दलित साहित्य सिध्दांत आणि स्वरुप प्रबोधन प्रकाशन,५ नागपूर, प्रथमावृत्ती १४ जानेवारी १९७८ पृ. २
३) सकंलन / संपादन प्रा. कुलकर्णी गो.म. - दलित साहित्य प्रवाह आणि प्रतिक्रिया, मेहता पब्लिसिंग हाऊस, पुणे द्वितीयावृत्ती ऑगस्ट १९९७ पृ. १४
४) डॉ. सोमण अंजली - मराठी कथेची स्थितीगती, प्रतिमा प्रकाशन, पुणे प्रथमावृत्ती १९९५ पृ १६१
५) तत्रैव - पृ १६?
६) तत्रैव - पृ १६४
७) संपादन कुलकर्णी- अनिरुध्द अनंत प्रदक्षिणा, कॉन्टिनेन्टल प्रकाशन विजया नगर, पुणे पूर्मुद्रण २००० ८) संपादक डॉ.पानतावणे गंगाधर - अस्मितादर्श जाफेमा १९९२,वर्षे २५ क १ पृ.५

## औरंगाबाद तालुक्यातील ऐतिहासिक मंदिरे-एक अभ्यास'

प्रा. सुनिल कुंडलिकराव जाधव:इतिहास विभाग, कोहिनूर कला, वाणिज्य व विज्ञान महाविद्यालय, खुलताबाद, औरंगाबाद

महाराष्ट्रातील ऐतिहासिक दृष्ट्या अती महत्वाचे मानले गेलेले औरंगाबाद शहर व त्याचा परिसर वास्तु शास्त्राच्या दृष्टीने अत्यंत संपन्न परिसर आहे. संपुर्ण औरंगाबाद तालुका ऐतिहासिक व सांस्कृतिक परंपरा असणारा भाग समजला जातो. या भागात प्राचीन व मध्ययुगीन काळातील पुरातत्वीय अवशेष मोठ्या संख्येने आजही पाहावयास मिळतात. वेगवेगळया संस्था व व्यक्तीकडून या निरनिराळया ऐतिहासिक अवशेषांचा शास्त्रोक्त पद्धतीने अभ्यास झाला आहे आणि अद्यापही चालु आहे.

महाराष्ट्राच्या इतिहास लेखनामध्ये अनेक विद्वानांनी योगदान केलेले आहे. सुरूवात जवळ-जवळ इ.स. १८८५ इतकी मागे नेता येते. प्रिन्सिप, स्टिवन्सन, बर्जेस त्याचप्रमाणे श. गो. भांडारकर, डॉ. अळतेकर, ग. ह. खरे, गं. बा. शरदार इ. नामवंतांनी केले संशोधन मुलगामी स्वरूपाचे आहे. या सर्वांच्या लिखानांच्या आधारावरच मोठ्या प्रमाणावर महाराष्ट्राचा इतिहास उभा करता येतो. औरंगाबाद तालुक्यासारख्या भौगोलिक घटकांवर आणि त्याच्या इतिहासावर प्रकाश टाकण्याचा प्रयत्न उपरोक्त लिखानामधून झालेला आहे.

म्हणूनच औरंगाबाद तालुका असा एक छोटासा भौगोलिक घटक घेऊन तेथील दुर्लक्षित पण ऐतिहासिक व सांस्कृतिक दृष्ट्या महत्वाच्या मंदिर स्थापत्याला प्रकाशात आणून त्याचे संशोधन करण्याचा हा एक छोटासा व प्रामाणिक प्रयत्न आहे.

## संशोधनाची उद्विष्टे :

१) औरंगाबाद तालुक्यातील मंदिराचा भौगोलिक व पुरातत्वीय परीचय समाजाला करून देणे.
२) मंदिराच्या अभ्यासाच्या माध्यमातून मंदिर व परीसरातील सामाजिक, धार्मिक, आर्थिक व सांस्कृतिक आढावा घेऊन समाजात होणान्या परीवर्तनाचा वेध घेणे.
३) औरंगाबाद तालुक्यातील जी निवडक मंदिरे अभ्यासासाठी घेतली आहेत त्याचा काही निश्चित करणे व मंदिरात आढळणान्या शिल्पांचा थोडक्यात आढावा घेणे.

## मंदिर संकल्पनेचा उदय व विकास :

देव-देवता संबंधीच्या काही कल्पना मानवी मनात हजारो वर्षापूर्वी निर्माण झाल्या त्या कल्पनांचा विवास सतत होत गेला. त्या कल्पनांचे मुर्त रूप म्हणून या दैवी संकल्पनाची प्रतीके निर्माण करण्यात आली. या मुर्त संकल्पनाबद्दल मानवाला आदरयुक्त भीती होती म्हणून त्यांच्यासाठी त्याने व द्रोणासारख्या पानांची बैठक तयार करून त्यांना ओट्यावर बसविले. ऊन-पावसापासून या दैवीमूर्त कल्पनेचे संरक्षण व्हावे म्हणून त्यावर गवताचे छत तयार केले गेले. हिच मंदिर रचनेची प्राथमिक अवस्था होती.

दुसन्या टप्प्यात इतर वास्तु सारख्याच असणान्या मंदिराच्या रचनेत कालांतराने बदल होत गेला. सुरूवातीला याला ‘प्रसाद’ म्हणत असत. या प्रसादाच्या विकासाचा मोठा इतिहास आहे. गुप्त काळाच्या पूर्वीचा मंदीराच्या विकासाबाबत फारसा इतिहासी स्पष्ट होत नाही. तरी काही तुरळक साहित्य आणि पुरातत्व शास्त्र यांच्या साहायाने

काही महत्वपुर्ण सत्य समोर येतात.
गुप्त काळाच्या काठीही मंदिरे होती मात्र गुप्त काळात व त्यानंतर तीन शैलींचा ढोबळ मनाने मंदिर स्थापत्यात करण्यात येवू लागला. त्या शैली नागर, द्रविड आणि वेसर अशा आहेत, हे सांगणे यासाठी महत्वाचे आहे की, त्या आधीच्या शिलालेखात व साहित्यात या शैलींचा उल्लेख आढळत नाही. गुप्त व गुप्तोत्तर काळात यांच्यातील काही लक्षणांच्या आधारे या शैलीतील फरक दाखवण्याचा प्रयत्न केला आहे. तत्कालिन ग्रंथाच्या संदर्भातून असे दिसते की, त्यातील प्रतिकात्मक बाबी समजून घेण्यांस अवघड व अर्थगार्भित वाटतात. येथे स्थापत्य विषयातील अभ्यासविषयाची मर्यादा समोर येते.

महाराष्ट्रात उत्तरेकडील भागावर विशेषतः गोदावरीच्या उत्तरेकडील प्रदेशावर इ.स.नाच्या नवव्या शतकापासून ते चौदाव्या शतकापर्यंत जी मंदिरे निर्माण झाली त्यांना ‘हेमाडपंथी’ असे नाव प्रचलित झाले. ही विशिष्ट मंदिरशैली, रामदेव यादवांचा मंत्री हेमादी (हेमाडपंत) याने निर्माण केली अशी समजूत आहे. सामान्यपणे या मंदिराच्या विधानात गाभारा, अंतराळ मंडळ, मुख्यमंडप (एक किंवा तीन बाजूंना) स्तभं इतक्या अंगाचा समावेश होतो. या प्रकारचे सगळयात जुने मंदिर ठाणे जिल्द्यातील ‘अंबरनाथ’ येथे आहे. अमरेश्वर शिवाचे हे मंदिर चित्तराज या शिलाहार राज्याच्या काळात इ.स. १८२०च्या आसपास बांधण्यात आले. यानंतरच्या काळात या शैलीचा थोडाफार विस्तार होत गेला व नवनवीन मंदिरे निर्माण केली गेली.

औरंगाबाद तालुक्यातील आपण ज्या मंदिराचा अभ्यास करत आहोत, त्या मंदिरामध्ये साधारण: दोन चौरस हॉल ज्यात एक छोटा चौरस हा 'सभागृह’ आहे. तर दुसरा त्याहून मोठा चौरास हा 'सभामंडप' आहे. या मंदिरामध्ये स्तंभाची रचना आहे. पण त्याचा आकार हा विशाल स्तंभाच्या मानाने बराच छोटा आहे असे दिसते.

## औरंगाबाद तालुक्यातील मंदिर स्थापत्य :

औरंगाबाद तालुक्यातील ‘तेरा मंदिरे’ अभ्यासासाठी निवडलेली आहे. निवडलेल्या मंदिरापैकी चार शैव मंदिर आहेत. पाच देवीचे मंदिरे आहे व दोन मंदिरे ही जैन आहेत. त्यापैकी खंडोबाचे एक आणि शेंद्रा येथील मांगिरबाबाचे एक मंदिर आहे. त्या मंदिराचा थोडक्यात आढावा घेऊ.

औरंगाबाद शहरापासून ३७ कि.मी. अंतरावर कचनेर हे गाव आहे. कचनेर या परिसरातील चार मंदिराचा अभ्यास केलेला आहे. त्यापैकी ढगेश्वर (महादेव) गुहा मंदिर आहे. कचनेर तांडाच्या डोंगरातील दगडी गुहेत हे मंदिर वसले आहे. पांडवकालीन मंदिर असल्याच्या श्रद्धेमुके या मंदिरास समाजात धार्मिक दृष्ट्या अतिशय महत्व प्राप्त झाले आहे.

धारेश्वर (महादेव) मंदिराचा कालावधी सांगणे कठीण आहे. परंतु अतिशय जुने मंदिर आहे. धारेश्वर मंदिर हे मध्ययुगीन काळासी निगडीत असावे या मंदिराचे पूर्वीचे बांधकाम हेमाडपंथी होते. या मंदिराची कोणीही देखरेख करत नसल्यामुळे ते पडक्या स्थितीत आले होते. म्हणून नवीन मंदिर बांधण्यात आले आहे.

औरंगाबाद तालुक्यातील शरणापुर डोंगरावर भांगसी मातेचे मंदिर आहे. भांगसी मातेचे मंदिर हे प्राचिन काळापासून अस्तित्वात आहे, अशी समजूत आहे.

भांगसी मातेच्या मंदिराच्या मागील बाजूस लेणी खोदण्याचे काम अर्धवट सोडलेले आहे. आज त्याचे तीन चार स्तंभ उभे आहेत, त्यांच्याजवळ काही फुट खोलीवर चार लहान-लहान आयताकृती टाके कोरलेले दिसतात. या ठिकाणी एक राजकन्या सती गेली असावी अशी दंतकथा आहे. औरंगाबाद तालुक्यातील भांगसी मातेच्या महाराष्ट्र

शासनाने अतिशय क्षेत्राचा दर्जा दिलेला आहे.
खोडेगाव येथील रेणुका मातेचे मंदिर व सातारा येथील खंडोबाचे बांधकाम हे हेमाडपंथी आहे. तसेच सातारा परीसरातील श्री. कार्येश्वरसिद्धी (महादेव) मंदिर मनोकामना पुर्ण करणारे किंवा ठरविलेल्या कार्यास पुर्णत्वास नेणारे म्हणून प्रसिद्ध आहे. सातारा येथील खंडोबा मंदिराच्या प्रवेशद्वाराच्या डाव्या बाजूच्या भिंतीवर पोपट कोरलेले तसेच पोपटाच्या आकृतीच्यावर कमळावर ध्यानस्थ बसलेले एक व्यक्तीची मूर्ती कोरलेली आहे. ही आकृती ब्रम्हदेवाची असावी असा भास होतो. त्या मूर्तीच्या खाली दोन्ही बाजूला दोन सेवकांची आकृती कोरलेली आहे. सेवकांच्या बाजूला रथगाडीवर स्वार झालेली आकृती दाखवलेली आहे. ती आकृती अतिशय प्रसन्न, टवटवीत, तातेतवाने असल्याचे दाखविले आहे.

प्रवेशद्वाराच्या उजव्या बाजूला भिंतीवर मोराची आकृती कोरलेली आहे. त्याचबरोबर बासरी वाजविणान्या एका व्यक्तीची आकृती कोरण्यात आली आहे. त्या बासरीच्या सुरावर गोपीका नाचतांना दाखविले आहे. ही श्रीकृष्णाचीही आकृती कोरलेली असावी व त्यांच्या बासरीच्या सुरावर गवळणी नाचत आहेत असे आकृतीत दाखविण्यात आले आहे.

औरंगाबाद तालुक्यात प्रसिद्ध दोन जैन मंदिरे आहे. पहिले मंदिर श्री १००८ चिंतामणी पार्श्वनाथ दिगंबर जैन मंदिर कचनेर येथे आहे. कचनेर हे दक्षिण भारतातील जैनांचे हे तिर्थक्षेत्र अतिशय प्रसिद्ध आहे. दरवर्षी कार्तिक शु. $१ ५$ ला वार्षिक यात्रा भरते. पुर्ण भारतातून हजारो जैन भाविक श्रद्धेने यात्रेसाठी येत असतात.

तर दुसरे मंदिर श्री. १००८ संकटहर पार्श्वनाथ दिंगेबर जैन मंदिर जटवाडा येथे आहे. हे मंदिर मध्ययुगीन कालीन असावे असे येथील दंतकथावरून समजते. जटवाडा हे गाव डोंगराच्या कुशीत आहे. जटवाड्याचा परिसर हा अतिशय निसर्गरम्य आहे.

औरंगाबाद शहरातील तीन मंदिराचा अभ्यास केला आहे. खाराकुवॉ येथील महालक्ष्मी मंदिर व कर्णपुरा देवी मंदिराच्या मागे ४०० वर्षाचा इतिहास आहे. तर खडकेश्वर मंदिर व कर्णपुरा देवी मंदिराच्या मागे ४०० वर्षाचा इतिहास आहे. तर खडकेश्वर येथील खडकेश्वर महादेव मंदिर हे शहराच्या मध्यभागी वसले आहे. या प्राचीन कालीन मंदिरात महादेवांची पिंड स्थापन केली आहे. ही पिंड सुमारे ८०० वर्षापूर्वीची आहे असे पुजान्यांचे म्हणणे आहे. औरंगाबाद शहराचे पूर्वीचे नाव खडकी होते. या नावावरूनच या मंदिरास खडकेश्वर असे नाव रूढ झाले. खडकेश्वराची यात्रा महाशिवरात्रीला भरते.
निष्कर्ष :
अध्ययन विषयाचे अध्ययन पुर्ण झाल्यावर असे दिसते की, हे काम अत्यंत आनंददायक होते. मंदिरातील मूर्तीच्या अभ्यासाबाबत बोलायचे झाल्यास तो वाटतो तेवढा कंटाळवाणा नाही. मंदिराचा प्रत्येक दगड ना दगड स्वतःची एक वेगळी माहीती सांण्यासाठी आतुर असल्याचे भासत आहे.

औरंगाबाद शहरातील दुर्लक्षित परंतु ऐतिहासिक दृष्टीने महत्वाच्या ठरणान्या मंदिराचा शोध घेऊन प्रकाशात आणण्याचा प्रयत्न केला आहे. त्या मंदिरात होणान्या उत्सवावरून त्यांचे धार्मिक सामाजिकच, आर्थिक व सांस्कृतिक महत्व मांडले आहे.

मंदिराचा अभ्यास करत असतांना एक गोष्ट प्रकर्षाने जाणवली आणि ती म्हणजे मंदिरे आहे त्या स्थितीत टिकवून ठेवण्याचा प्रयत्न कोणीही केलेला दिसत नाही. एखाद्या विशिष्ट कालखंडात एखादे मंदिर बांधले गेले

असले तरी त्यात कालपरत्वे अनेक घटकांचा अंर्तभाव करण्यात आलेला आपल्याला दिसतो. हे सर्व धार्मिक आणि निःस्वार्थ भावनेतून केले गेले असले तरी त्यातून ऐतिहासिक संशोधनात अडथळा निर्माण होत गेला आहे.

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प्रा. सुनिल के. जाधवःशोध छात्र, जे. जे. टी. विश्वविद्यालय, राजस्थान

अलिजबहादुर महादजी शिंदे यांच्या आयुष्याचा जवळपास पूर्ण भाग हा महाराष्ट्रापासून दूर उत्तरेत (हिंदुस्थानात) गेला. त्यांच्या कर्तबगरीला तिकडे अनुकुल असे क्षेत्र मिळाले आणि मराठ्यांचे साम्राज्य निर्माण करण्याची त्यांची महत्वाकांक्षा पुष्कळ अंशी त्यांना साध्य करता आली. हिमालयापासून ते नर्मदेपर्यंत आपला दरारा बसविला. काही कारणांसाठी त्यांचे महाराष्ट्रात म्हणजेच पुण्यात आगमन झाले.

रामचंद्र शाहिराचा खर्ड्याचा लढाईवर रचलेला एक जुना पोवाडा आहे. त्याच्या आरंभी ‘हिंदुस्तान गुजरात सोडून शिंदे दख्खनेत आला, हुकूम केला बादशहाने त्याला' हे ध्रुपद आहे. त्यावरून महादजीच्या पुण्यास येण्याची गर्जना दक्षिणेत कशी उठली याची कल्पना येते.

महादजी प्रथम टोक्यास आले. तेथून आपल्या मुसलमान गुरूस मन्युरशहा यास भेटण्यास ते बीडला गेले. तेथून तुळजापुरास भवानी मातेचे दर्शन घेऊन आपल्या गावी म्हणजे जमगावास गेले. तेथे चार महिने विश्रांती घेऊन लोकांच्या मनातील वादळ शांती झाल्यावरच ते पुण्यास आले.

ता. १२ जून १७९ २ला महादजीनी वनवाडीस मुक्काम केला. तेव्हापासून ता. १२.०२.१९७४ पर्यंत पुण्यास राहिले. यात त्यांनी १३ जूनला पेशव्यांची भेट घेतली. २२ जूनला वकील-मुतालिकचा दरबार झाला. पुण्यात येऊन भानगडी मिळवितांना तसेच नाना व महादजीच्या जवळीकता वाढत असतांना लाखोरीच्या युद्धाचा ताण आणि पुण्यातील सततच्या हालचाली यांचा महादजीच्या प्रकृतीवर नकळत परिणाम होत होता. जूनच्या सुरूवातीस त्यांना ज्वराने घेरले. पेशवा, नाना, हरिपंत फडके त्यांची वारंवार विचारपूस करू लागले. ११ फेबुुवारी १७९३रोजी प्रकृतीत एकदम बिघाड झाला आणि दुसन्याच दिवशी म्हणजे १२ फेब्बुवारी १७९४ रोजी बुधवार माझ शुद्ध त्रयोदशीला-पुण्याजवळ वयाच्या ६७ व्या वर्षी वनवाडीस महादजीचे देहावसान झाले. महादजीने मृत्युपूर्वी काही दिवस अगोदर दौलतरावास दत्तक घेण्याचे योजिले होते. एप्रिलमध्ये दत्तक विधान झाले. आणि १० मे १७९४ रोजी ते महादजीचे कायदेशीर वारस बनले.

इ.स. १७९ २ला महादजी शिंदे यांनी एक सुंदर कलात्मक शिवमंदिर वनवाडीस आपल्या मुक्कामी बांधले होते. महादजीच्या अंतिम इच्छेप्रमाणे मंदिराच्या आवारात उजव्या बाजूस अग्निसंस्कार केले व अस्थिकलश ठेवून त्यावर त्या ठिकाणी दौलतरावाने समाधी बांधली. त्यास ‘शिंदेंची छत्रो’ असे म्हणतात. तिच्या खार्चास पेशव्यांनी ता. ५.९.१७७५ रोजी १ चाहूर जमीन छत्रीच्या लगत देवविली.

याबद्दल अधिक माहिती पेशवे दप्तरात मिळते. ती अशी, ‘दौलतराव शिंदे यांनी हुजूर विनंती केली की, आपले तीर्थरूप कै. महादजी शिंदे यांचे छत्रीचे खर्चास करार देऊन हे सनद तुम्हास सादर केली असे म्हणून त्याजवरून मौजे उरली ता. सांज्य, प्रापुणे २०५० रू. कमावले बेरजेचा मारनिलेकडे छत्रीचे खर्चास करार देऊन हे सनद तुम्हास सादर केली असे म्हणून रामचंद्र नारायण यांचे ना सनद' ही छत्री अलीकडे इ.स. १९९३ ला माधवराव जे शिंद्यांनी वाढवून टोलेजंग केली. मंदिराच्या समोर दोन मजली सभामंडपाचे काम केले. त्याचवेळी कै. श्रीमंत महादजी महाराज शिंदे यांच्या मूर्तीची मंदिरात स्थापना केली. सभामंडपाचे पुर्ण काम हे पीरबंदर

दगडातील आहे. पुण्यातील ऐतिहासिक वास्तूपैकी शिंदे छत्रीतच या दगडाचा वापर केलेला दिसतो. कै. महादजी शिंदेंनी बांधलेल्या शिवमंदिराचे बांधकाम काळापाषाण दगडापासून केलेले आहे. त्यावर अनेक कलाकृतीं अलंकारीत केलेल्या आहेत. उदा. फुलांनी, पानांनी, मंदिराच्या बांधकामावर शिवकालीन बांधकामांची छाप दिसून येते. मंदिराच्या वर चढत्या भाजणित ६७ कलश तयार केले व ते पंचधातूंनी मढविले. मंदिराच्या डाव्या, उजव्या बाजूने असे तीन दरवाजे आहेत.

मंदिराच्या आत गाभान्यात सुंदर शिवलिंग असून मागील बाजूस कै. श्रीमंत महादजी महाराज शिंदे यांची मूर्ती एक कमान तयार करून त्यात ठेवली आहे. गाभान्याच्यावरच्या बाजूस कृष्णलिला, विष्णु आवताराचे चित्रित केलेले आहे. तसेच मंदिराच्या दरवाजाच्या चौकटीवरील कमानीत सरस्वतीची सुंदर कोरीव मूर्ती आहे. मंदिराच्या दरवाजात आल्याबरोबर मंदिरात शिवलिंग व महादर्जींच्या प्रसन्न मूर्तोंचे दर्शन होते.

मंदिरासमोरील सभामंडप मध्ययुगीन राजवाङ्याप्रमाणे बांधला असून तो दोन मजली आहे. तिन्ही बाजूने खिडक्या ठेवून आत प्रकाश व हवा येण्याची व्यवस्था केली आहे. कमानी करून त्यावर सुंदर नक्षीकाम केले आहे. सभामंडपाच्या आत अनेक कमानीवजा खांब असून कमानी व खांबास सुंदर नक्षीकाम केले आहे. त्यावर नैसर्गिक हर्बल रेक्सिटिव्ह रंगाने रंगविले आहे. तो अजूनही सुंदर व उठून दिसतो. सभामंडपातील प्रत्येक खांबावर शिंदे घराण्यातील कर्तुत्ववान पुरूषांच्या त्या काळातील पेंटींग्ज केलेल्या तसबिरी आहेत. त्यात महादजी शिंदेची पण तसबीर आहे. सभागृहात स्टाईलची फरशी बसविलेली आहे.

कै. महादजी शिंदेची ‘समाधी’ (छत्री) मंदिराच्या तोंडाच्या उजव्या बाजूस असून छत्री बांधकाम चुना विटाचे आहे. त्यावर चुन्याचे प्लास्टर आहे. छत्रीच्या शिखराचे बांधकाम शिवमंदिराच्यासारखे असून पंचधातूंचा कलश आहे. थोडीफार कलाकसुरी सोडली तर छत्रीवर कसलीच कलाकसुरी नाही समाधी व शिवलिंग साध्या दगडाचे असून त्यावर कै. श्रीमंत महादजी शिंदे यांचा मुखवटा आहे. समाधीचीही दररोज आंघोळ घालून पूजा केली जाते. छत्रीच्या बाजूला ध्वजस्तंभ असून तोही पंचधातूंचा आहे. शिंदे घराण्याचे वंशज वर्षातून एकवेळेस नियमितपणे येऊन छत्रीचे दर्शन घेतात.

कै. श्रीमंत महादजी महाराज शिंदेंची फेबुुवारी महिन्यात पुण्यतिथी मोठ्या उत्साहात साजरी केली जाते. अनेक कार्यक्रम त्यावेळी ठेवले जातात. तसेच दसरा सण, उत्सव साजरा केला जातो. शंकराचे मंदिर असल्याने महाशिवरात्रीचा सणही उत्साहात साजरा केला जातो. यावेळी पालखी निघते. अनेक भाविक दुरून दर्शनास येतात. तसेच मे महिन्यात त्यांचा मुस्लिम गुरू मन्सूर शहावल्लीचा उत्सवही साजरा केला जातो. कै. श्रीमंत महादजी शिंदेच्या समाधीची मंदिराची पूजा देखरेख व सन उत्सवही साजरा करण्यासाठी सिंदोया देवस्थान ट्रस्टची नेमणूक केली आहे. तेच पूर्ण व्यवस्था अजूनही पाहते. मंदिरात पाण्याची व राहण्याची व्यवस्था आहे. शिंदेशाही छत्री बघण्यासाठी अनेक पर्यटक दुरून येतात. 'शिंदेशाही छत्री' बघण्यासाठी १ रू. तिकीट ठेवले आहे. स्वच्छतेसाठी अनेक सेवक आहेत.

शिंदेशाही छत्रीचा भाग सर्क्हे नं.७५ असून एकूण जमीन १ हेक्टर, ३ चाहार आहे. मंदिर व छत्रीच्या बाजूने साधारणतः ७ ते ८ फुटांचे वॉल कंपाऊंड दगडाचे आहे. वॉल कंपाऊंडच्या आतील जागाही ३ २७० स्क्वेअर फूट आहे. समाधीची जागा ही २० बाय २० ची आहे. मंदिराच्या बाहेर सुंदर फुलांची व फळांची गर्द झाडी लावलेली आहे. या समाधीस भेट दिल्यानंतर व त्याचे कार्य, पराक्रम अभ्यासाला नंतर आपल्या मनास स्फुर्ती

येते.

> श्रीनाथ
> य.शिन्दे कुलरत्न भूथुजबल गै गैड्र: कलिन्दात्यना मध्या दो दघि भुमिराजयमभुनक संवत्सरे वैक्रमे।
> सुद्धाशुभि: परिमिते माद्ये सिते जिद्दीने
> सभेष्वष्ट स्वर्ग कामतियों जगामस पूनरूस्थावनी शेवषे।।?।।
> स्वीयाकन्दयुतुं चिरं स्थितवतः शुभ्राद्युसप्ताड्द: भु
> भूत वैक्रमवत्सरे शानिदने जेष्ठे सिते पुष्पभे।
> पचम्या प्रवितामहस्थ महतः ः्रीमन महादजी पभो
> रिच्छन् दिव्यगति जयाजितनुजः श्रीमाधवो भुपति ।/२।। शेण्डे 'यम्बक रार्मण: कुलगुरून दैवज्ञाविइद्युतान पा क् सम्पेक्य मुदाड्क: कुण्डविद्यया चन्द्रे प्रतिष्ठाविद्यिमा यात्रासीच्छुतिशालिविप्रतिनवहै रातन्यमाते क्रत:
> वाश्चयौत्लुकै: प्रमोदपृथलैलौकै: तित्ति: सड्कूलता'।/३।।
> सिंदे कूलरत्न श्रीमन्महराजाधिराज श्री. मशि.

वनवाडी मुकामी विक्रम सम्बत १८५० माघशुद्ध १३ बुध वैकुंठवासी झाले त्याची ही छत्री त्याचे प्रप्रपौत्र महाराज माधवराव शिंदे यांनी विक्रम संवत १९८१ ज्येष्ठ शुद्ध शनिक यत्यविज प्रतिष्ठापित केली आहे. (समाजधीजवळ हा शिलालेख कोरलेला आहे.)

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## राखीव जागांच्या संदर्भात संसदेची भूमिका

डॉ. सौ. मनिषा अनिल कचवे : ३५, नेहर हौसिंग सोसायटी, देवपूर, धुळे.

## प्रास्ताविक :

भारतीय राज्यघटनेद्वारा सामाजिक न्यायाची हमी देण्यात आली आहे. डॉ. आंबेडकर म्हणतात, " सर्व व्यक्तींनी आत्मसन्मान, न्याय आणि समानतेने जीवन जगले पाहिजे" म्हणूनच राज्यघटनेच्या सरनाम्यात आणि राज्यघटनेच्या विविध तरतूददद्वारा मागासवर्गीय, महिला, अपंग, प्रकल्पग्रस्त, माजी सैनिक इ. साठी विशेष सवलती देण्यासंदर्भात तरतूद करून घटनाकारांनी भारतीय जनतेला दिलेल्या वचनाची पूर्ती केली आहे. घटनेच्या चौकटीत केलेल्या तरतुदी प्रत्यक्षात अंमलात आणतांना अनेक अडचणी निर्माण होतात. त्याचप्रमाणे बदलत्या परिस्थितीनुसार संदर्भ बदलतात. त्यामुळे त्यांचा दुष्परिणाम होऊन ज्यांच्यासाठी आरक्षणाच्या सवलती राज्यघटनेद्वारा देण्यात आल्या. त्यापासून ते वंचित राहण्याची राक्यता असते. म्हणून राज्यघटनेमधील उपाययोजनांचा हुध्द हेतू लक्षात घेऊन त्याची योग्य पध्दतीने अंमलबजावणी व्हावी, म्हणून वेळोवेळी आवरयक ते बदल करणे आवइयक असते. ती भूमिका संसदेला संपन्न करावी लागते म्हणून गेल्या ५५ वर्षात संसदेने वेगवेगळे आयोग आणि समित्या नियुक्त करुन वेळोवेळी महत्वपूर्ण बदल स्वीकारून आयोग आणि समितीच्या अहवालावर आधारित कायदे करण्याचा प्रयत्न केला आहे.

त्याचप्रमाणे आरक्षणविषयक घटनात्मक तरतुद्दींच्या संदर्भात जेव्हा कायदेशीर तरतुदींच्या विरलेषणाचा प्रइन व अमलबजावणी करतांना आलेल्या अडचणी त्यातून उद्भवलेले लवाद आणि त्या संदर्भात वेळोवेळी उच्च न्यायालय व सर्वोच्च न्यायालयाने घेतलेली भूमिका, न्यायालयाच्या निर्णयामुळे देखील आरक्षणाच्या संदर्भाच्या तरतुदींचा अर्थ स्पष्ट करण्यास मदत झाली आहे.परंतु बन्याचदा कायदेशीर आणि शाब्दिक अर्थ तपासून कायद्याच्या चौकटीत राहून न्यायालयाने जेव्हा निर्णय घेऊन आरक्षणाच्या मूलभूत उद्दिष्टाला छेद देण्याचा प्रयत्न केला तेव्हा त्या न्यायालयीन निर्णयाच्या विरोधामध्ये संसदेने विधायक भूमिका घेऊन घटनात्माक दुरूस्त्या आणि कायदेही केलेत.

मागासवर्गीयांसाठी आरक्षणाची सवलत प्रारंभिक अवस्थेत 'जात' या निकषाच्या आधारे देण्यात येऊन, अनुसूचित जाती आणि जमातींसाठी तरतूद करण्यात आली. परंतु परिस्थिती बदलत गेली, त्यानुसार लोक मागण्यांचा आढावा घेण्यासाठी संसदेच्या माध्यमातून आयोग, समित्या नियुक्त करून त्यांनी दिलेल्या अहवालातून 'जात' हा निकष सामाजिक न्याय प्रस्थापित करण्यासाठी अपुरा वाटू लागला. त्या अहवालानुसार स्त्रिया, आर्थिकदृष्ट्या मागासलेले त्यांना देखील या आरक्षणाचा लाभ दिला जावा, म्हणून संसदेने घटनात्मक बदल करून व कायदे करून जास्तीत जास्त लोकांना आरक्षण उपलब्ध करून देऊन सामाजिक न्याय प्रस्थापित करण्याचा प्रयत्न केला.

घटनेमधील तरतुदीनुसार कायदे करून त्याची अमलबजावणी करून घेणे याची मुख्य जबाबादारी जनतेचे प्रतिनिधीत्व करणान्या संसदेवर येते. डॉ. आंबेडकर म्हणतात, "संसदीय पध्दती ही व्यक्ती व समाज या दोघांच्या हिताच्या दृष्टीने सर्वोत्तम आहे. म्हणून आरक्षणाविषयक धोरणाची मिमांसा करतांना संसदेची भूमिका समजावून घेणे अतिराय महत्वाचे ठरते.

अनुसूचित जाती आणि अनुसूचित जमातीबद्दल भारतीय राज्यघटनेत कलम १४, १६, ૪६, २४૪, ३३०, ३३२, ३३५, ३३८, ३३९, ३४०, ३४१, ३४२ मध्ये तरतूद करण्यात आली आहे. राज्यघटनेच्या चौकटीत राहून कायदेमंडळाला कार्य करावे लागते. दुर्गादास बासू म्हणतात "आपल्या घटनाकारांनी उपयुक्त सिध्दांतांना तात्विक आधारावर लागू करुन सामुदायिक उन्नतीसाठी विरोष प्रयत्न केले नसते, की जे सामाजिक आणि आर्थिकदृष्टया मागासलेले आहेत तर ती त्यांची मोठी चुक झाली असती. कारण असमर्थ लोकांना सुरुवातीपासून मदत दिली नसती तर राष्ट्रला लोकराही पध्दतीने चालविणे कठीण झाले असते. वास्तवात लोकराहीतील समतेचा सिध्दांत तेव्हाच कार्य करु राकतो, जेन्हा सर्व राष्ट्रला व्यवहारात एका समान स्तरावर आणले जाईल."

राष्ट्र सर्व क्षेत्रात उत्तम विकास करु शकते. परंतु अनुसूचित जाती आणि अनुसूचित जमातीसारख्या कमकुवत वर्गाच्या संदर्भात हे म्हणता येणार नाही. कारण समाजाची मानसिकता बदलायला बराच कालावधी लागेल व अजूनही काही उपायांची गरज आहे. ते उपाय संसद करू शकते. १७ व्या कलमाच्या अनुषंगाने $१ ९ ५ ५$ साली अस्पृष्यतेच्या गुन्द्यासंबंधी संसदेने विस्तृत कायदा केला. मंदिरे, विहिरी, दुकाने, दवाखाने, शाळा, राहण्याच्या वसाहती, सार्वजनिक करमणुकीच्या जागा, व्यवसाय इ. कोणत्याही बाबतीत अस्पृष्यतेचे आचरण हा दखलपात्र गुन्हा मानण्यात आला. आंबेडकर म्हणतात, "येथे आर्थिक व सामाजिक लोकशाही नाही, फक्त राजकीय लोकराही आहे समता आणण्यासाठी संसदेने प्रयत्न केले. १९५५ या अस्पृरयता निवारण कायद्याची प्रभावीपणे अंमलबजावणी करता यावी, म्हणून सरकारने कायदे केलेत. अस्पृ३यांवर होणान्या अत्याचारापासुन त्यांना संरक्षण देण्यासाठी आणि अस्पृइयांना राज्यघटनेने व कायद्दाने जे अधिकार दिले आहेत, त्यांचा योग्य प्रकारे लाभ मिळवून देण्यासाठी हे कायदे करण्यात आलेत. त्याशिवाय अस्पृरय व समाजातील आर्थिकदृष्टया कमकुवत असलेल्या अन्य घटकांना आर्थिक सहाय्य उपलब्ध करून देण्यासाठी सरकारने अनेक योजना जाहीर केल्या. डॉ. बाबासाहेबांना असे वाटते होते, सामाजिक परिस्थिती कायद्याच्या द्वाराच बदलली जावू रकते. त्यासाठी त्यांनी हिंदू कोड बिल मांडण्याचा प्रयत्न केला. १९५५मध्ये भारत सरकारने संसदेत हिंदू कोड बिल मांडून काही तरतूद मान्य करुन घेतल्या. स्त्री-पुरुष समानता प्रस्थापित करण्यासाठी आणि स्त्रियांचे हक्क प्रस्थापित करण्यासाठी घटना दुरुस्त्या व कायदे करण्यात आलेत.

## संसदेने केलेल्या घटनादुरुस्त्या :

"'प्रत्येक पिढी म्हणजे एक स्वतंत्र राष्ट्र आहे असे मानले पाहिजे. आपल्या पिढिला बहुमताच्या आधारे बांधून घेण्याचा हक्क दिला असतो. परंतु ज्याप्रमाणे एका देशाला दुसन्या देशातील लोकांना बध्द करुन घेण्याचा हक्क नसतो. त्याप्रमाणे भावी पिढीला जखडून ठेवण्याचाहक्क आजच्या पिढीला नसतो. " जे जेफरसनचे मत खरे आहे.

काळानुरुप नव्या समस्या, प्रश्न उद्भवतात. त्यांचे निरसर करण्यासाठी संसद घटना दुरुस्ती करत असते. अनुसूचित जाती-जमाती यांच्या विकासाच्या दृष्टेने केलेल्या घटना दुरस्त्या पुढील प्रमाणे -

पहिली राज्य घटना दुरुस्ती (१९५१) - या दुरुस्तीन्वये घटनेच्या १५ व्या कलमात बदल करुन असे ठरविले की, जर राज्याने समाजाच्या दुर्बल घटकांच्या व अनुसूचित जाती-जनजातीच्या विकासासाठी विरोष सवलतीची व्यवस्था केल्यास राज्याचे ते वर्तन भेदभावकारक (discriminatory) समजले जाणार नाही.

सातवी राज्यघटना दुरुस्ती (१९५६)-१६ व्या कलमात फेरफार करुन ठरविले की, राज्याच्या वा केंद्रशासित प्रदेशात नोकरीत प्रवेश मिळविण्यासठी उमेदवार त्या राज्याचा वा प्रदेशाचा रहिवासी असणे आवइयक ठरविण्याचा संसदेला अधिकार आहे. व्यक्तीच्या समानसंधीच्या हक्कामुळे संसदेच्या अधिकारास बाधा येत नाही.

आठव्या राज्यघटना दुरुस्तीन्वये (१९६०) - ३३४ व्या कलमात आवइयक तो बदल करुन अनुसूचित जाती, जनजातीसाठी संसदेत ठेवल्या गेलेल्या राखीव जागांची, त्याचप्रमाणे अँग्लो इंडियनांना नामनिर्देशाच्या मार्गाने लोकसभेत व विधान सभामध्ये प्रतिनिधीत्व देण्यासंबंधीची कालमर्यादा दहा वर्षावरुन वीस वर्ष म्हणजे (२६ जानेवारी १ ९७० पर्यंत) वाढविण्याची तरतुद करण्यात आली.

तेविसाव्या दुरुस्तीने (१९६९) अनुसूचित जनजातींसाठी ठेवलेल्या आरक्षणास आणखी १० वर्षांनी वाढविले म्हणजे १९८० पर्यत वाढविण्यात आली.

बेचाळीसावी राज्य घटनादुरुस्ती (१९७६) - घटनादुरुस्तीने भारतीय घटनेच्या सरनाम्यात दोन महत्वाच्या शब्दांनी भर घातली. त्यात एक समाजवादी व दुसरे धर्मानिरपेक्ष होय. समाजवाद आणण्यासाठी विशिष्ट क्षेत्रांवर बहुसंख्यांक व वरिष्ठ वर्गाची पकड आहे, ती सोडवावी लागेल. डॉ. बाबासाहेब आंबेडकर म्हणतात "अस्पृ३यांच्या जमिनीच्या एकत्रीकरणाचे कायदे वा कुळकायदे या देशातील सहा कोटी अस्पृरयांना काहीच मदत करु राकणार नाहीत कारण ते तर भूमिहीन आहेत. त्यांच्यासाठी सामुदायिक शोतीचीच तरतूद घटनेत असणे आवइयक आहे. "

झोषणमुक्त समाज निर्माण करण्यासाठी, समता आणण्यासाठी ही राज्यघटना दुरुस्ती महत्वाची आहे. आरक्षणांशी संबंधित घटनादुरुस्तीची संख्या बरीच मोठी आहे. त्याच अनुसूचित जाती आणि अनुसूचित जमाती (जनजाती) यांना जी राजकीय आरक्षणे आहेत. त्याची कार्यमर्यादा वाढवणान्या तीन घटनादुरुस्ती झाल्यात. पंचेचाळीस राज्यघटना दुरुस्ती १०८०-१९९० मध्ये मंजूर करण्यात आल्या. त्यापैकी प्रत्येकीने त्या आरक्षणाची मुदत दहा वर्षांनी वाढवली. विद्यमान तरतुदींनुसार २४ जानेवारी २०१० पर्यंत ही आरक्षणे आहेत. लोकसभेत ५४२ जागामध्ये ७९ जागा अनुसूचित जातीसाठी आहेत, $४ ०$ जागा अनुसूचीत जमातीसाठी आहेत. विधानसभामधील तसेच केंद्रशासित प्रदेशांमध्ये एकूण ३९९७ जागामध्ये ३१५ जागा राखीव आहेत. १९८૪ ची $५ १$ वी घटनादुरुस्ती ही लोकसभा व विधान सभामधील अनूचित जाती व जमातीच्या राखीव जागांशी संबंधित आहे.

१९८७ च्या सत्तावन्नाव्या घटनादुर्स्तीनुसार नागालँड, मेघालय, मिझोराम आणि अरुणाचल प्रदेशा येथील अनुसूचित जनजारींना लोकसभेत तसेच नागालँण्ड व मेघालय यांच्या विधान सभेमध्ये आरक्षण मिळाले १९९२ ची ७३ वी व ७४ वी घटना दुरुस्तीत राखीव जागांची तरतूद केलेली आहे. १९६१ च्या लोकसंख्येच्याप्रमाणानुसार स्थानिक शासन संस्थेत राखीव जागांची तरतूद केलेली आहे. कलम २४३ (ड) नुसार १९९२ साली महिलांना ३०\% राखीव जागा या हासन व्यवस्थेत होत्या, तर १९९४ साली ३३\% राखीव जागा करण्यात आलेल्या आहेत. तसेच राखीव जागा असणारे मतदार संघ चक्राकार (Rotation) पध्दतीने निरिचत करण्यात आले. त्याप्रमाणे अपंग, विधवा स्त्रिया, अनुसूचित जाती-जमाती यांच्यासाठी कल्याणकारी कार्यक्रम आखण्याचे अधिकार राज्यघटनेच्या कलम २४३(ग) नुसार पंचायत राज व्यवस्थेला मिळाले.

७४ व्या राज्यघटना दुरुस्तीनुसार शहरी शासन व्यवस्थेत स्त्रियांना ३३\% राखवी जागा ठेवण्यात

आल्या. १९९५ ची ७७ वी राज्यघटना दुरुस्ती व २००० ची ८१ वी व ८२ वी राज्यघटना दुरुस्ती या तिन्ही दुरुस्त्या सरकारी पदावर आरक्षण पात्र वर्गांना समानसंधी मिळण्याइी संबंधित आहे. यात केंद्र किंवा राज्यातील कार्यांच्या संबंधित पदावर किंवा सेवांसाठी नेमणूक करण्याच्यावेळी प्रशासकीय तत्वतेची पातळी ठेवतांना अनुसूचित जाती व जमातीच्या हक्कांविषयी (दावा) विचार केला जाईल. अखिल भारतीय सेवांच्या खुल्या स्पर्धेंवर भरण्यात येणान्या जागा किंवा इतरप्रकारे होणान्या भरतीच्या जागा (दोघांमध्ये) ७.५ प्रतिशत जागा अनुसूचित जाती-जमातीसाठी राखीव आहेत. राज्यामधील अनुसूचित जाती जमातीच्या लोकसंख्येनुसार जागा राखीव ठेवल्या जातात. २००० सालच्या ८૪ व्या राज्यघटना दुरुस्तीने अशी तरतूद केली आहे की, पंचायत शासनसंस्थांमध्ये अनुसूति जातीसाठी असणारे आरक्षण अरुणाचल प्रदेशात लागू होणार नाही. २००२ सालची ८५ वी राज्यघटना दुरुस्तीनुसार पदोन्नतीला लागू असलेल्या आरक्षणाच्या संदर्भातील जेष्ठता क्रमाचा उल्लेख करण्यासाठी केली आहे.

अभाप्रकारे अल्पसंख्यांक विकासापासून वंचित अशा नागरिकांसाठी संसदेने वेळोवेळी राज्यघटना दुरुस्त्या केल्या आहेत.

## मागासवर्गीयांचा अभ्यास करण्यासाठी नेमलेल्या समित्या (आयोग) :

ब्रिटिशांच्या काळात $१ ९ १ ९$ मध्ये भारतीय पातळीवर मागासवर्गीयांच्या सुधारणांसाठी पहिले पाऊल टाकले गेले. माँटेग्यू चेम्सफोर्ड सुधारणा लागू करण्यात आल्या. १९३१ च्या रिरगणती नंतर ‘दलित’ हे नाव बदलून बाह्य जाती असे ठेवण्यात आले. १९३५ पासून वेगळे राजकीय प्रतिनिधीत्व देण्यास प्रारंभ झाला. १९४३ पासून केंद्र सरकारच्या नोकज्यात आरक्षण व्यवस्थेला सुरुवात झाली.

## कालेलकर आयोग :

स्वातंत्र प्राप्तीनंतर मागासवर्गीय जाती जमातीसाठी भारतीय स्वातंत्रानंतर केंद्र सरकारने नेमलेला पहिला आयोग म्हणजे काका कालेलकर आयोग होय. घटनेच्या ३४० व्या कलमनान्वये २९ जानेवारी १९५३ साली राष्ट्रपतींनी एक वटहुकूम काढून काका कालेलकर आयोगाची स्थापना केली. या आयोगाने ३० मार्च $१ ९ ५ ५$ ला अहवाल सादर केला. त्यांनी रिफारझी केल्या की, मागासवर्गीयांची लोकसंख्या निरिचत करणे, सर्व स्त्रियांचा मागासवर्गीयांमध्ये समावेश करणे, सर्व तांत्रिक व औद्योगिक शिक्षण संस्थामध्ये मागासवर्गीयांसाठी $७ ० \%$ जागा राखीव ठेवणे सरकारी नोकज्यांमध्ये मागासवर्गीयांसाठी राखीव जागा ठेवणे इत्यादी.

काका कालेलकर आयोग आपला अहवाल सर्वसंमतीने सादर करु शकला नाही. १९५६ मध्ये संसदेच्या दोन्ही सभागृहात हा अहवाल मांडण्यात आला. पण संसदेत त्याच्यावर कोणत्याही प्रकारची चर्चा झाली नाही. ७ एप्रिल १९५९ रोजी या विषयावर राज्यांच्या प्रतिनिधींची एक परिषद आयोजित करुन त्यावर विचारविनिमय करण्यात आला. त्याप्रमाणे गृहखात्याने राज्यांच्या अधिकान्यांची बैठक घेतली, त्यातून कोणतीही फलनिष्पत्ती होऊ इाकली नाही.

## ढेबर अयोग :

काका कालेलकर आयोगानंतर हा आयोग नेमण्यात आला. अनुसूचित क्षेत्र आणि अनुसूचित जाती जमाती आयोग त्याचे अध्यक्ष यु. ऐन. ढेबर हे होते. या आयोगाची नियुक्ती राष्ट्रपतींनी केली. (२८/०४/१९६०) त्यांनी म्हटले की, "संविधानाच्या मुलभूत साच्याचा विचार केला तर यात कुठेही कमी

नाही. संविधानाने केवळ १० वर्षासाठीच राखीव जागा दिलेल्या होत्या. हे निरिचत करतांना प्रभावी उपाय योजनेवर भर दिला परंतु प्रभावी उपाययोजना होऊ न इाकल्यामुळे त्याची मुदत परत वाढविण्यात आली. जर प्रभावी अमंलबजावणी झाली तर राखीव जागा ठेवण्याचा जो उद्देश घटनाकाराचा होता तो पूर्ण होईल."

१९६१ साली अध्यक्ष श्री. यु. एन. ढेबर, (रिपोर्ट पृष्ठ स. ३५) अनुसूचित क्षेत्र आणि अनुसूचित जाती-जमाती आयोग संसदेने अनुसूचित जाती आणि अनुसूचित जमातीच्या कल्याणासाठी नेमलेली संसदीय समिती यांचे अध्यक्ष संसद सदस्य श्री. के. प्रधानी हे होते. संसदेने हा आयोग नेमला तो १९६८ नेमला.

## मंडल आयोग :

काका कालेलकर आयोगाच्या अहवालातील त्रुटी दूर करण्यासाठी २० डिसेंबर १९७८ ला संसदेने दुसरा मागासवर्गीय आयोग नेमण्याची घोषणा केली. १९८० ला मंडल आयोगाने आपला अहवाल राष्ट्रपतींना सादर केला. "मंडल आयोगाने तयार केलेल्या यादीतील प्रत्येक जात एकजिनसी व संलग्न असली तरी सामाजिक व रैक्षणिक दृष्ट्या त्या (जाती) एकसारख्या मागासलेल्या नाहीत."

मंडल अहवाल केंद्र सरकारला सादर केल्यानंतर सुमारे दीड वर्ष तो लोकसभेपुढे चर्चेला ठेवण्याचे टाळले. मंडल आयोगाच्या शिफारहीसाठी लोकसभेत व बाहेर जन आंदोलने झाली. म्हणून ३० एप्रिल १९८२ ला केंद्र सरकारने लोकसभेत अहवाल सादर केला. मंडल आयोगाच्या या रिफाररी म्हणजे ओबीसींच्या मुक्तीसाठी जाहीर केलेली हक्कांची सनद होय." नंतरच्या काळात अनेक रिफाररी स्वीकारण्यात आल्या. मंडल आयोगाच्या रिफाररीवरुन देशात ठिकाठिकाणी जे भयंकर वादळ उठले त्याने १९८० नंतरच्या राजकारणाचा नूरच पालटून टाकला.

## संविधान पुनर्विलोकन आयोग :

राष्ट्रीय लोकराही आघाडी सरकारने मार्च २००० मध्ये संविधानाच्या पुनर्विलोकन करण्यासाठी एक राष्ट्रीय आयोग नेमला. २००२ ला या अयोगाने सरकारला शिफाररी सादर केल्या. "अनुसूचित जाती आणि अनुसूचित जनजाती यांना देण्यात आलेल्या राखीव जागांची अंमलबजावणी अधिक कार्यक्षमपणे व निदोषपणे करण्याच्या हेतूने आयोगाने केलेल्या काही शिफारशी विचारात घेण्याजोग्या आहेत. " त्या शिफाररी पुठील प्रमाणे - राखीव जागांशी संबंधित सर्व बाबींची दखल घेणारा एक सर्वसमावेशक कायदा केंद्दसरकारने करावा, त्या कायद्यान्वये एका राखीव जागा न्यायाधिकरणाची स्थापना करावी. त्या न्यायाधिकारणाने सरकारी सेवा, सार्वजनिक क्षेत्र, बँका व अन्य वित्तीय संस्था इं. मधील राखीव जागाच्या अंमलबजावणीइी संबंधित तंटयाचा त्वरित निपटारा करावा. या न्यायाधिकारणाला उच्च न्यायालयाचा दर्जा असावा आणि त्याला निर्णया विरुध्दचे अपील केवळ सर्वोच्च न्यायालयाकडेच करता यावे. न्यायाधिकारणावर नेमणूका करतांना संबंधित व्यक्तीचा राखीव जागाच्या अंमलबजावणीसाठी पूर्व इतिहास लक्षात घेतला जावा. राखीव जागांची अंमलबजावणी जाणूनुुजून टाळणे हा रिक्षापात्र अपराध ठरवला जावा नेमणूक व पदोग्रती यात मागासवर्गीयांना सवलती द्याव्यात. डॉ. आंबेडकरांचे अनुयायी स्वत:ला म्हणवणान्या ज्या पुढान्यांनी संविधान पुनर्विलोकन आयोगाला विरोध केला होता, त्यांच्याैैकीही कोणीही आयोगाच्या या शिफारशीवर अद्याप भाष्य केलेले नाही."

## संदर्भ ग्रंथ :

०१. अग्रवाल - गांधी एक आंबेडकर - राजनीतिक एवं सामाजिक चिन्तन, रितु पब्लिकेशन, जयपूर.

० २. देशापांडे म. द. - डॉ. आंबेडकर यांचे राजकीय विचार, लोकवाड्मयगृह, मुंबई.
$\circ$ ३. युवा संघर्ष - फुले-आंबेडकर शताब्दी विऐोषांक ९०-९१.
०४. आंबेडकर बी. आर. - एतिहिलेशेन ऑफ कास्ट, चेकर एण्ड कम्पनी, बम्बई १९ ३६.

## बंजारा समाजाच्या परिणामकारक राजकीय सहभागाच्या मर्यादा : विरोष संदर्भ मराठवाडा

प्रा. अंकुरा अंबादासराव चव्हाण : (राज्यइास्त्र विभाग) मत्स्योदरी रिक्षण संस्थेचे, कला महाविद्यालय, तीर्थपूरी, ता. घनसावंगी, जि.जालना

बंजारा समाज हा भारतीय समाजाचा एक अविभाज्य घटक आहे. देरातील २ ३ घटक राज्य आणि ३ केंद्नरासीत प्रदेरात तो वास्तव्यास असून अनेक नावाने ओळखला जातो. या समाजामध्ये अनेक उपजाती आहेत. हा समाज पूर्वीपासून भ्रमणइील राहिलेला आहे. पंरतु मागील रांभर वर्षाच्या काळात तो स्थिरावला आहे. त्यामुळे त्यांच्यामध्ये चांगले रिक्षण आणि जीवन जगण्याच्या योग्य साधनांची इच्छा वा आकांक्षा निर्माण झालेली आहे. मुलत: शौर्य, काटकपणा, संघर्षशीलता हा समाजाचा स्थायीभाव आहे. या समाजामध्ये अनेक सुधारक झाले त्यापैकी मराठवाड्यातील पहिले समाज सुधारक कै. बठीराम हिरामण राठोड (किनवट) यांनी कोणत्याही प्रकाराच्या सामुदायिक संघटेची स्थापना न करताही खन्या अर्थाने समाज सुधारण्यासाठी चळवळीच्या माध्यमातून जनजागृती सुरु केली. वेराभुषा बदल करणे, रिक्षणाला प्रारंभ करणे, व्यसनाधिनता नष्ट करणे व तांड्यातील लोकानी स्थिर जीवन जगावे यासाठी त्यांनी अहोरात्र परीश्रम केले. ${ }^{\text { }}$

बंजारा या राब्दाच्या उत्पती विषयी अनेक मतमतांतरे आहेत. बंजारा हा राब्द बन+ज+अरी अरा तीन राब्दापासून बनलेला आहे. 'बनज' याचा अर्थ वाणिज्य किंवा व्यापार असा होतो. ${ }^{3}$ एन्थोवेनच्या मते "बंजारा न तो केवल जंगलमे घुमनेवाला है । और नही चावल ले जानेवाला, बनजारा की सही उत्पती पंजाबी के बनज या वजन शब्द से है'।

महाराष्ट्रत बंजारा समाजाची लोकसंख्या सुमारे $५ ०$ लाख आहे. तर संपूर्ण भारतात बंजारा समाजाची लोकसंख्या सुमारे ७ कोटी आहे. हा समाज भारता बरोबरच जगातील १ २ ते १ ७ देशामध्ये "रोमा जिप्सी" या नावाने वास्तव्य करतो आहे. बंजारा समाजाच्या सुधारणा चळवळीची सुरुवात खन्या अर्थाने बळीराम हिरामण राठोड, फुलसिंग नाईक, बाबसिंग दगडूसिंग राठोड, हिरामण पवार, ताराचंद नाईक निर्माण झाले. तब्बल २ ३ वर्ष सतत महाराष्ट्राच्या राजकारणात राहून त्यांनी बहूजन समाजाबरोबर बंजारा समाजालाही विरोष महत्व मिळवून दिले.

महाराष्ट्रात एकूण सहा विभागपैकी मराठवाडा हा एक विभाग होय. यामध्ये औरंगाबाद, जालना, परभणी, हिंगोली, नांदेड, बीड, लातूर, उस्मानाबाद असे एकूण आठ जिल्हे असून औरंगाबाद हे विभागीय राहर आहे. या वीभागात अनेक प्रकारच्या जाती वा समूह वास्तव्य करुन आहेत. यातील बंजारा हा एक भटका व विमुक्त समाज आहे. मराठवाङ्यात ज्या बंजारा तांड्याची लोकसंख्या जास्त आहे. त्या ठिकाणी स्वतंत्र ग्रामपंचायतीचा दर्जा देण्यात आलेला आहे. स्वतंत्र मतदारसंघ, राजकारणात स्त्रियांचा सहभाग लोकराही पध्दतीने मतदानाची सोय या नव्या संकल्पना तांडा संस्कृतीमध्ये अस्तित्वात आलेल्या आहेत. पूर्वी या समाजामध्ये राजकीय व्यवस्थेत स्त्रियांचा सहभाग नगण्य होता. परंतु आज तो कमी अधिक प्रमाणात निर्माण होत आहे. तरी लोकसंख्येच्या प्रमाणात या समाजाला प्रतिनिधीत्व मिळालेले नाही. ज्याप्रमाणे माळी समाजात छगन भुजबळ समता परिषदेच्या

माध्यमातून समाज प्रबोधन करीत आहेत．वंजारी समाजात खा．गोपीनाथ मुंढे यांचे नेतृत्व आहे．दोन्ही समाजात रिक्षणाचे प्रमाण जास्त आहे म्हणून महाराष्ट्रच्या राजकीय सत्तेत या समाजाचे प्रभूत्व जाणवते．परंतु बंजारा समाज आज मराठवाङ्यात मोठ्या प्रमाणात असूनही राजकीय व्यवस्थेमध्ये त्यांचा परिणामकारक सहभाग निर्माण झालेला नाही．त्यामुळे समाजात सर्वसमावेशक अशा नेतृत्वाची पोकळी निर्माण झालेली दिसून येते．

तक्ता क्र．？
मराठवाडच्याच्या राजकीय प्रक्रियेमध्ये बंजारा समाजाचा सहभाग

| जिल्हा | $\begin{gathered} \text { लोकसभा } \\ \% \end{gathered}$ | $\begin{gathered} \text { विधानसभा } \\ \% \end{gathered}$ | जिल्हा परिषद \％ | पंचायत समिती \％ | $\begin{gathered} \hline \text { ग्रामपंचायत } \\ \text { \% } \end{gathered}$ | $\begin{aligned} & \text { नगर पालिका } \\ & \text { \% } \end{aligned}$ | $\begin{gathered} \text { महानगर } \\ \text { पालिका } \\ \text { \% } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| नांदेड | निरंक | १（११．११） | ७（१०．९૪） | १५（१२．०९） | く९५（८．३९） | ૪（१७．००） | निरंक |
| परभणी | निरंक | निरंक | २（३．८५） | ३（२．८८） | ३०૪（५．५३） | ३（८．३ ३） | निरंक |
| हिंगोली | निरंक | निरंक | १（२．00） | १（ 9.00 ） | २ २ ५（५．२२） | निरंक | निरंक |
| जालना | निरंक | निरंक | ३（५．४५） | ९（९．૪७） | ૪५५（७．१ २） | १（१．८५） | निरंक |
| औरंगाबाद | निरंक | निरंक | १（१．६७） | ५（૪．३ ७） | ૪०१（६．०१） | निरंक | २（२．०२） |
| बीड | निरंक | निरंक | १（१．६९） | निरंक | ३९८（4．0く） | निरंक | निरंक |
| लातूर | निरंक | निरंक | १（ ．७ २） | निरंक | २५५（३．९६） | २（३．२२） | निरंक |
| उस्मानाबाद | निरंक | निरंक | निरंक | ३（२．७く） | १८३（३．૪९） | २（११．७६） | निरंक |

स्र्रोत ：नांदेड，परभणी，हिंगोली，जालना，औरंगाबाद，बीड，लातूर，उस्मानाबाद या सर्व जिल्हयातील जिल्हा परिषद，पंचायत समिती，नगर पालिका व काही महानगर पालिका यांचे सामान्य प्रशासन विभाग आणि लोकसभा，विधानसभा यांचे हासन राजपत्र २०१००

वरील तक्स्यानुसार असे निदर्शनास येते की，नांदेड जिल्हयातील एकूण ९ विधानसभा सदस्यांपैकी बंजारा समाजाचा १（११．११）सदस्य आहे．जिल्हयातील किनवट या मतदार संघात बंजारा समाज मोठ्या प्रमाणात आहे．त्यामुळे राष्ट्रवादी काँग्येसचे शराद पवार यांनी दूरदृष्टी ठेवून समाजाला येथे उमेदवारी दिली आणि विजय संपादन केला आहे．येथील हदगाव，देगलूर，किनवट，मुखेड नगर परिषदेत प्रत्येकी १（५．८८）जिल्हा परिषद ७（१०．९४）पंचायत समिती १५（१२．०९）ग्रामपंचायत ८९५（८．३९）हा राजकीय सहभाग मराठवाङ्यातील बंजारा समाजाच्या इतर जिल्हयाच्या राजकीय सहभागाच्या तुलनेत सर्वाधिक आहे．तसेच हिंगोली लोकसभा मतदारसंघाचे दीर्घकालीन नेतृत्व या समाजाचे मा．खा．उत्तमराव राठोड यांनी इ．स．१९८० ते $१ ९ ९ ०$ पर्यत सलग दोन वेळा नेतृत्व केले आहे．

मराठवाड्यातील इतर जिल्हयाच्या तुलनेत उस्मानाबाद जिल्हयात सर्वात कमी प्रमाणात बंजारा समाज वास्तव्यास आहे．येथील ८ पैकी ५ तालुक्यामध्ये ग्रामपंचायतीच्या सत्तेत त्यांचा सहभाग आहे．पंरतु वाशी，भूम， परंडा या तालुक्यात समाजाचा ग्रामपंचायत आणि जिल्हा परिषदेमध्ये सहभाग आढळून आलेला नाही．

मराठवाड्याच्या राजकीय प्रक्रियेचा बंजारा समाजाच्या अनुषंगाने विचार केला असता २००९ च्या लोकसभेमध्ये एकही प्रतिनिधी नाही．तर विधानसभेत केवळ एक आहे．नागरी स्थानिक स्वराज्य संस्थेत अत्यल्प आहे．ग्रामीण स्थानिक स्वराज्य संस्थेत समाजाचा काही प्रमाणात सहभाग दिसून येतो．पंरतु अपेक्षित असा नाही． एकूणच समाजाचा राजकीय सहभाग अतिराय कमी आहे．याला समाजाच्या महिला देखील अपवाद नाही．समाज आजपर्यत राजकीय दृष्टया अविकसित राहिलेला आहे．त्यांच्यामध्ये राजकीय सामाजिकीकरणाची प्रक्रिया

अतिशय हळ्बवार आहे. मुलत: इतर प्रगत समाजापासून दूर डोंगर दन्यात उदरनिर्वाहासाठी भटकत राहिल्यामुळे व त्यांची भटकण्याची प्रवृती कायम असल्यामुके त्यांना राजकीय प्रक्रियेचे महत्व समजलेले नाही. समाजात जे काही थोडे नेतृत्व उदयास आले आहे. पंरतु त्यांना राजकीय पाठबळ मिळालेले नाही. त्यामूळे बंजारा समाजाच्या परिणामकारक राजकीय सहभागाच्या काही मर्यादा आहेत.

## १) उच्च रिाक्षितांचे अत्यल्प प्रमाण :

बंजारा समाजामध्ये उच्च रिक्षितांचे प्रमाण अत्यल्प आहे. उच्च रिक्षणामुळे विकास कार्याकडे पाहण्याच्या दृष्टिकोनात बदल होत असतो. पुरोगामी दृष्टिकोनामुळे समाजाचे सामाजिक आणि आर्थिक प्रइन सोडविण्यास मदत होत असते. रिक्षणाच्या बळावर नेता आपले विचार लोकांना पटवून देतात त्यातून समाज परिवर्तन घडून येते. रिक्षण हे सर्वागीण विकासाचे प्रभावी साधन आहे. परंतु या बाबतीत समाजामध्ये असलेले अत्यल्प प्रमाण हे त्यांच्या परिणामकारक राजकीय सहभागातील मर्यादा ठरते आहे.

## २) आर्थिक कमकुवतता :

राजकारणामध्ये आर्थिक बाजू बळकट असणे नेतृत्वासाठी आवइयक झाले आहे. त्यामुळे केवळ श्रीमंत कुटुंबाचे लोकच नेते होऊ राकतात. अरी धारणा निर्माण झाली आहे. व्यक्तीच्या जीवनात त्याच्या आर्थिक दर्जाला अनन्य साधारण महत्व प्राप्त झाले आहे. ज्या समाजाच्या लोकांच्या अन्न, वस्त्र, निवारा या प्राथिमक गरजा जेथे पूर्ण होत नसतील तेथे त्यांच्याकडून कोणत्याही प्रकारची परिणामकारक राजकीय सहभागाची अपेक्षा करता येणार नाही.

## ३) राजकीय पक्षाचा नकारात्मक दृष्टिकोन :

सन २००९ त्या विधानसभा निवडणुकीत राष्ट्रीय काँग्पेस, भाजपा, शिवसेना, मनसे या महत्त्वाच्या राजकीय पक्षांनी या समाजाला एकही विधानसभेची उमेदवारी देऊन निवड्ून आणण्याचा प्रयत्न केला नाही. मात्र राष्ट्रवादी काँग्रेसने बंजारा समाजाच्या प्रदीप नाईक यांना किनवट विधानसभेची उमेदवारी देऊन निवडून आणले आहे. परंतु इतर राजकीय पक्षांचा समाजाप्रती दृष्टीकोन नकारात्मक दिसून येतो.

## ૪) असंघटितपणा :

कोणत्याही समाजाचे राजकीय हीत संबंध नव्हे तर सर्वागीणहित संबंधाची पूर्तता करण्यासाठी त्यांच्याकडून संघटितपणे प्रयत्न होणे गरजेचे आहे. परंतु मराठवाड्यातील बंजारा समाजामध्ये संघटितपणाचा अभाव असल्याचे दिसून येते. त्यामुळे त्यांचा परिणामकारक राजकीय सहभाग निर्माण होऊ राकलेला नाही.
५) समाजाची मर्यादीत लोकसंख्या :

लोकशाहीत निवडणुकीमुळे लोकसंख्येला अतिशाय महत्व प्राप्त झाले आहे. त्यामुळे बंजारा समाजाची मर्यादीत असलेली लोकसंख्या ही त्यांच्या परिणामकारक राजकीय सहभागाची मर्यादा आहे.
६) समाजामध्ये राजकीय प्रबोधनपर चर्चासत्रे, जनजागृती, व्याख्याने यांचा अभाव :

बंजारा नेत्यांनी राजकीय व्यवस्थेविषयी समाजात जनजागृती केलेली नाही. समाजाचे राजकीयीकरण सामाजिकीकरण प्रभावीपणे झालेले नाही. व्याख्याने, जाहीर सभा, राजकीय पक्षाचे प्रचार साहित्य पुस्तिका, मोर्चे, परिषदा, प्रबोधनपर भाषणे, चर्चा सत्रे यामुळे समाजातील लोकांच्या राजकीय ज्ञानात भर पडते. त्यातून परिणामकारक राजकीय सहभाग निर्माण होत असतो. परंतु या बाबतीत समाज बहूतांशी अनभिज्ञ आहे.

## ७) रिक्षण प्रक्रिया समाजाच्या तळपातळीवर विकसित करणे :

रिक्षण हे मनुष्याच्या विकासाचे प्रभावी साधन आहे. यामध्ये शाळा, महाविद्यालय ही केवळ ज्ञानाची केंद्र नाहीत तर सामाजिकीकरणाची प्रमुख परिणामकारक माध्यमे आहेत. त्यामध्ये राज्यहासन, राजकीय पक्ष, राजकीय व्यवस्था, इत्यादी गोष्टी ते रिकतात. त्यामधून प्रभावी राजकीय सामाजिकीकरण घडून येते. प्रयोगात्मक अभिरूप (Mock) संसद, शाळठ, समिती, विद्यार्थी नेत्यांची निवडणुक यातूनच आदर्श राजकीय आणि सामाजिक संस्थांची ओळख होते. ${ }^{\circ}$ परंतु समाजाच्या राजकीय नेत्यांनी रिक्षण प्रक्रिया समाजाच्या तळपातळीवर विकसित त्यामुळे त्यांचा परिणामकारक राजकीय सहभाग निर्माण होऊ इाकलेला नाही.

## ८) वैचारिक मागासलेपणा :

बंजारा समाज आज राजकीयदृष्टया दिशाहीन आहे. राजकारणातील प्रइन समस्या सोडविण्याबाबत एकूण समाजाचे म्हणून कोणतेही नियोजन किंवा सर्वपक्षीय समन्वय असलेले दिसून येत नाही.

## ९) अंधश्रध्दा :

अंधश्रश्देपोटी देवी देवतांना बकरे बळी देणे, नवस करणे, पूर्वजांना मद्याचे नैवद्य देणे इत्यादी अनिष्ट चालीरीती रूढी परंपरा बंजारा समाजाला मागे नेणान्या आहेत. अज्ञान, अंधश्रध्देला तिलाजंली दिल्याशिवाय या समाजाचा परिणामकारक राजकीय सहभाग निर्माण होणार नाही.
सारांश : मराठवाड्यातील बंजारा समाज रोती आणि मजुरीझी जोडलेला आहे. तो आर्थिकदृष्टया खुप दुर्बल आहे. तसेच अनेकविध समस्यांनी ग्गासलेला आहे. त्यामुळे आर्थिक दुर्बलता, निरक्षरता, राजकीय जाणिवांचा अभाव, मतदान प्रक्रियेविषयीची उदासीनता, व्यसनाधिनता, हुंडा पध्दती, वाईट रुढी परंपरा, भ्रष्ट झालेली सामाजिक व्यवस्था, स्वार्थी समाज नेतृत्व इत्यादीमुळे राजकीय प्रक्रियेमध्ये परिणामकारक प्रभाव समाजाचा दिसून येत नाही. बहूसंख्य प्रमाणात तांड्यावर राहत असलेला हा समाज आपल्या वैविध्यपूर्ण सांस्कृतिक वारशाचे जतन करून आधुनिक प्रवाहाइी करा पध्दतीने जोडल्या जावे या विचारात आहे. त्यामुळे सामाजिक, आर्थिक, राजकीय, सांस्कृतिक इत्यादी प्रकारच्या समस्या सोडिवण्यासाठी नेतृत्वाने आणि शासनाने चांगले सहकार्य करून समाजाने अधिक सजग व्हावे आणि आपला विकास करून घ्यावा असे दिसून येते.
संदर्भ सूची :
१. पांडे अनिलकुमार, बुधन बंजारा विरोषांक नोन्हेंबर - जानेवारी २००४ प्रकाशाक महापंडित राहूल सांस्कृत्यायन प्रतिष्ठाण, दिल्ली.
२. बळीराम हिरामण राठोड, गोर बंजारे लोकांचा इतिहास, प्रकाशाक ब. पा. स्मारक समिती, यवतमाळ, १९७३.
३. आ. क. राठोड, गोर बंजारा इतिहास व लोकजीवन, गोरवट प्रकाइन मोहा, प्रथम आवृत्ती १९९४, पृष्ठ क्र.१,२.
૪. एन्थोवेन - ट्राईब्स एण्ड कास्टस ऑफ बाँम्बे भाग २, पृष्ठ क्र. २२.
५. फुलसिंग जाधव, (संपादक) गोरवाणी (स्मरणिका) प्रकाइान संयोजन समिती, पहिले गोरबंजारा साहित्य संमेलन, औरंगाबाद, जानेवारी २००३.
६. पंजाब चव्हाण, बंजारा हस्तकलेची झोकांतिका, गौरव प्रकाइन, अमरावती, २००८.

## प्राथमिक स्तरावरील विद्यार्थ्यांना पारंपारिक अध्यापन पद्धती आणि तंत्रज्ञानाद्वारे अध्यापन एक तौलनिक अभ्यास

प्रा. एस. एस. खुळे, प्रा. के. वाय. करजगांवकर आणि प्रा. एस. एच. कांबळे: सहयोग सेवाभावी संस्थेचे अध्यापक विद्यालय, विष्णुपूरी, नांदेड.

## प्रस्तावना :

शिक्षणाचा प्रमुख हेतू विद्यार्थ्यांच्या व्यक्तिमत्त्वाचा सर्वांगिण विकास होय. या सर्वांगिण विकासामध्ये व्यक्तिगत विकास आणि सामाजिक विकासाचा समावेश होतो. विकासाच्या माध्यमातून शिक्षण हे आजन्म सुरु राहते. या शिक्षण देणान्या अनेक वाहिन्या किंवा संस्था आहेत. उदा : घर, शाळा, शेजारी, वृत्तपत्रे, रेडिओ, टी. व्ही., चित्रपट, संगणक इत्यादी यानुसार आयुष्य हे परिवर्तनशील बनते. शिक्षण म्हणजे ज्ञानसाधना आणि ज्ञानसाधना म्हणजे वर्तन बदल होय. हा वर्तनबदल पुर्वानुभवांवर अवलंबून असतो. ज्ञानानुभवाचे मूळ आहे ‘संवेदना’. संवेदनेतून अनुभव समृद्धी होत जाते.

| आपण खालील प्रकारे शिकतो |  |  | आपण लक्षात ठेवतो |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| डोळे | - | く३\% | पाहतो | - | ३ ०\% |
| कान | - | १ १\% | ऐकतो | - | २ \% \% |
| नाक | - | ३.40\% | पाहुन ऐकतो | - | 40\% |
| त्वचा | - | 9.40\% | बोलतो | - | く0\% |
| जीभ | - | १.00\% | बोलून करतो | - | 90\% |

२० व्या दशकात विज्ञान व तंत्र्जानाने आश्चर्यकारक प्रगती केली आहे. ह्यातून प्रसारमाध्यमांचा शिक्षणक्षेत्रात भरपूर उपयोग झाला आहे. प्रसारमाध्यमांमुळे संदेशाची गती वाढते व विद्याथ्यांसमोर दीर्घकाळ टिकणारे व लवकर आकलन होणारे ज्ञान पोहचते. ह्यामध्ये प्रक्षेपित साधने, छापील मजकूर व इलेक्ट्रॉनिक साहित्याचा वापर केला जातो. इलेक्ट्रॉनिक साहित्यात संगणक, एल.सी.डी., चित्रपट, मोबाईल यांचा वापर अध्ययन अध्यापनात करता येतो. ही सर्व साधने दृकश्राव्य या प्रकारात मोडतात. त्यामुळे अशा संवेदनेतून जास्त परिणामकारक ज्ञान मिळते.
प्रस्तुत संशोधनाची गरज :
अध्ययन अध्यापन प्रक्रियेत शिक्षक हा वक्त्याची व विद्यार्थी श्रोत्याची भूमिका बजावतांना दिसतात. यामुळे विद्यार्थी वर्गात लक्ष देत नाहीत, मुले तासाला गोंधळ करतात आणि अन्य विद्यार्थी व शिक्षक टांचे लक्ष विचलित करतात. संशोधिकेने प्राथमिक स्तरावरील विद्यार्थ्यांची पाहणी करतांना असे दिसून आले की, विद्यार्थ्यांना या स्तरावर केवळ चित्र दाखवण्यात येतात. त्यात विद्यार्थ्यांची फारशी अभिरुची नाही. या विद्यार्थ्यांचा कल, जाहिरातील, ऑनिमेशन, संगणक, मोबाईल इत्यादीमध्ये जास्त असतो असे निदर्शनास आले. त्यामुळे परिसर अभ्यास या विषयासाठी ऑनिमेटेड सी.डी. तयार करुन एल.सी.डी.द्वारे प्रक्षेपित करुन अवधान खेचून

अभिरुची निर्माण करता येईल आणि अध्यापन परिणामकारक करता येईल. यावेळी या अनुभूती दृक-श्राव्य साधनांनी दे गे गरजेचे ठरते.

## संशोधन विषयाचे शीर्षक :

"इयत्ता १ ली तील विद्यार्थ्यांना परिसर अभ्यास विषय पारंपारिक पद्धती आणि तंत्रज्ञानाचा वापर करुन अध्यापन-एक तौलनिक अभ्यास."
संशोधन उद्दिष्टे:
१. इयत्ता १ ली तील विद्यार्थ्यांमध्ये परिसर अभ्यास विषयात आवड निर्माण करण्यासाठी पाठ्यघटकावर आधारित अनिमेटेड कार्यक्रम तयार करणे.
२. पारंपारिक पद्धतीने अध्यापन व तंत्र्रानाचा वापर करुन केलेल्या अध्यापनाची तुलना करणे.

## शीर्षकातील संज्ञांचे स्पष्टीकरण:

१) इयत्ता १ ली :प्रस्तुत संशोधनात महाराष्ट्र राज्यातील इयत्ता १ लीचा विचार केला आहे.
२) परिसर अभ्यास : महाराष्ट्र राज्यात २०१० पासून सुरु झालेला परिसर अभ्यास विषयाचा अभ्यासक्रम.
३) पारंपारिक पद्धती : इयत्ता १ लीच्या विद्यार्थ्यांना शिकवण्यासाठी वापरण्यात येणान्या.
४) तंत्रज्ञान : विज्ञानाचा वापर करुन जे काही नवीन यंत्र व तंत्र तयार केले जातात व त्यांचा दैनंदिन जीवनात वापर करण्यात येतो, ते म्हणजे तंत्र्जान होय.
परिकल्पना :

## शून्य परिकल्पना:

पारंपारिक अध्यापन व तंत्रज्ञान (इलेक्ट्रॉनिक उपकरण)चा वापर करुन अध्यापन यात सार्थ फरक नाही.
प्रायोगिक परिकल्पना :
पारंपारिक अध्यापन व तंत्रज्ञान (इलेक्ट्रॉनिक उपकरण) चा वापर करुन अध्यापन यात सार्थ फरक आहे.
संशोधन पद्धती :
प्रस्तुत संशोधनात शैक्षणिक संशोधनाचा विविध पद्धतीपैकी प्रायोगिक पद्धत वापरली आहे.
अभिकल्प :
प्रस्तुत संशोधनात समान गट पूर्वोत्तर चाचणी हा अभिकल्प वापरला आहे तो पुठीलप्रमाणे :

| गट | पूर्वचाचणी | उपचार | अंतिम <br> चाचणी |
| :--- | :---: | :---: | :---: |
| प्रायोगिक <br> गट | $\mathrm{T}_{1} \mathrm{E}$ | X | $\mathrm{T}_{2} \mathrm{E}$ |
| नियंत्रित गट | $\mathrm{T}_{1} \mathrm{C}$ | अभाव | $\mathrm{T}_{2} \mathrm{C}$ |

## प्रायोगिक गट :

$T_{1} E$ प्रायोगिक गटाला पूर्वचाचणी देगे. $X$ प्रायोगिक गटावर अध्यापन कार्यक्रमाची कार्यवाही करणे, $T_{2} E$ प्रायोगिक गटाला अंतिम चाचणी देणे.
नियंत्रित गट :
$T_{1} C$ नियंत्रित गटाला पूर्वचाचणी देणे, $T_{2} C$ नियंत्रित गटास अंतिम चाचणी देणे.
संशोधनासाठी निवडलेला नमुना :
प्रस्तुत संशोधनात संभाव्यता पद्धतीपैकी सुगम यादृच्छिक नुमना निवड पद्धतीचा वापर केला. नमुना निवडण्यासाठी १ ल्या वर्गाचे ५० विद्यार्यांना सामान्य ज्ञानावर आधारित १० गुणांची प्रश्नपत्रिका दिली व समान गुण असणारे १५-१५ विद्यार्थ्यांचे दोन गट केले.
माहिती संकलनाची साधने :
१) विद्यार्थ्यांसाठी तयार केलेली २० गुणांची संपादणूक चाचणी.
२) विद्यार्थी अभिप्रायासाठीची मतावली.
३) शिक्षकांचा अभिप्राय जाणण्यासाठी मतावली.

## अनुदेशन तयारी :

इयत्ता १ लीचे परिसर अभ्यास विषयाचे दोन घटक घेण्यात आले.
१) आपले शरीर
२) आपल्या गरजा

- शरीराचे अवयव
- शरीराची स्वच्छता
- अवयवांचे उपयोग
- आपले अन्न
- अवयव सारखे तरी व्यक्तीवेद
- आपले हाडे
- शरीराची निगा

यासाठी Sound \& Picture Animination करुन सी.डी. बनवण्यात आली.

## प्रत्यक्ष कार्यवाही :

प्रत्यक्ष संशोधनासाठी ४ दिवसाचा कालावधी लागला. यात पूर्वचाचणी, न्यादर्श निवड व २ दिवस अध्यापन केले. ४ थ्या दिवशी उत्तर चाचणी घेवून मतावली भरण्यात आली. यात नियंत्रित गटाला अन्य शिक्षकाने व प्रायोगिक गटाला संशोधिकेने एकाच वेळी अध्यापन केले.

## माहिती विश्लेषण :

प्रायोगिक आणि नियंत्रित गटाला दिलेल्या अंतिम चाचणीचे मध्यामान काढले व यावरुन $t$ value काठली. यात प्रायोगिक गटाचे $M=$ १ ३.२८ तर नियंत्रित गटाचे $M=९$ यावरुन $t$ मूल्य.

| स्तर | प्राप्त $\mathbf{t}$ <br> मूल्य | नुमना <br> मूल्य | निर्णय | परिकल्पना | निर्णय |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $० . ० १$ | $૪ . ८ ५ ८$ | $\circ . ४ ७ ९$ | सार्थक | शून्य <br> परिकल्पना | त्याग |

निष्कर्ष :
१. ज्या विद्यार्थ्यानां तंत्रज्ञानाचा वापर करुन शिकवण्यात आले त्यांनी संपादणूक चाचणीत अधिक गुण मिळवले.
२. परिसर अभ्यासाच्या तासात गडबड करणारी मूले अध्ययन अनुभवात जास्त लक्ष देतात. वर्गातील गोंधळ कमी होतो.
३. दृक-श्राव्य ज्ञानाच्या वापरामुळे ज्ञान दोर्घकाळ स्मरणात राहिले.
४. विद्यार्थ्यांना animated programme द्वारा शिकणे जास्त आवडू लागले.
4. शिकत असतांना विद्यार्थ्यांची मने उत्साहित होती .

शिफारशी : शिक्षक - योग्य घटकांची निवड करुन उद्दिष्टे साध्य करण्यासाठी learning programme प्रभावी तंत्रज्ञानाच्या मदतीने तयार करावेत.
मुख्याध्यापक : शिक्षकांच्या कल्पकतेला वाव देण्यासाठी आवश्यक साधनांची उपलब्धता मुख्याध्यापकाने करुन घ्यावी.
पालक : बाजारात उपलब्ध असलेल्या C.D., Programme चा घरी मुलांना शिकवण्यासाठी वापर करावा.
शिक्षक प्रशिक्षक : प्रशिक्षणा दरम्यान पाठ टाचणात नवीन तंत्रज्ञानाचा वापर करुन पाठाची कार्यवाही करण्याचे प्रशिक्षण द्यावे.

## 21 व्या शतकातील संयुक्त राष्ट्रसंघ : उद्दिष्टे व आव्हाने

प्रा. रतन व्ही. राठोड : प्रमुख पदवी व पदव्युत्तर राज्यशास्त्र विभाग, सीताबाई कला महाविद्यालय, अकोला प्रस्तावना :

संयुक्त राट्रसंघ हे पहिल्या महायुध्दानंतर स्थापन झालेल्या राष्ट्रसंघाचे पुनरुज्जीवित किंवा सुधारित रुप आहे. 26 जून 1945 ला संयुक्त राष्ट्रसंघाची सनद तयार झाली. त्याचदिवशी 50 देशाच्या प्रतिनिधींनी त्यावर स्वाक्षन्या केल्या. जगाच्या एकूण लोकसंख्येपैकी $2 / 3$ लोकसंख्येचे प्रतिनिधित्व त्या ठिकाणी झाले होते. पोलंड परिषदेला उपस्थित नव्हता. परंतु नंतर सामील झाला म्हणून उपस्थित राहून स्वाक्षरी करणारी 51 राष्ट्र झाली. 24 ऑक्टोबर 1945 ला जेव्हा बड्या राष्ट्रांनी त्याचप्रमाणे बहुसंख्यांक राष्ट्रांची सनदेला मान्यता मिळाली. तेव्हा ती सनद लागू होवून अधिकृत रुपाने संयुक्त राष्ट्रसंघाची स्थापना झाली. आजही 24 ऑक्टोबर जगात संयुक्त राष्ट्रदिवस म्हणून साजरा केला जातो. आज रोजी दक्षिण कोरीयाचे बान की मून हे संयुक्त राष्ट्रसंघाचे महासचिव आहेत.

संयुक्त राष्ट्रसंघाच्या ध्येयासंबंधीचे विवेचन राष्ट्रसंघाच्या घटनेच्या पहिल्या कलमात करण्यात आले आहे. त्यानुसार आंतरराष्ट्रीय शांतता व सुरक्षितता स्थापन करणे आक्रमणाचा प्रतिकार करणे. आक्रमणाविरुध्द प्रभावी अशी सामुहिक कार्यवाही करणे. शांतता आणि आंतरराष्ट्रीय कायदा यांची अवहेलना करण्याचा कृतीचे दमन करणे आंतरराष्ट्रीय प्रश्न शांततामय मार्गाने आणि आंतरराष्ट्रीय कायदयानुसार सोडविणे. स्वयंनिर्णय व समान अधिकारांच्या आधारावर राष्ट्रा-राष्ट्रांतील मैत्रीचे संबंध निर्माण करणे आणि विकसित करणे तसेच चिरंतन शांतता प्रस्थापित करणे व त्यासाठी इतर उपाययोजना करणे. जगातील आर्थिक, सामाजिक, सांस्कृतिक व मानवी समस्यांना सोडविण्यासाठी आंतरराष्ट्रीय सहकार्य प्राप्त करणे आणि वंश, लिंग, भाषा व वर्णभेद न बाळगता संपूर्ण मानव जातीसाठी मूलभूत अधिकार आणि स्वातंत्र्यास प्रोत्साहन देणे. निर्देशित उद्दिष्टांच्या पूर्ततेसाठी राष्ट्राराष्ट्रांनी केलेल्या प्रयत्नात समायोजन घडवून आणणे हे संयुक्त राष्ट्रसंघाने आपले उद्दिष्ट मानले आहे.

संयुक्त राष्ट्रसंघाच्या आंतरराष्ट्रीय शांतंता व सुरक्षितता या उद्दिष्टांच्या परिपूर्तीमध्ये ती कितपत यशस्वी झाली याची नोंद करता असे आढळले की, प्रत्यक्ष पेचप्रसंगावर तिला मात करता आली नाही. तरी आंतरराष्ट्रीय क्षेत्रात ताण-तणावाची परिस्थिती निर्माण होऊ नये याबद्दल तिने बरेच यश संपादन केले आहे. युनोने आंतरराष्ट्रीय वाद निर्माण झाल्यास प्रथमत: वाटाघाटी, चौकशी, मध्यस्थी, समजावणी, लवाद निर्णय, न्यायालयीन निर्णय, प्रादेशिक नेतृत्वाचे मार्गदर्शन, सल्लामसलत किंवा तत्सम शांततामय मार्ग या पायन्यांचा उपयोग करुन वाद सोडवण्याचा प्रयत्न केला आहे. अर्थात युनोने प्रत्यक्ष कारवाई करण्यापेक्षा संघर्षाचे ठिकाणी मध्यस्थाची भूमिका पार पाडली आहे. युनोच्या कार्याविषयी सरचिटणीस श्री. उथांट म्हणतात, "युनो ही एक अशी मानवतेची संसद आहे की, जिच्या व्यासपीठावर दुष्वृत्ये, अन्याय आणि मानवाच्या आकांक्षा मांडल्या जातात. तिने स्थानिक संघर्षाचे रुपांतर जागतिक युध्द्दात होण्याचे टाळले आहे. तिने 100 कोटी जनतेला स्वातंत्र्य मिळवून दिले आहे, तिने सर्वप्रकारचा वसाहतवाद, जातिभेद, वंशभेद यांचा निषेध केला आहे व ती याविरुध्द झगडली आहे. तरीही युनोला अद्याप चांगले काम करायचे आहे." अर्थात संयुक्त राष्ट्र्संधासमोर असलेल्या विविध आव्हानांमुळे आपली उद्दिष्टे तिला साध्य करता आली नाहीत. प्रस्तुत शोधनिबंधाद्वारे संयुक्त राष्ट्रसंघाची उद्दिष्टे व 21 व्या शतकातील आव्हाने मांडण्याचा प्रयत्न करण्यात आला आहे.

## शोधनिबंधाची उद्दिष्टे:

१. संयुक्त राष्ट्रसंघाची उद्दिष्टे स्पष्ट करणे.
२. 21 व्या शतकातील संयुक्त राष्ट्रसंघाची भूमिका विशद करणे.
३. संयुक्त राष्ट्रसंघासमोरील वर्तमानकालीन आव्हानांवर प्रकाश टाकणे.

## 21 व्या शतकातील संयुक्त राष्ट्रसंघासमोरील आव्हने :

संयुक्त राष्ट्रसंघाची आर्थिक व सामाजिक क्षेत्रातील कामगिरी राजकीय किंवा आंतरराष्ट्रीय शांतताविषयक कामगिरीपेक्षा जास्त उल्लेखनीय आहे. युनोच्या सनदेतील उद्दिष्टांमध्ये नोंद केल्याप्रमाणे आर्थिक, सामाजिक, सांस्कृतिक आणि मानवतावादी स्वरुपाच्या आंतरराष्ट्रीय समस्या सोडवून आंतरराष्ट्रीय सहकार्य निर्माण करणे तसेच कोणताही भेदभाव निर्माण न करता मानवी हक्क व मूलभूत स्वातंत्र्य प्राप्त करुन देण्यास प्रोत्साहन व उत्तेजन देणे, याबाबत युनोने भरीव कामगिरी केली आहे. या कार्याची मुख्य जबाबदारी युनोची घटक संस्था असलेल्या आर्थिक व सामाजिक मंडळावर टाकली आहे. या संस्थेस मदत करण्यासाठी विश्वस्त मंडळ व अन्य क्षेत्रात विविध संस्था युनोने स्थापन केल्या आहेत. या संस्थांनी अनेक महत्वाकाक्षी कार्यक्रम आखून त्यांची विविध स्तरांवर अंमलबजावणी केली आहे की त्यांचे मोजमाप करणे कठीण कार्य आहे. आंतरराष्ट्रीय राजकारणात 1970 नंतर परिस्थिती बदलली. रशियात ख्रश्चेव्ह येताच तेथील पोलादी पडदा हळूहळू खिळखिळा होऊ लागला आणि सोव्हिएत संघाचा तथाकथित विकास जगाच्या नजरेस पडला. शीतयुध्दाची तीव्रता कमी झाली. 1974 मध्ये भारताच्या पोखरण येथील भूमिगत अणुस्फोटामुळे तो पाच अण्वस्त्रधारी राष्ट्रांच्या पंक्तीत जाऊन बसला. इंग्लंड मोठे राष्ट्र म्हणून निष्पभ ठरले. फान्सचे केवळ स्थानिक महत्व उरले. अलिप्त राष्ट्राच्या चळवळीत जोम असल्याने, या गटाकडे तिसरी शक्ती या दृष्टीने जग पाहू लागले. एकंदरित विसाव्या शतकाच्या सातव्या-आठव्या आंतरराष्ट्रीय क्षेत्रातील सत्ता-समीकरणे नव्याने जुळू लागली.

सोव्हिएत संघाच्या विघटनामुळे आंतरराष्ट्रीय पातळीवर अमेरिकेला टक्कर देणारा प्रतिस्पर्धी राहीला नाही. आंतरराष्ट्रीय शांतता व सुरक्षितता टिकवून तिसरे महायुध्द टाळणे या मुख्य उद्दिष्टांसाठी संयुक्त राष्ट्रसंघाची स्थापना केली. परंतु आज वास्तविक चित्र वेगळे आहे. संयुक्त राष्ट्रसंघात लहान-मोठे 192 सदस्य राष्ट्रे आहेत. ही राष्ट्रे तत्वत: स्वतंत्र व सार्वभौम आहेत. पण त्यातील बहूतांश छोट्या राष्ट्रांचे सार्वभौमत्व बड्या राष्ट्रांकडे गहाण पडले आहे. तिसरी शक्ती म्हणून उदयास आलेल्या अलिप्त राष्ट्रांच्या संघटनेला आज एका मेळाव्याचे स्वरुप आले आहे. सुरक्षा समितीपुठे अरब, इस्त्रायल, दक्षिण आफ्रिका, इराण-इराक, पॅलेस्टाईन मुक्ती आदी प्रश्न वर्षानुवर्षे पडून होते. ते प्रश्न आज सुटले आहेत. क्हेटोचा अधिकार हा अपवादात्मक परिस्थितीत वापरला जाईल अशी मुळात अपेक्षा होती. परंतु सुरक्षा समितीतील कायम सभासद राष्ट्रांनी हा अधिकार खाजगी मालमत्ता समजून वापरला आहे. बड्या राष्ट्रांनी आपले जागतिक राजकारणातील हितसंबंध जपण्यासाठी नकाराधिकाराचा जास्तीत जास्त वापर केला आहे. संयुक्त राष्ट्रसंघास आंतरराष्ट्रीय शांतता टिकविण्याच्या मूलभूत उद्दिष्टांशिवाय इतर उद्दिष्टांची पूर्ती करण्यात मोठ्या प्रमाणात यश मिळाले आहे. युनेस्को, युनिसेफ, जागतिक आरोग्य संघटना, नाणेनिधी, विश्व बॅक यासारख्या इतरही संघटनांनी केलेले कल्याणकारी किंवा मानवतावादी कार्य उल्लेखनीय स्वरुपाचे आहे.

एकविसाव्या शतकात अमेरिका ही एकमेव महासत्ता असतांना संयुक्त राष्ट्रसंघास आंतरराष्ट्रीय

शांततेबाबत स्वतःची न्याय्य भूमिका घेता येईल की नाही हा एक चिंतनाचा मुद्दा आहे. कारण आज संयुक्त राष्ट्रंघाचे अस्तित्वच धोक्यात आहे. आर्थिक अडचणीमुळे संयुक्त राष्ट्रसंघ बंद पडण्याची स्थिती आहे. सदस्याकडे वर्गणीची रक्कम मोठ्या प्रमाणात थकित आहे. दैनंदिन कामासाठी द्यावयाचा निधी सध्या संघटनेकडे नाही. संयुक्त राष्ट्रसंघाला 66 वर्षे पूर्ण झाली असतानांही तिची अवस्था दयनीय आहे. सुरक्षा मंडळातील व्हेटोच्या अधिकाराचा दुरुपयोग, कडवा राष्ट्रवाद, अण्वस्त्र बंदी कराराबाबतचे मतभेद, सर्वसमावेशक अण्वस्त्र बंदी करारामागील पक्षपाती डावपेच इत्यादी कारणांमुळे संयुक्त राष्ट्रसंघाच्या कार्यावर मर्यादा पडल्या आहेत.

मानवी हक्क व मूलभूत अधिकार सर्वसामान्यांना उपलब्ध करुन देण्यात संयुक्त राष्ट्रसंघ यशस्वी ठरली तरी उपभोगू देण्यात अपयशी ठरत आहे. काश्मीर व पॅलेस्टाईन सारखे प्रश्न युनोसमोरील मोठी आव्हाने आहेत. करिता संयुक्त राष्ट्रसंघाच्या सनदेमध्ये दुरुस्ती करणे, घटक संस्थांची पुनर्रचना करणे, आवश्यक तितका निधी युनोच्या कार्यासाठी उपलब्ध करुन देणे आणि लहान-मोठ्या राष्ट्रांमध्ये आंतरराष्ट्रीय सामंजस्य व सहकार्याची भावना वाढीस लागणे इत्यादी बाबी झाल्यास संयुक्त राष्ट्रसंघ ही आंतरराष्ट्रीय संघटना खन्या अर्थाने यशस्वी होईल. जागतिकीकरणाच्या प्रक्रियेमुळे देशादेशांमध्ये परस्परावलंबन वाठले आहे. श्रीमंत राष्ट्र अधिक श्रीमंत तर गरीब राष्ट्र अधिक गरीब बनत आहेत. जागतिकीकरण, उदारीकरण, खाजगीकरण या नविन आर्थिक व्यवस्थेमुळे राष्ट्रा-राष्ट्रात लोकशाही समाजवादाऐवजी भांडवलशाही व्यवस्था निर्माण होत आहे. करिता युनोद्वारे स्वातंत्रा, समता, बंधुता व न्याय या तत्वांची कठोर व प्रभावी अंमलबजावणी होणे आवश्यक आहे !

## निष्कर्ष :

१. युनोची सामाजिक व आर्थिक क्षेत्रातील कामगिरी उल्लेखनीय आहे.
२. युनोने आंतरराष्ट्रीय शांतता निर्मितीसाठी अविरत प्रयत्न केले असुनही अनेक राजकीय संदर्भ आजही शांतता स्थापनेत अडथळा बनत आहेत.
३. सुरक्षा परिषदेतील कायम सभासद राष्ट्रांनी व्हेटोचा वापर स्वहितासाठी केलेला दिसतो .
૪. युनोतील कार्याकरिता आर्थिक निधी अपुरा स्वरुपाचा आहे.
4. 21 व्या शतकात मानवी अधिकारांचे उल्लंघन, दहशतवाद, पर्यावरणाचा न्हास, आण्वीक स्पर्धा, कडवा राष्ट्रवाद इत्यादी विविध, आंतराष्ट्रीय प्रश्नाद्वारे युनोसमोर अनेक मोठी आव्हाने कायम आहेत.

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## बाल आदिवासी जीवनाचे भयावह वास्तव

डॉ. दिनकर ए. उंबरकर : प्रमुख, पदवी व पदव्युत्तर समाजशास्त्र विभाग, सीताबाई कला महाविद्यालय, अकोला. प्रस्तावना :

1979 हे वर्ष बाल वर्ष म्हणून साजरे करण्यात आले. देशाला भावी आधारस्तंभ म्हणून येणारी भावी पिढी सशक्त आणि संपन्न असावी या उद्देशाने बालकांच्या संदर्भात लोकजागृती व्हावी ह्या हेतूने बालवर्ष साजरे करण्यात आले. 20 नोक्हें. 1989 ला संयुक्त राष्ट्रसंघाने बाल हक्काची संहिता अस्तित्वात आणली. याच बालहक्काच्या संहितेला भारताने सुध्दा 1992 मध्ये मान्यता दिली.

भारतामध्ये 1992 चा बाल कामगार प्रतिबंध आणि नियमन कायद्यांतर्गत 14 वर्षाखालील सर्व बालकांना सुरक्षा प्रदान करण्यात आली. बाल कायदा 2000 मुळे 18 वर्षाखालील सर्व बालकांना न्यायालयीन संरक्षण प्राप्त झाले.

बालकांच्या सुदृढ वाढीकरिता एवढे अधिकार प्राप्त होऊनसुध्दा, काय बालकामगारांच्या संदर्भातील समस्यांचे निराकरन झाले आहे ? या प्रश्नाचे उत्तर आजही नाही असेच आहे. देशाच्या सामाजिक आणि राजकीय व्यवस्थेचे ते एक अपयश आहे. हे सर्व जाणून घेण्याच्या उद्देशानेच हा विषय शोधनिबंधाकरिता निवडला. संवैधानिक प्रयत्न :
"कारखानदारांच्या शोषणातून बाल कामगारांची मुक्तता व्हावी या उद्देशाने 19 व्या शतकाच्या सुरुवातीस शासनानेच कायदा अस्तित्वात आणावा अशी मागणी काही ब्रिटीश विचारवंतांनी पुठे आणली आणि त्याचा परिणाम म्हणून ब्रिटीश पार्लमेंटने जगातील पहिला फॅक्टरी कायदा 1802 मध्ये पास केला. कारखान्यात किंवा खाणीत बालकामगारांना राबवू नये अशी तरतुद या कायदयात नक्हती तर सात वर्षाखालील बालकांना दिवसाला 12 तासांपेक्षा जास्त राबविता येणार नाही अशी तरतुद त्या कायद्यात होती. परंतु नंतर ब्रिटीश पार्लमेंट मध्येच पास झालेल्या 1947 च्या बाल कायद्यात बालकामगारांच्या समस्यांची सविस्तर दखल घेण्यात येऊन त्यामध्ये प्रामुख्याने 15 वर्षाखालील बालकांकडून उद्योगामध्ये काम करवून घेण्यास प्रतिबंध घालण्यात आला."?
"जागतीक श्रम संघटनेने १९७३ साली एका कॉन्टेन्स जगातील आपल्या १५० सभासद राष्ट्रांना १५ वर्षाखालील मुलांना कामगार म्हणून कोणत्याही कामावर लावू नये असे कायदे करावेत असे आवाहन केले आहे. या आवाहनाला प्रतिसाद देऊन फक्त २७ सभासद राष्ट्रंनी कामगारांचे किमान वय १५ असावे असा कायदा केले. पण बाल कामगारांना धोकादायक कामांपासुन सरंक्षण देणारा कायदा फारच थोड्या राष्ट्रांनी केला." परंतु बाल कामगारांना संरक्षण देणारे कायदे अस्तित्वात येऊनही बाल कामगारांच्या शोषणाची मालिका मात्र खंडीत होऊ शकली नाही. भारतामध्ये ज्यांना कायद्याबद्दल जाणीवच नाही असा आदिवासी वर्ग आपल्या हक्कांसाठी झगडणार तरी कसा ? उलट आपल्या झोळीत काही तरी पडते आहे ह्या भाबड्या आशेपोटीच तो सतत लुटला गेला.

१० डिसेंबर १९४८ रोजी संयुक्त राष्ट्रसंघाच्या आमसभेने मानवी हक्क जाहीर करणारे घोषणाप्र संमत केले. या घोषणापत्रानुसार, यापुढे कोणत्याही देशाच्या सरकारला, "आम्ही आमच्या नागरिकांना कसेही वागवू , असे म्हणण्याचा नैतिक किंवा कायदेशीर अधिकार उरला नाही. मानवाधिकाराच्या घोषणापत्रातील २६ व्या कलमान्वये प्रत्येकाला शिक्षण घेण्याचा अधिकार दिलेला आहे." ${ }^{\text {₹ }}$ शिक्षणाचा अधिकार हा विकासासाठी

अत्यंत मौलिक अधिकार आहे. जगाचे ज्ञान, आपल्या स्थितीचे ज्ञान, आपल्या हक्काचे ज्ञान व ते मिळविणान्या मार्गाचे ज्ञान शिक्षणामुळेच साध्य होते.

मानवाधिकाराच्या अनुषंगानेच घटनाकारांनी भारतीय घटनेत मूलभूत अधिकारांचा समावेश केलेला आहे. भारतीय राज्य घटनेच्या २१ व्या कलमान्वये सर्वानना जगण्याचा अधिकार दिलेला आहे. कोणत्याही व्यक्तीच्या जीवनाचे किंवा त्याच्या व्यक्तीस्वातंत्र्याचे कायदयाने घालून दिलेल्या पध्दतीचा अवलंब केल्याशिवाय हरण करता येणार नाही. परंतु भारतातील आदिवासींची कोवळी मुले जीवन जगण्याकरिता आजही केविलवाणी धडपड करतानाचे चित्र सर्वदूर पाहवयास मिळते.

## आदिवासी बालकांची शैक्षणिक स्थिती :

आदिवासींना शैक्षणिक अधिकार प्राप्त व्हावे या उद्देशाने महाराष्ट्र शासनाने जिल्हा परिषदेअंतर्गत पूर्व प्राथमिक व प्राथमिक शाळा बहुतांश आदिवासी खेड्यांमध्ये सुरु केलेल्या आहेत. तसेच "महाराष्ट्रातील चार विभागात जवळपास 400 आश्रमशाळा आदिवासी क्षेत्रात गत अनेक दिवसांपासुन सुरु आहेत. परंतु आदिवासीमध्ये शिक्षणासंबंधी जाणीव निर्माण करण्याकरिता व साक्षरतेचा दर वाढविण्याकरिता त्या फारशा प्रभावी सिध्द हो शकल्या नाहीत." ${ }^{\gamma}$ यासंबंधात आदिवासी समस्यांचे अभ्यासक डॉ. गोविंद गारे लिहितात "गेल्या अनेक दिवसांपासून आदिवासी विभागात अनेक सामाजिक संस्थांनी व शासनाने चालविलेल्या आश्रमशाळा शैक्षणिक प्रगतीसाठी आटोकाट प्रयत्न करीत आहेत. तरी देखील आदिवासी विभागातील शिक्षणाची प्रगती समाधानकारक नाही." ${ }^{4}$ शाळेतच दाखल न होणान्या कोरकू आदिवासी मुलांचे प्रमाणपत्र $40 \%$ पेक्षा अधिक आहे. अर्थात $40 \%$ पेक्षा अधिक बालकामगार अक्षर ओळख नसलेला आहे. तर अर्धवट शाळा (गळती) सोडणान्यांचे प्रमाण ४६\% इतके आहे. कोरकू आदिवासींच्या २०० मुलांपैकी एखादा मुलगा एस.एस.सी. परीक्षा पास करतो तर $५ ० 0$ मुलांपैकी एखादा पदवीपर्यंतचे शिक्षण घेतो. शाळेत प्रवेश घेतल्यानंतर ४ थी नंतर इ. ७ वी, $९ \circ$ वी, १२ वी व पदवी या क्रमाने शैक्षणिक दर्जामध्ये आदिवासी युवकांची संख्या मोठ्या प्रमाणावर घटत गेल्याचे दिसून येते. (स्त्रोत - प्रत्यक्ष क्षेत्र अध्ययन)

आदिवासी योजनांचे अभ्यासक डॉ. श. गो. देवगावकरांच्या मते, "दुर्गम भागात वास्तव्याला असलेल्या आदिवासींच्या मुलांपर्यंत विविध शैक्षणिक योजनांचा लाभ पोहचत नाही. त्यामुळे या लाभापासून ते वंचित राहतात. काही योजनांचा लाभ प्रत्यक्ष लाभार्थीपर्यंत न पोहचता तो लाभ भलतेच लोक बळकावतात." ${ }^{\AA}$ याचा परिणाम म्हणून $१ ५$ वर्षाखालील आदिवासी मुले शैक्षणिक दृष्ट्या मागासलेले आहेत. महाराष्ट्रातील आदिवासींचे साक्षरतेचे प्रमाण केवळ (पुरुष) ३६.७७\% तर स्त्रियांमागे २४.०३\% इतके अल्प आहे. आदिवासींची लोकसंख्या भारतीय लोकसंख्येत ८\% आणि महाराष्ट्रामध्ये एकूण लोकसंख्येच्या ९\% पेक्षा जास्त आहे. एवढ्या मोठ्या प्रमाणावर असलेला आदिवासी समाज व त्याची युवापीढी विकास आणि प्रगतीच्या दृष्टिकोनातून अजूनही दुर्लक्षीतच आहे.

## आदिवासी बाल कामगार विषयक स्थिती :

शिक्षणाबद्दलच्या जाणीवेचा अभाव, निरक्षरता व दारिद्रय रेषेखालील जीवन यामुळे आदिवासी आपल्या मुलांना इतरत्र काम करण्यास लावतात. तसेच जंगलावर निर्भर असलेल्या आदिवासींची जंगलाच्या आधारे प्राप्त होणारी रोजी-रोटी शासनाच्या वन कायद्यामुळे हिसकावून घेतली गेली आणि त्याचा परिणाम म्हणून आदिवासींची

मुले ठेकेदारांकडे, जमीनदारांकडे व उद्योगांमध्ये बाल कामगार म्हणून राबू लागले. १४ वर्षाखालील बालकांकडून शारीरिक श्रमाचे अवजड काम करवून घेण्यास प्रतिबंध घातल्या गेला असला तरी आदिवासी क्षेत्रामध्ये या कायद्याची प्रभावी अंमलबजावणी होत नसल्यामुळे आदिवासींची मुले बाल कामगार म्हणून पिळले जात आहेत. त्यांचे बालपण कष्टात जात असल्यामुळे पुढे अनेक शारीरिक व्याधींनी त्रस्त होऊन ते अनेक रोगांना बळी पडतात. परिणामत: त्यांच्या आयुर्मानातही घट होते.

बाल कामगारासंधीच्या समस्या एवढ्या तीव्र स्वरुपाच्या आहेत की, १९९१ च्या जनगणना अहवालानुसार संपुर्ण भारतामध्ये बालकामगारांची संख्या १ कोटी १३ लाख इतकी प्रचंड आहे. तसेच महाराष्ट्रात सुध्दा बाल कामगारांची संख्या ११ लाख इतकी आहे. खाणीत आणि धोकादायक ठिकाणी आज २५,००० बाल कामगार कार्यरत आहेत. ठाणे जिल्ह्यातील ३५ हजार आदिवासींची मुले बाल कामगार म्हणून विटांच्या भट्ट्यांवर काम करतात. डहाणू, पालघर या आदिवासी भागतील ५ ते $३ ५$ वयोगटातील मुले विविध क्षेत्रात बाल कामगार म्हणून काम करतात.

मेळघाटमधील कोरकू आदिवासींची १८ वर्षाखालील मुले जंगल ठेकेदारांकडे जंगलातील अवजड कामे करतात. तसेच काही मुले सावकार वश्रीमंत शेतकच्यांकडे 'घरगडी’ म्हणून दिवसातून १० ते १२ तास शारीरिक कष्टाच कामे करतात. शिक्षण व खेळण्याचे वय असलेल्या काळातच त्यांचे बालपण जनावरांप्रमाणे राबण्यातच हरविले जाते. सावकार, ठेकेदार, जमीनदार यांच्याद्वारे होणान्या आर्थिक शोषणाच्या कचाट्यात भारतीय आदिवासी पूर्णतः अडकला आहे.
"वेठबिगारीतून बालकांची मुक्तता करण्यासाठी घटनेतील २३ व्या कलमान्वये वेठबिगारी पध्दतीने काम करुन घेणे बेकायदेशीर ठरविण्यात आले." तरीसुध्दा विविध आदिवासी भागांमध्ये आदिवासी मुलांकडून वेठबिगारी काम करुन घेतले जाते. " ११\% कोरकू आदिवासी आजही वेठबिगारी पध्दतीने काम करतांना दिसून येतात. त्यापैकी बहूतांश आदिवासी बाल कामगार म्हणून सावकार व ठेकेदारांकडे सालदार व घरगडी म्हणून काम करतात." ${ }^{\circ}$ आदिवासींची काही मुले स्थानिक रोजगाराअभावी शहराकडे धाव घेतात. शहरातील व्यावसायिक आदिवासी मुलांकडून मोठ्या माणसांसारखे काम करुन घेतात. परंतु त्याचा मोबदला म्हणून दिली जाणारी मजुरी अत्यंत तुटपूंजी असते.

भारताला स्वातंत्र्य मिळून आज ६३ वर्षाचा काळ लोटला आहे. तरीही या देशात वेठबिगारी, सालदारी, घरगडी ह्या अत्याचारी पध्दती अजूनही चालूच आहेत. दारिद्रयाची भिषणता आणि जाणीवेचा अभाव यामुळे आदिवासी आपल्या कोवळ्या मुलांना शाळेत न पाठवता वर्षा-दोन वर्षाच्या बोलीने घरकामासाठी किंवा कारखान्यात अथवा शेत जमीनीवर काम करण्याकरिता पाठवतात आणि त्यातुनच सुरु होते ‘बाल कामगारांचे’ शोषण. ‘बाल कामगारांच्या’ या भयानक परिस्थितीला शासकीय धोरण, शहरवासीयांची व्यक्तिवादी प्रवृत्ती जशी कारणीभूत आहे त्याचप्रमाणे आदिवासी बाल कामगरांच्या माता-पित्याची आपल्या अपत्याबद्दलची उदासीनता देखील तेवढीच कारणीभूत आहे.
ठळक निष्कर्ष :
१. बाल कामगारांच्या समस्या निर्माण होण्यास आदिवासी कुटूंबाचे भिषण दारिद्रय कारणीभूत आहे.
२. भूमि स्वामित्वाचा अभाव व लघू आकाराची शेती बाल कामगारांच्या निर्मितीस कारणीभूत आहे.
३. गैरआदिवासींच्या शोषणाच्या प्रवृत्तीमुळे आदिवासी बाल कामगारांच्या समस्यांची तीव्रता अधिक दिसून येते.
४. व्यसनाधिनतेच्या आहारी गेलेल्या आदिवासी पालकांची मुले अधिक मोठ्या प्रमाणावर बाल कामगार म्हणून राबतांना दिसतात.
५. आदिवासी बाल कामगारांमध्ये व्यसनाधिनतेच्या विविध सवयी दिसून येतात.
६. आदिवासींमध्ये शिक्षणाविषयी आणि आपल्या इतर हक्कांविषयीच्या जाणीवा वृध्दिंगत झालेल्या नाहीत.
७. विविध शासकीय शैक्षणिक योजनांमुळे साक्षरतेच्या दरात वाढ होत आहे. परंतु आदिवासी मुलांमध्ये उच्च शिक्षण प्राप्त करण्याचा दर अत्यंत कमी दिसून येतो.
८. आदिवासी मुलांमध्ये मध्येच शाळा सोडण्याचे प्रमाण (गळती) फार जास्त आहे.
९. शाळेत प्रवेशच न घेणे आणि घेतलाच तर मध्येच शाळा सोडण्याच्या प्रवृत्तीमुळे आदिवासींमध्ये बाल कामगारांची संख्या अधिक दिसून येते.

## उपाययोजना :

१. आदिवासींकरिता राबविल्या जाणान्या कल्याणकारी योजना प्रभावीपणे राबविल्या जाव्यात.
२. ५ ते १५ वयोगटातील आदिवासी मुलांना आश्रम शाळेद्वारा मोफत शिक्षणाची सोय असावी आणि आदिवासी मुलांचा आश्रमशाठेतील प्रवेश सक्तीचा करण्यात यावा.
३. स्वयंसेवी (एन.जी.ओ.) संस्थांना अतिरिक्त अनुदान देऊन आदिवासी बालकांवर योग्य संस्कार, शिक्षण व प्रशिक्षणाची सोय त्यांच्याकडून करुन घेण्यात यावी.
૪. आदिवासी विकास योजनेत स्थानिक लोकांचा सहभाग घेतला जावा.
4. भूमिहीन कुटूंबातील व्यक्तीस स्थानिक पातळीवर रोजगार उपलळ्ध करुन द्यावा म्हणजे आदिवार्सीची मुले शिक्षण घेऊ शकतील.
६. सामाजिक स्तरावरुन आदिवासी बाल कामगारांसंदर्भात अभियान राबविण्यात यावे.
७. लोकशिक्षणातून आदिवासींमध्ये शैक्षणिक, सामाजिक व राजकीय जागृती निर्माण करावी.

## संदर्भसूची :

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५. गारे डॉ. गोविंद :- महाराष्ट्रातील आदिवासी जमाती, कॉन्टीनेन्टल प्रकाशन पुणे, २००२, पृ. क्र. १५.
६. देवगांवकर डॉ. सौ. शैलजा व देवगांवकर डॉ. श. गो. : आदिवासी विश्व, आनंद प्रकाशन, नागपूर, २००१, पृ. क्र., २१३.

## रोजगार हमी योजनेतून रोजगारांची निर्मिती : एक अध्ययन

डॉ. दिनेश वा. निचित : सहयोगी प्राध्यापक, संत गाडगे महाराज महाविद्यालय, वलगांव

## प्रस्तावना :

रोजगार हमी योजनेची खरी सुरुवात महाराष्ट्रात झाली. 1972 च्या भिषण दुष्काळाला सामोरे जाण्यासाठी रोजगार हमी योजनेची संकल्पना उदयास आली त्याचे खरे शिल्पकार कै. वि. स. पागे होय. रोजगार हमी योजनेच्या विधेयकावर बोलतांना पागे म्हणाले होते की, रोजगार हमी योजना राबविण्यासाठी महाराष्ट्र सरकार तर वाटचाल करीतच आहे. नक्हे संपूर्ण प्रांत या दिशेने वाटचाल करील असे वाटते. ते खरेच ठरले आणि ही योजना केंद्रसरकारने संपूर्ण देशात राबविण्याचा निर्णय घेतला. महाराष्ट्रात भिषण दुष्काळ निर्माण झाला. बेरोजगारांचे हाल व्हायला लागले. बेरोजगराच्या निमित्ताने बेरोजगारांचे लोंढे शहराकडे यायला लागले. गावात काम मिळेनासे झाले. ग्रामीण व शहरांमध्ये असंतूलन निर्माण झाले. या कठीण परिस्थितीतून मार्ग काढण्यासाठी रोजगार हमी योजनेची निर्मिती झाली.

केंद्र सरकारने ही योजना राबविण्याचा निर्णय घेतल्यामुळे या योजनेमध्ये अधिक बळकटीपणा आला. केंद्राकडून मिळणान्या निधीचा वापर महाराष्ट्राला अधिक प्रमाणात करता येवू लागला. गेल्या दहा वर्षात राज्यात रोजगार हमी योजनेसाठी 16 हजार कोटी रुपये प्राप्त झालेत त्यापैकी 10 हजार कोटी रुपये खर्च करण्यात आलेत.

## 1.1 विषय अभ्यासण्याची आवश्यकता (गरज)

महाराष्ट्रातच नक्हेतर सर्व देशभर बेरोजगारीचे संकट निर्माण झाले. बेरोजगाराने उग्र रुप धारण केलेले आहे. बेरोजगारांची वाढती संख्या ही देशासमोरची सर्वात मोठी समस्या आहे. अशातच 1972 साली निर्माण झालेल्या भिषण दुष्काळात बेरोजगारांच्या संख्येत वाढ झाली. या सर्व संकटाना सामोरे जाण्यासाठी रोजगार हमी योजनेचा जन्म महाराष्ट्रात झाला. बेरोजगार निर्मितीच्या दृष्टीने रोजगार हमी योजनेचे महत्व अधिक आहे. आज जवळपास 38 वर्षाचा कालावधी या योजनेच्या सुरुवातीला झालेला आहे. सदहू योजनेची सध्या स्थिती काय आहे? या योजनेवर आजवर किती खर्च झाला आहे? या योजनेवर आजवर किती खर्च झाला आहे? या योजनेतून खरोखरच रोजगारांची निर्मिती झाली काय? याचा अभ्यास होण्याच्या दृष्टीने सदईू विषयाची निवड केलेली आहे.

## 1.2 विषय अभ्यासण्याची उद्दिष्टे :

१. रोजगार हमी योजनांच्या मुळ धोरणांचा अभ्यास करणे.
२. रोहयो योजनेच्या उपलब्ध निधी व खर्चाचा अभ्यास करणे.
३. रोजगारांची किती निर्मीती झाली याचा अभ्यास करणे.
४. योजनेसमोर असणान्या समस्या व अडचणींचा अभ्यास करणे.
1.3 गृहीतके :
१. रोजगार हमी योजनेतून गावांचा विकास तर झालाच पर्यायाने रोजगारांची निर्मिती सुद्धा झाली. असे प्रथमदर्शनी दिसते.
२. रोजगार हमी योजना आपल्या उद्देशांमध्ये सफल होत असल्याचे दिसते.
1.4 संशोधन पद्धती :

रोजगार हमी योजनेतून रोजगाराची निर्मिती या विषयाचे अध्ययन करण्यासाठी प्राथमिक व दुय्यम स्त्रोतांचा वापर करण्यात आला. प्राथमिक स्त्रोतांमध्ये रोहयो योजना राबविणान्या कार्यलयाला भेटी देग्यात आल्यात. प्रशासकीय अधिकारी यांच्या मुलाखती घेवून प्रश्नांच्या माध्यमातून समस्यांच्या उकल करण्यात आला. तसेच रोजगार व्यक्तीच्या मुलाखती घेण्यात आल्यात व त्यांचे सूद्धा या योजनेविषयीचे मनोगत घेण्यात आले.

दुय्यम स्त्रोतांमध्ये प्रकाशीत व अप्रकाशीत ग्रंथ, मासीके, पुस्तके इत्यादोंचा आधार घेऊन माहीतीचे संकलन करण्यात आले व अभ्यासत त्याचे यथोचीत ठिकाणी वापर करून सारणीयन व अर्थनिर्वचन करण्यात आले.

## 1.5 संकलीत माहितीचे सारणीयन व अर्थनिन्वचन:

सन 1960-70 च्या दरम्यान महाराष्ट्र राज्याला दारीद्रय आणि बेकारीला सामोरे जावे लागे. ज्यासाठी रोजगार निर्मितीचा एक कार्यक्रम तयार करण्यात आला. ज्यामध्ये ग्रामीण विकासाचे सुयोग्य धोरण तयार करणे, दरीद्रय निर्मूलन करणे, ग्रामीण रोजगारांचा धडक कार्यक्रम करणे, या विविध कार्यक्रमांच्या अंतर्गत रोजगार निर्मितीला सुरूवात झाली या कार्यक्रमांचे स्वरूप अत्यंत मर्यादीत व प्रायोगिक स्वरुपाचे असल्यामुळे ग्रामीण भागातील बेरोजगारीचा प्रश्न परिणामकारकरित्या सुटू शकला नाही. पुढे धडक योजना राबविण्याचा मानस सरकारने केला. ग्रामीण भागात रोजगाराची निर्मिती करणे आणि दारिद्रय निर्मूलन करण्यासाठी सन 1972 मध्ये रोजगार हमी योजनेला सुरुवात करण्यात आली. 1977 ला रोजगार हमी योजनेला वैधानिक पाठींबा देण्यात आला आणि रोहयोचा कायदा 26 जानेवारी 1979 पासून अंमलात आला. या योजनेचा मुख्य उद्देश दारीद्रय निर्मूलन करणे व रोजगारांची मोठ्या प्रमाणात निर्मिती करणे हाच होता. त्यानुसार सरकारने पावले उचललीत व पुढीलप्रमाणे आर्थिक तरतूद, एकूण खर्च व रोजगारांची नर्मिती झाली.

रोहयोची आर्थिक तरतूद, खर्च व रोजगार निर्मिती

| वर्ष | आर्थिक तरतूद | एकूण खर्च | रोजगार निर्मिती (कोटीत) |
| :---: | :---: | :---: | :---: |
| $1989-90$ | 231.54 | 239.28 | 7.80 |
| $1990-91$ | 236.97 | 238.92 | 8.98 |
| $1991-92$ | 310.95 | 319.92 | 11.94 |
| $1992-93$ | 453.23 | 452.72 | 14.80 |
| $1993-94$ | 313.62 | 347.34 | 9.84 |
| $1994-95$ | 413.15 | 384.09 | 9.42 |
| $1995-96$ | 450.00 | 443.75 | 9.70 |
| $1996-97$ | 418.25 | 366.75 | 9.01 |
| $1997-98$ | 360.00 | 353.00 | 9.00 |
| $1998-99$ | 489.00 | 456.66 | 9.11 |
| $1999-2000$ | 495.25 | 493.97 | 9.19 |
| $2000-01$ | 667.03 | 578.00 | 11.12 |
| $2002-03$ | 850.00 | 889.00 | 15.45 |
| $2003-04$ | 1050.00 | 1051.52 | 16.91 |

## विश्लेषण:

वरील सारणीचे अध्ययन केले असता असे दिसून येते की, दरवर्षीच्या करण्यात आलेल्या आर्थिक तरतूदीच्या मानाने थोड्याफार फरकाने कमी-जास्त प्रमाणात खर्च करण्यात आला. सन 1989-90 मध्ये 239.28 कोटी रुपये खर्च करण्यात आले. त्यावेळी 7.80 कोटी बेरोजगारांना रोजगार प्राप्त झाला. हे शेकडा प्रमाण 3.26 टक्के दिसून येते. तेच 2003-04 मध्ये 1051.52 कोटी रुपये खर्च करण्यात आले. त्यावेळी 116.91 कोटी रोजगाराची निर्मिती झाली हे शेकडा प्रमाण 1.62 एवढे दिसून येते. यावरून हे स्पष्ट होते की, एकीकडे 15 वर्षात खर्चामध्ये पाच पटीने वाठ झालेली आहे तर दुसरीकडे रोजगार निर्मितीत पाच पटीने वाढ न होता घट झाल्याचे दिसून येते.

प्रकाशीत साहीत्याच्या आधारे असेही दिसून येते की, काम करण्यास इच्छूक व्यक्तींना रोजगाराची हमी दिली जाते. यासाठी बेरोजगारांकडून वेगवेगळे अर्ज भरून घेतले जातात. ही योजना पाटबंधारे, सार्वजनीक बांधकाम विभाग, कृषी, वन, शासकीय विभाग, जिल्हापरिषदांमार्फत राबविण्यात येते. या योजनेखाली उत्पादक स्वरुपाची कामे देग्यात येतात. या योजनेअंतर्गत सिंचनाची, भूविकासाची सामाजिक वनीकरणाची, रस्ते, वैधानिक योजना, इत्यादी स्वरुपाची कामे राबविण्यात येतात. कामगारांना हजेरी पटानुसार मजूरी न देता त्यांनी केलेल्या कामाच्या प्रमाणात शासनाने ठरवून दिलेल्या दरानुसार मजूरी देण्यात येते. कामाच्या ठिकाणी पिण्याच्या पाण्याच्या सोई, निवान्याची व विश्रांतीची व्यवस्था, प्रथोमपचार व औषधाची व्यवस्था, त्याचप्रमाणे कामाच्या कालावधीत अपघात झाल्यास किंवा अपंगत्व आल्यास 50,000 रु चे सानुग्रह अनुदान देण्यात येते.

## निष्कर्ष व शिफारशी :

निष्कर्ष : रोजगार हमी योजनेला जवळपास 40 वर्षाचा काळ पूर्ण झालेला आहे. रोजगारांची निर्मीती व ग्रामीण विकास झाला यात शंकाच नाही. मात्र खर्चाच्या तुलनेने ज्या प्रमाणात रोजगारांची निर्मीती व ग्रामीण विकास झाला यात शंकाच नाही. मात्र खर्चाच्या तुलनेने ज्या प्रमाणात रोजगारांची निर्मिती व्हायला पाहीजे होती त्याप्रमाणात रोजगार निर्मिती झाल्याचे दिसत नाही.
शिफारशी :
१. ही योजना सर्वकष करून अधिक रोजगार निर्मिती कशी करता येईल याप्रमाणे योजना अधिक प्रभावशाली करावी.
२. रोजगारांना मिळणान्या मजूरी दरात वाढ करण्यात यावी.
३. शासकीय नियंत्रण अधिक प्रभावशाली करण्यात यावेत.
४. या योजनेचा प्रचार-प्रसार अधिक करण्यात यावा.
५. या योजनेतून कार्याची व क्षेत्राची व्याप्ती वाढविण्यात यावी.
६. या योजनांचा तात्काळ पाठपूरावा घेण्यात यावा.
७. बेरोजगारांचा शैक्षणीक स्तर लक्षात घेता त्याप्रमाणे रोजगाराभिमुख योजना तयार करण्यात याव्यात. संदर्भ :
१. ‘योजना’ एप्रिल 2005
२. ‘योजना’ फेबुवारी 2003

## संत तुकारामांच्या अभंगातील लौकिकता

प्रा. महेश मंगनाळे: मराठी विभाग, श्री संत गाडगे महाराज महाविद्यालय, लोहा ता. लोहा जि. नांदेड

मूलतः साहित्य हे द्विध्रुवात्मक आहे. संत साहित्य तर या संजेस अधिक जुळणारे आहे. संतांनी ‘प्रपंच आणि परमार्थ' यांचा सुयोग्य मेळ घालण्याचा प्रयत्न सदैव केलेला दिसून येतो. संत ज्ञानेश्वरांपासून संत तुकारामांपर्यंत हाच विचार प्रकर्षाने दृष्टीपथास येतो. साहित्यातूनच खन्या अर्थाने मानवी जीवनपोषण होते. तसेच अलौकिक विश्वाची जाणीवही श्रेष्ठ काव्यातून प्रत्ययास येते. मध्ययुगात संतसाहित्याचा बहुअंगी विलास मराठी साहित्य संस्कृतीच्या वाटचालीस महत्वपूर्ण ठरलेला दिसून येतो. म्हणून आजही संत काव्य प्रेरकशक्ती म्हणून पुढे येत आहे. संत तुकारामांनी आपल्या वास्तव जीवनातून आलेले अनुभव अभंगांच्या रूपाने शब्दात बांधले, त्यांच्या अभंगात ‘स्वभाव’ आहे. तसेच तुकारामांचा प्रवास जसा लौकिकतेकडून अलौकिकतेकडे, ऐहिकतेकडून पारमार्थिकतेकडे झाला त्याचप्रमाणे त्यांचे अभंगही लौकिकता व अलौकिकता या प्रवासातूनच मूर्त झाले आहेत. यास साक्ष म्हणजे संत तुकारामाचे खडतर आयुष्य, त्यांनी भोगलेले व्याप-ताप, अपरिमीत दु:ख, मायबापाचा मृत्यू, दिवाळखोरी, दुष्काळ, पत्नी रखमाबाई व मुलगा यांचा मृत्यू, संसाराची वाताहात या तप्त अनुभवातून त्यांची अभंगवाणी वास्तव स्थितीची मांडणी प्रभावीपण करते, दंभस्फोट घडवून मानवी मनाच्या कक्षा भेदते. प्सस्थापित मूल्यांविरुद्ध विद्रोह पुकारते त्यामुळे तुकाराम हे आजही तितकेच नवखे वाटतात जितके ते त्यांच्या कालखंडात होते. सामाजिकता, उपदेशात्मकता, उपहास, अंर्तविरोध, द्वंद्द हे त्यांच्या अभंगाचे आशयदृष्ट्या विशेष जाणवतात. तथापि त्यांचे अभंग त्यांनी अनुभवलेल्या लौकिक स्थितीवर मर्मग्राही भाष्य करतात.
"बरा देवा कुणबी केलो।
नाही तरि दंभे असतो मेलो ।११।।
भले केले देवराया।
नाचे तुका लागे पाया ।।२।।"
या अभंगात तुकारामांनी कुणबी जीवनाची यथार्थता स्पष्ट केली आहे. उच्चवर्णीय, साधू, महंत हे बेगडी जीवन जगत असतात. त्यांच्या जीवनात दंभ भरून राहिलेला असतो. त्यामुळे अशा अज्ञानात ते आत्मजान प्राप्त करू शकत नाहीत. सामान्यतः शूद्र शेतकज्याच्या जीवनातच खरे सामर्थ्य आहे. त्यांच्या जीवनात कसलेही दंभ नाही हे जीवन तुकारामांना जगायला मिळाले आणि त्यांनी हे जीवन खरे करून दाखविले.

तुकाराम महाराजांनी मानवी जीवनात कर्माला महत्व दिले आहे. कर्मानेच जड जीवनातून मुक्त होता येते परंतु कर्म मात्र डोळस असावे लागते. याबाबत ते म्हणतात,

ऊस वाढविता वाढली गोडी।
गुळ साकर हे त्याची परवडी।।?।।
सत्यकर्मे आचरें रे । बापा सत्यकर्मे आचरे रे।
सत्यकर्म ज्यात दंभ नाही, व्यक्तीने असेच कर्म करून स्वोद्धार करावा असा भाव तुकारामांनी व्यक्त केला आहे. त्याचप्रमाणे जशी दृष्टी तशी सृष्टी व्यक्तीला दिसू लागते तसेच चित्ताचे आहे. हाच भाव पुढील अभंगात संत तुकाराम व्यक्त करतात...

जैसे चित्त जयावरी । तैसे जवळी तें दुरी।।१।।
न लगे द्यावा परिहार । या कोरडे उत्तर।
असे अभ्यंतर । साक्षभूत जवळी।।२।।
अशाप्रकारे एखाद्या गोष्टीची जवळीक किंवा दुरावा हा त्या व्यक्तिच्या चित्तशुद्धीवर, चित्ताच्या विशालतेवर अवलंबून आहे. म्हणून बाह्य उपचार कोरडे आहेत. अंत:करणपूर्वक प्रयत्नांती अध्यात्मिक सुखम्राप्ती होते असा लौकिकातून अलौकिक विचार तुकारामांनी मांडला आहे.

तुकाराम महाराजांनी लौकिक जीवनात आढळणारे भेद नाकारले आहेत. जाती, वर्ण या भेदांना त्यांनी आपल्या हयातीत कधीही थारा दिला नाही ते म्हणतात, अधिकार-जात, वर्ण-धर्म-जात।
ठाव नाही सत्य-असत्याशी।।
अशा पद्धतीने तुकारामांनी त्यांच्या काळात विषमता नाकारून समतेचा-ममतेचा संदेश जगताला उद्देशून दिला आहे.

संत तुकारामांनी भौतिक जीवनात भोगलेले व्याप, सुख-दु:ख, मानवी अगतिकता, समस्त समाजाचा पोरकेपणा अनुभवाला, दुष्काळाने त्यांचे कवीमन जागते झाले; यातूनच ते विठ्ठलाशी समरूप झाले, ऐहिकातून वैकुंठाचा मार्ग त्यांना मिळाला, अंतरीचा आकांत ते प्रकट करू लागले,

न देखवे डोळा ऐसा हा अकांत।
पर पीडे चित्त दु:खी होते।।
संत तुकारामांनी लोकशिक्षणाचे प्रभावी कार्य केले. समाजाची जडण-घडण निकोपपणे होण्यासाठी त्यांनी हे कार्य अव्याहतपणे केले आहे.

पराविया नारी माऊली समान।
मानलिया धन काय वचे।
न करिता परनिंदा परद्रव्य अभिलास।
काय तुमचे यात वेचे सांगा।
व्यक्तिला सन्मार्ग दाखवावा, त्यांना नैतिकता शिकवावी असा भाव ते वरील अभंगात व्यक्त करतात, परस्त्रीला मातेसमान मानावे, परधनाची अभिलाषा बाळगू नये. खन्या अर्थने सोवळे-ओवळे-विटाळ मानणान्यांना त्यांनी सुनावले की, अशा प्रकारे परधन, परस्त्रीचा विटाळ मानला तर ते सर्वांसाठी कल्याणकारी आहे.

चंदनाचे गावी सर्पांची वसती।
भोगिती ते होती द्वीपांतरी।।
एका ओझे एका लाभ घडे देवा।
संचिताचा ठेवा वेगळाला।।
त्याचप्रमाणे चंदनाच्या झाडावर सर्पांची वस्ती असली तरी त्यावर चंदनाच्या गुणांचा प्रार्दुभाव होत नाही. व्यक्तिच्या संचिताचा लाभ त्यास होतो. म्हणून सन्मार्ग, सदाचार यातूनच विकास होतो.

स्वंयेपाक करी। संशय तोचि धरी।

संदेह सागरी। आणीक परी बुडती।।
जो स्वतः स्वंयपाक करतो आणि त्याबद्दल संशयही तोच व्यक्त करतो हे अनर्थक आहे. संशयाने व्यक्तीचा पुरता नाश होतो. असे तुकारामांना सांगावयाचे आहे.

नको दुष्टसंग। पड भजनामधी भंग।
काय विचार देखिला।
सांग माझा तो विठ्ठला।।
दुष्ट-दुर्जनांची संगत ही केव्हही घातक, भजनातही बाधक म्हणून या बाबींपासून व्यक्तिने नेहमी दूर राहिले पाहिजे असे तुकारामांनी सांगितले आहे.

जोडोनियां धन उत्तम वेव्हारे ।
उदास विचारे वेच करी।।
उत्तमचि गती तो एक पावेल।
उत्तम भोगील जीव खणी।।
प्रस्तुत अभंगतून तुकारामांनी आचार शुद्धता, विचार शुद्धता आणि अंतिमध्येय प्राप्तीचा मार्ग साधक व सर्वसामान्य व्यक्तिला सांगितला आहे. लौकिक जीवनामध्ये व्यक्तीने चांगल्या मार्गाने धनदौलत कमावून त्या संपत्तीचा विनियोग विधायक कार्यासाठी करावा आणि उत्तम व्यवहारातूनच अंतिम सुख लाभू शकते असा भाव त्यांनी व्यक्त केला आहे.

अशाप्रकारे संत तुकारामांच्या अभंगातून आलेले लौकिक जीवनाविषयीचे विचार निर्भिड, स्पष्ट आणि मौलिक स्वरूपाचे आहेत. त्यांच्या या विचारांत व्यष्टी आणि समष्टीबाबत दूरगामित्व व समस्त लोककल्याणाची भूमिका सामावलेली आहे.

## संदर्भग्रंथ सूची :

१. सार्थ तुकाराम गाथा - खंड दुसरा - डॉ. प्र. न. जोशी
२. ‘तुकोबांचे वैकुंठगमन’ - दिलीप पुरुषोत्तम चित्रे
३. जगद्गुरू श्री संत तुकाराम महाराज - स्मारक्गंथ - संपा. अॅ. शैलजा ज्ञानेश्रर मोळक
४. प्राचीन मराठी वाङ्मयाचा इतिहास - ल. रा. नसिराबादकर

## स्वामी विवेकानंद यांचा वैश्विक राष्ट्रवाद

डॉ. संभाजी पॉटील-वारुंगुके : राज्यशास्त्र विभाग, मत्स्योदरी महाविद्यालय, जालना.
प्रा. बाबासाहेब प्रल्हाद पाबके-पाटीलः राज्यशास्त्र विभाग, मत्स्योदरी महाविद्यालय, तिर्थपुरी ता. घनसावंगी जि. जालना.

## गोषवारा (Abstract) :

विवेकांनदांनी वैश्विक राष्ट्रवादाचे प्रतिपादन यासाठी केले की पुढे चालुन ‘धर्म' हाच भारताच्या राष्ट्रीय जीवनाचा मेरुदंड बनू शकेल त्यांच्या मते, भारताच्या भावी महानेतेच निर्माण त्यांच्या इतिहासाच्या पायावर केल्या जावू शकते. इतिहासाची उपेक्षा करणे राष्ट्राच्या जीवनाचा निषेध केल्यासारखे आहे. त्यासाठी भारताच्चा राष्ट्रावादाची निर्मिती ही ऐतिहासिक विरासतीच्या सुदृढ पायावरच झाली पाहिजे असे विवेकानंदाचे ठाम मत होते. म्हणून राष्ट्रनिर्मितीसाठी ‘धार्मिक राष्ट्रवादाची’ संकल्पना मांडली हिच संकल्पना पुढे वैश्विक राष्ट्रवाद म्हणून समोर आली.

## प्रस्तावना :

स्वामी विवेकानंदाना राष्ट्रदृष्ट्ये म्हणून ओळखल्या जाते. राजकीय चिंतनामध्ये त्यांचा 'धार्मिक राष्ट्रवादाचा’ सिंध्दात महत्वपुर्ण आहे. म्हणून भारतीय राष्ट्रवादाच्या संदर्भात धार्मिक राष्ट्रवादाचा विचार करणे आवश्यक आहे. भारताच्या स्वंतत्र्य चळवळीमध्ये विविध स्वरुपाचे राष्ट्रवादी विचार प्रवाह दिसून येतात. तत्कालीन राजकीय व्यवस्थेला अनुरुप विवेकानंदानी ‘धार्मिक राष्ट्रवादाचा’ पाया निर्माण केला.

विवेकानंदाचा धार्मिक राष्ट्रवाद हा धर्माधिष्ठित नसून धर्मनिरपेक्ष तत्वांवर आधारित आहे. ते सर्व धर्मसमभावी विचारांचे होते. प्रत्येक धर्मातील आदर्शवादी तत्वांचा स्विकार करुन त्यांनी राष्ट्रवादी विचार सांगितला आहे. विवेकानंद म्हणतात, "आतापर्यंत सर्व धर्मामध्ये एक वाक्यता निर्माण करण्याचे जे प्रयत्न झाले. त्या सर्वांमध्ये सर्व धर्म सत्य आहेत. हा सिध्दांत मान्य असला तरी प्रत्यक्ष व्यवहारात मात्र या धर्माना काही विशिष्ट मतात जखडून ठेवण्याचा प्रयत्न करण्यात आला आणि परिणामी परस्परांशी विरोध करणारे, भांडणे व वरचढ होण्याचा प्रयत्न करणारे आणखी काही नवीन पंथ निर्माणं झाले."

सद्य स्थितीमध्ये भारतात विविध संप्रदायाचे लोक राहतात. प्रत्येक धर्म, संप्रदाय आपली बाजू इतर धर्म, संप्रदायाहून श्रेष्ठ ठरविण्याचा प्रयत्न करत असल्याचे दिसून येते. धर्माचे मुळ स्वरुप समाजावून न घेता उद्रेकाच्या भावनेने धर्मा-धर्मामध्ये दंगली घडवुन येत आहे. यामध्ये निष्पाप सामन्य माणसाचे बळी गेले परंतु अजूनही धर्माचे मुळ स्वरुप जनतेला समजू शकले नाही.

आजच्या युगामध्ये दहशतवादासारखी भीषण समस्या राष्ट्राला भेडसावत आहे. 'जीहाद’ सारख्या धार्मिक भावनेतूनच दहशतवादाला खतपाणी मिळत आहे. दहशतवादामुळे सामाजिक अशांतता निर्माण होऊन सामान्य माणसाचे जगणे कठीण झाले आहे. धर्माच्या नावावरुन अधंश्रध्दा पसरविणारे अनेक ढोंगी लोक जनतेची फसवणूक करतात. तसेच धर्मामध्ये अस्पृश्यतेची समस्या देखील राष्ट्रीय हिताला बाधक आहे. परकीय सत्ता, विदेशी आक्रमण थांबविण्यासाठी भारताला सर्वधर्म संप्रदायामध्ये समन्वय घडवून आणण्याची गरज निर्माण झाली आहे.

वरील समस्या राष्ट्रीय हिताला व राष्ट्राच्या सुरक्षतेला बाधक असून भारतातील अंतर्गत स्थिती अतिशय बिकट झाली आहे. त्यासाठी वैश्विक राष्ट्रवादाची गरज आहे. यासाठी वरील पार्श्वभूमीवर प्रस्तुत संशोधन

विषयाची आवश्यकता आहे.

## संशोधनाची उद्दिष्टे :

१. विवेकानंदाच्या धर्म या संकल्पनेचे स्वरुप स्पष्ट करणे.
२. राष्ट्राच्या विकासात धर्माचे योगदान स्पष्ट करुन आजच्या स्थितीत धर्म चिंतनाची दिशा तपासणे
३. विवेकानंदाच्या धर्मविषयक विचारांचे वैश्विक राष्ट्रवादाच्या संदर्भात विश्लेषण करणे.
४. विवेकानंदाच्या विचारांची आजच्या संदर्भात राजकीय, सामाजिक, धार्मिक, शैक्षणिक तसेच मानवी जीवनाशी निगडीत संबंधीत क्षेत्रात उपयुक्तता स्पष्ट करुन आजच्या संदर्भात वैश्विक राष्ट्रवाद स्पष्ट करणे.
4. धर्म आणि शिक्षणाचे महत्व या विभागतून वैश्विक राष्ट्रवादाचा अभ्यास करणे.

## विवेकानंदाचा वैश्विक राष्ट्रवाद :

भारत स्वातंत्र्य झाल्यापासून जनतेमध्ये विशेषतः तरुणामध्ये आपले राष्ट्र नव्याने घडविण्याचा प्रबळ उत्साह संचारल्याने सर्वत्र आढळून येत आहे. ही गोष्ट अर्थातच स्तुत्य आहे. परंतू हे कार्य हाती घेण्यापूर्वी आधुनिक भारताची निर्मिती कशी करायची याची स्पष्ट कल्पना असणे आवश्यक आहे. "आपल्याला काय चित्रावयाचे आहे याचे चित्र मनचंक्षुसमोर आल्यावरच चित्रकार पटदिशी चित्र काढण्यास सुरुवात करतो. तसेच एखादी इमारत बांधायची असल्यास इंजिनिअर सर्व प्रथम ती कशासाठी बांधायची आहे हा विचार करुनच तो नकाशा काढतो. तब्दतच आपण देखील भावी भारताचे स्वरुप कसे असावे याची स्पष्ट धारणा करुन घेतली पाहिजे मगच राष्ट्रनिर्मितीच्या कार्यात उतरले पाहिजे." यासाठी विवेकानंदानी ‘धार्मिक राष्ट्रवादाची’ संकल्पना समोर मांडली.

देशातील राजकीय विचाराला विवेकानंदानी दिलेली पहिली महत्वाची देणगी म्हणजे राष्ट्रीय जीवनासाठी धर्माला त्यांनी देलेले मध्यवर्ती स्थान होय. नव भारताची उभारणी ही धार्मिक - अध्यात्मिक अधिष्ठाणावरच होऊ शकते. असा त्याचा ठाम विश्वास होता. त्यांनी सांगीतले होते की, "भारताला सर्वांगीण विकासासाठी धर्मालाच आपल्या राष्ट्रीय जीवनाचा मुलाधार मानावयास हवे. तसे केल्याखेरीज गत्यतर नाही." कारण भारतात धर्म हाच पुर्वीपासुन राष्ट्रीय जीवनाचा केंद्रबिंदू आहे. राजकारण, सत्ता, आणि बुध्दी यांना देखील या देशात दुय्यम स्थान आहे. 'धर्म’ हाच भारतीयांच्या जीवनाचा हा विकासाचा एकमेव आधार सदैव होता, आहे. आणि राहील.

हेगेल प्रमाणेच विवेकांनदाचा पण विश्वास होता की, कोणत्याही राष्ट्राचे जीवन एका प्रमुख तत्वांची अभिव्यक्ती असते. त्यांच्या दृष्टिने धर्म हा भारताच्या इतिहासातील अत्यंत महत्वपूर्ण सिध्दांत राहिलेला आहे. विवेकानदांच्या शब्दात "ज्याप्रमाणे संगीतामध्ये एक प्रमुख स्वर असतो. त्याचप्रमाणे प्रत्येक राष्ट्राच्या जीवनामध्ये एक प्रधान तत्व असते. इतर सर्व तत्व त्यामध्ये केंद्रीत असतात. भारताचे प्रमुख तत्व ‘धर्म’ आहे." त्या करीता त्यांनी राष्ट्रवादाच्या धार्मिक सिध्दांतांचा पाया निर्माण केला. पुढे चालून याच सिध्दांताचे बिपीनचंद्र पाल, अरविंद घोष, यांनी प्रतिपादन केले.
"राष्ट्रसुधारणेमध्ये विवेकानंद धर्माचे योगदान आवश्यक मानतात. म्हणून भारतातील प्रत्येक सुधारणेसाठी धार्मिक स्वरुपाची चळवळ हाती घेणे आवश्यक आहे. भारतामध्ये समाजावादी किंवा राजकीय विचारांचा पुर वाहण्यापूर्वी प्रथम या भूमित आध्यात्मिक व वैश्विक बंधूत्वाच्या विचारांचा पुर वाहणे आवश्यक आहे."

विवेकानंद धर्माला व्यक्ती राष्ट्र या दोघांना शक्ती प्रदान करणारे तत्व मानत होते. त्यांच्या मते "माइया धर्माचा सार शक्ती आहे. जो धर्म ह्रदयामध्ये शक्तीचा संचार करत नसले, तो माइया दृष्टीने धर्म नाही जरी तो उपनिषदांचा किंवा गीतेचा धर्म असेल, शक्ती धर्मापेक्षा मोठी वस्तु आहे. शक्ती पेक्षा मोठे काहीच नाही."
"भारतामध्ये धर्म हा राष्ट्रीय जीवनाचे केंद्र स्थान आहे. भव्य अशा राष्ट्रीय मंदिराचा तो भक्कम पाया आहे. राजकारण, सत्ता व बुध्दी यांना देखील भारतात गौन स्थान आहे. म्हणून भारतात धर्महीच विचारार्थ बाब आहे."

विवेकानंदाचा धार्मिक राष्ट्रवाद हा कोणत्याही विशिष्ट धर्माशी संबंधित नसून तो धर्मनिरपेक्ष तत्वांवर आधारलेला आहे. राष्ट्रनिर्मितीसाठी विवेकानंद राष्ट्रातील सर्वधर्म संप्रदायाचे योगदान आवश्यक मानतात. विवेकानंद म्हणतात, वंश, भाषा, धर्म व शासन या सर्वांनी मिळ्न राष्ट्र बनत असते. जगातील इतर राष्ट्रांच्या निर्मितीचे घटक पाहिल्यास ते फार थोडे असल्याचे दिसते. भारतामध्ये आर्य, द्रविड, तुर्क, मोगल, युरोपीय, आदि जगातील सर्व वंशाच्या लोकांचे वास्तव्य आहे. विवेकानंद म्हणतात, युरोपमध्ये राजकीय विचारसरणी ही राष्ट्रीय ऐक्याचा आधार आहे. म्हणून भारताचा भविष्यकाळ उज्वल बनविण्यासाठी धर्मातील ऐक्याची नितांत आवश्यकता आहे. विवेकानंदाच्या मते, "भारतातील सर्व प्रदेशात एकाच धर्माला मान्यता असली पाहिजे."

वरील विचारावरुन असे दिसून येते की, राष्ट्रबांधणीमध्ये विवेकानंद धर्माची भूमिका महत्वाची मानतात. धर्म हे भारताचे प्रमुख तत्व आहे. भारतातील प्रमुख समस्याचे निवारण हे धर्माच्या माध्यमातून झाले पाहिजे असे विवेकानंदाचे ठाम मत होते. धार्मिक राष्ट्रवादाच्या निरीक्षणातून असे दिसून येते की, सध्या स्थितीमध्ये भारतात विविध धर्माचे, संप्रदायाचे लोक राहत असल्यामूळे सर्वामध्ये समन्वयाची गरज निर्माण झाली आहे. राष्ट्रबांधणीमध्ये सर्व धर्मातील आदर्श तत्वाची गरज आहे. परस्परामध्ये सामंजस्य, शांततापूर्ण सहअस्तित्व ठेवणे. आज आवश्यक आहे. विवेकानंदाचा धार्मिक राष्ट्रवाद हा कोणत्याही एका विशिष्ट धर्माशी संबंधीत नसून प्रत्येक धर्मातील आदर्शवादी तत्वांवर आधारीत आहे. विवेकानंदानी जरी हिंदू धर्माचे समर्थन केले असले तरी हिंदू धर्मातील परंपरागत, वाईट प्रथेमध्ये ते सुधारणा करण्याचे सांगतात. भारताचा पाया हा धर्म आणी अध्यात्मिकतेवर आधारित असल्यामुळे प्राचीन ऋषीमुनींचे आध्यात्मिक विचार भारतातील तळा गाळाच्या लोकापर्यत पोहचविण्याची आज आवश्यकता आहे. म्हणून विवेकानंदाचा धार्मिक राष्ट्रवाद हा रचनात्मक व विशुध्द स्वरुपाचा आहे. म्हणून आपल्या गुरुप्रमाणे विवेकानंदानी सर्वधर्म समभावाची घोषणा केली. त्यांच्या मते "आपल्या मातृभुमीसाठी दोन महान प्रणाली हिंदु तसेच इस्लाम यांचा संगमच एक मात्र अशा आहे." यातूनच वैश्विक राष्ट्रवादाच्या दृष्टीने विवेकानंदामध्ये विश्वमानवतावाद व विश्वबधुत्वांची भावना अंगी असल्याचे दिसून येते.

## निष्कर्ष (Findings) :

विवेकानंदाचा धार्मिक राष्ट्रवाद हा मौलिक विचार आहे. विवेकानंदानी आपल्या मातृभूमीविषयी प्रेमाची व राष्ट्राभिमानी भावना अनेक ठिकाणी आपल्या व्याख्यानामधून व्यक्त केली. देशभक्तीची भावना तरुणांमध्ये रुजविण्याचा त्यांनी मोठ्या प्रमाणात प्रयत्न केला. राष्ट्रबांधणीच्या प्रत्येक कार्यासाठी त्यांनी धर्माची भूमिका आवश्यक सांगितली. म्हणून अभ्यासाअंती काही निष्कर्ष पुढीलप्रमाणे सांगता येतील.
१. विवेकानदांची धर्म ही संकल्पना सर्वधर्मसमभावी तसेच बुध्द्रीप्रमाण्यवादी होती.
२. भारतातील कट्टर धार्मिकता, सांप्रदायिक्ता या मानवी मनाला दुषित करणान्या संकल्पनेच्या निराकरणासाठी विवेकानंदाचे विचार महत्वपूर्ण आहे.
३. विवेकानंदाचे विचार मानवी समुदायांना धर्मनिरपेक्ष, अहिंसावादीराज्य, शांततापूर्ण सहअस्तित्व, विश्वशांती, समता, बंधुता, अध्यात्म या मानवतावादी मुल्यांवर आधारीत समाज निर्माण करण्यासाठी महत्वपूर्ण आहेत.
૪. धार्मिक आणि सामाजिक सुधारणा विवेकानंदाना अपेक्षित होती
५. विवेकानंदानी राष्ट्राला साध्य मानून राष्ट्रविकासासाठी धर्माला साधन मानले.
६. विवेकानंदाचे धार्मिक विचार मानवी समुदायाला विश्वबंधुत्वाची व मानवतावादाची प्रेरणा देणारे आहे.

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# Air Pollution and Health Hazards in Solapur City (Maharashtra) 

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#### Abstract

: Environmental pollution has become a very dreadful cause of health hazards in growing urbanized cities in India and its effect is quite pervasive even in rural areas. The rapid urbanization and industrialization in and around study region has attracted many migrants from various parts of the state. The city is situated on the south east fringe of Maharashtra State and lies in the Bhima and Sina river basins. Climactically it falls in the drought prone region in Maharashtra state. According to 2001census the population growth rate of city is 40.53 per cent as compare to 1991 census. Due to expansion of city limit the number of vehicles were increased and it shows positive relation with vehicular pollution. The present study is based on primary and secondary data. For analyzing the data, various cartographic and statistical techniques have been applied. Present study examines the state of emission level of various gaseous within the city and its impact on health of the population residing within the limits. The study highlights that So2 and Nox levels were within the prescribed limits however RSPM and SPM levels exceeded the limits. Shivaji Chowk (R\&C) area is having highest level of RSPM (Respirable Suspended Particulate Matter) 436.70 (UG/M3) and SPM (Suspended Particulate Matter) 430. Vehicular Pollution is the major contributory sources of air pollution and its impacts are mainly eye irritation, asthma, bronchitis, etc. In Solapur city the condition of ambient air quality is unsatisfactory.


Key words: Air Pollution, Health Damages, Health Production Function
INTRODUCTION:
Environmental pollution has become a very dreadful cause of health hazards in growing urbanized cities in India and its effect is quite pervasive even in rural areas. The large-scale industrialization increases the production of material goods and urbanization creates mega cities, the ill effects of these activities are reflected in the form of various environmental problems. One such problem is the deterioration of urban air quality in India and other developing countries. The main contributing factors to air pollution are the overwhelming concentration of vehicles, poor transport infrastructure and the establishment of industries in urban agglomerations. Epidemiological studies have shown that there is a significant association between the concentration of air pollutants and adverse health impacts (Ostro, et al., 1995; MJA, 2004). Therefore here an attempt has been to examine the state of level of Air pollution and its impact on health in the study region.
OBJECTIVE:
To examine the state of emission level of various gaseous and its impact on health of the population within the city.

## STUDY AREA:

The city is situated on the south east fringe of Maharashtra State and lies in the Bhima and Sina river basins. Climactically it falls in the drought prone region in Maharashtra state. According to 2001 census the population growth rate of city is 40.53 per cent as compare to 1991 census. Average annual rainfall are 584.3 mm and maximum temperature $45^{\circ} \mathrm{C}$. As per 2010 RTO record the total number of various types
of vehicles are $9,08,960$. These are the major source of air pollution in the city.

## DATABASE AND METHODOLOGY:

The present study is based on primary and secondary data .The data regarding air pollution level in the city at various locations such as viz. Ashok chowk, Saat Rasta chowk and near MIDC, Akkalkot Road (New) has been collected. Regarding various air quality parameters such as Sulphur dioxide (So2), Oxides of nitrogen(Nox), Suspended particulate Matter (SPM) etc.. The impact of these pollutants on human health was also studied by random sample methods. By visiting Civil Hospital and other prestigious hospitals in the city. With the help of random sampling, various diseases types were identified in the city. For analyzing the data, various cartographic and statistical techniques have been applied.
DISCUSSION:
Today, with an unprecedented population growth the physical expansion of the cities is inadvertent. The physical expansion of built up areas beyond their corporation boundaries is conspicuous. Much of the development has occurred in a spontaneous, haphazard and unplanned manner. What were initially rural villages have now been transformed into urban residential, commercial and industrial complexes. This phenomenal growth of cities has been the topic of concern to planners of the world over (Bhat,etal,1974). The importance of the link between air pollution and health is underscored in a study by Pope, et al.,(2002).In Solapur city the condition of ambient air quality is unsatisfactory.

## SOURCES OF AIR POLLUTION IN THE CITY:

The rapid urbanization and industrialization in and around Solapur city has attracted many migrants from various parts of the state to Solapur. This has resulted in expansion of the settlements in Solapur city. Since the first census of independent India \& then onwards up to 1991, the population of the city has shown a constant and gradual increase ranging between $15 \%$ to $20 \%$. While the city population was 3,38,000 in 1951 (The first census of independent India), the figures were 3,34,000 (1961) 3,88,000 in (1971) $5,14,000$ in (1981) \& 6,21,000 in (1991) respectively. However, the census of 2001 reveals that the city population has reached phenomenal figure of $8,73,047$ indicating a steep rise in the population of Solapur city as compared to earlier census figures starting from 1951. Due to expansion of city limit the number of vehicles $(9,08,960)$ were increased and it shows positive relation with vehicular pollution.
The major contributory sources of air pollution in Solapur city are mainly

1. Vehicular Pollution
2. Industrial Pollution (The industrial activity in Solapur city and surrounding areas is mostly confined to small scale sector and there are a very few medium and large scale industries located in Solapur city. The contribution of industrial pollution is negligible. Therefore it is not considered here.)
3. Vehicular Pollution:

It is seen from the gathered data that the Air quality trend in Solapur city is disturbing. This is mainly because of heavy vehicular movement through Solapur City, resuspension of the dust on city Roads due to prevailing climatic conditions and bad patches of untarred / unconcretized roads in the city and the frequent dust storms.
The traffic and transportation problems in Solapur city can be broadly attributable to the factors as under.
i] A steep rise in number of vehicles especially the two wheelers.
ii] Heterogeneous traffic conditions with limited road capacities which make the segregation of traffic very difficult.
iii] Absence of a ring road despite radial expansion of the city.
iv] Insufficient road carriageway capacities in the congested area.
v] Crowded intersections leading to increased air and noise pollution.
vi] Various encumbrances on roads such as encroachments, unauthorized constructions particularly of religious nature etc.
vii] Limitations of DP roads to cater to the transport needs since vast stretches of developable lands in the DP do not have any plans for road networking.
viii] Absence of parking facilities at important locations leading to street parking of the vehicles.
ix] The inadequacy of footpaths, their diversions to other uses and joy-walking leading to obstruction in the vehicular traffic.
x] In addition to vehicular pollution, the area being draught prone, dry climatic conditions are always prevailing
XI] Poor maintenance of tar roads in the city results into higher level of RSPM.
XII] Bad patches between the city roads and footpaths resulting into higher dust emissions.
XIII] Incidence of storm dust are frequently observed, resulting into high RSPM and SPM.
Table -1.1 Solapur city- No. of vehicles and their contribution to pollution

| Sr. <br> No. | Types of <br> Vehicles | $\mathbf{2 0 0 0}$ | $\mathbf{2 0 0 5}$ | $\mathbf{2 0 1 0}$ | \% Contribution |
| :---: | :--- | ---: | ---: | ---: | :---: |
| $\mathbf{1}$ | 2 Wheelers | $1,62,371$ | $3,25,950$ | $7,85,500$ | $77.33 \%$ |
| $\mathbf{2}$ | Auto Rickshwas | 6403 | 8,500 | 10,260 | $2.93 \%$ |
| $\mathbf{3}$ | Light Motor <br>  <br>  <br> Vehicles | 16,042 | 34,150 | 45,000 | $7.40 \%$ |
| $\mathbf{4}$ | Heavy Vehicles | 28,387 |  |  |  |
|  | Total | $2,13,203$ | $4,14,500$ | 68,200 | $9,08,960$ |

Source- Regional Transport Office, Solapur-2010
It is seen from the Table 1.1 that the number of two wheelers has steeply increased in Solapur city which may be partly responsible for the deterioration of the air quality in the city. The number of other vehicles in Solapur has also increased during last ten years however the road development has not kept pace with these increased vehicles. Besides, the existing roads are having narrow carriageways and hence not capable of taking up this increased traffic volume.


This results in the speed reduction of the vehicles and consequent increase in the pollution load. The survey reveals that the vehicles have to compulsorily run at a low speed during the peak traffic hours due to traffic congestion. The heavy traffic density also aids in further aggravating the already increased air pollution in the city. The Two wheelers and Auto Rickshaws have shown a steep rise in the last three years as per the RTO registration. The table above shows the percentage contribution of air pollution made by the different categories of vehicles in Solapur city.
The Air quality status at various locations is given below.
Table -1.2 Air quality status at various locations in Solapur City

| Sr. <br> No | Locations | So2inug/ <br> m2 | Nox in <br> ug/m2 | RSPM <br> (UG/M3) | SPM |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 1 | Shivaji <br> Chowk(R\&C)Area | 20.60 | 38.15 | 436.70 | 430 |
| 2 | Satt-Rasta <br> Chowk(R\&C) | 20.85 | 32.75 | 413.50 | 416 |
| 3 | MIDC(R\&IArea) | 18.10 | 40.55 | 346.30 | 400 |
| 4 | WIT Campus Ashok <br> Chowk | 21.00 | 48.00 | 190 | 423 |
| 5 | Limit | $80 / 120$ | $80 / 120$ | $100 / 150$ | 200 |

Source- MPCB-2010


It is seen from the above air quality results that So2 and Nox levels were within the prescribed limits however RSPM and SPM levels exceeded the limits. It is because of the vehicular movement is increased at the above locations in Solapur city and National HighwayNo. 9 which passes through Solapur city. Fig.1.2 shows that except WIT campus the level of RSPM and SPM is declined as compare to other locations within the city.

## Status of Public Health

There is one medical collage and total 210 hospitals in Solapur city. The present study reveals about the impacts of air pollution on the health of population residing within Solapur city limits. The results of this study are given in the table below. It is observed that pulmonary tuberculosis diseases stood first, followed by bronchitis, chronic and asthma etc,.
Table -1.2 Number of patients with various diseases respiratory tract infections admitted in SCSM General Hospital, Solapur (from 1998 to 2010)

| Sr. <br> No | Diseases | $\mathbf{1 9 9 8}$ | $\mathbf{1 9 9 9}$ | $\mathbf{2 0 0 0}$ | $\mathbf{2 0 0 1}$ | $\mathbf{2 0 0 2}$ | $\mathbf{2 0 0 4}$ | $\mathbf{2 0 1 0}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1 | Pulmonary <br> Tuberculosis | 770 | 675 | 754 | 703 | 759 | 856 | 970 |
| 2 | Malignant neoplasm of <br> lip,oralcavity | 002 | 056 | 044 | 046 | 048 | 47 | 50 |
| 3 | All other diseases of the <br> upper respiratory tract | 216 | 191 | 239 | 169 | 165 | 191 | 225 |
| 4 |  <br> bronchiolitis | 023 | 054 | 121 | 082 | 096 | 136 | 200 |
| 5 | Pneumonia chronic\& | 449 | 410 | 426 | 500 | 426 | 315 | 291 |
| 6 | Bronchitis, <br> asthma | 001 | 009 | 004 | - | - | - |  |
| 7 | Pleurisy | All other diseases of the <br> respiratory system | 042 | 116 | 101 | 101 | 099 | 109 |
| 8 | 1916 | 1848 | 2201 | 1842 | 1797 | 1959 | 2500 |  |
| 9 | Total |  |  |  |  |  |  |  |

Source- Civil Hospital, Solapur -2010

## CONCLUSION:

In Solapur city the condition of ambient air quality is unsatisfactory. It is observed that pulmonary tuberculosis diseases stood first, followed by bronchitis, chronic and asthma etc. The level of SPM (Suspended Particulate Matter) in the ambient air at various locations remains high and above prescribed limit at most of the time due to insufficient air control measures. Innumerable air pollutants in the form of particles of irrespirable sizes ( smaller than 5 micron) such as dust and toxic trace metals and in the gaseous forms such as Co2, CO, So2, Nox and Fluorine enter the human body by inhalation or ingestion due to long exposure to polluted air from vehicular emission. These particles and gaseous forms can penetrate the lungs through the respiratory tract and be deposited in the alveoli or can enter the human body stream passing through the lung membranes. Health hazards associated with the inhalation of these parcels and gaseous forms are cardio-vascular respiratory oillments. It also contributes to illnesses like eye irritation, asthma, bronchitis, etc., which invariably reduce efficiency at work. In Solapur city the condition of ambient air quality is unsatisfactory.

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# Change in Cropping Pattern in Raigarh District, Maharastra : A Geographical Perspective 

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#### Abstract

: Agriculture in any region is dominantly controlled by physical and human environment. In this paper an attempt has been made to study the change in cropping pattern in Raigarh District of Maharashtra. Raigarh District is located in North Konkan of Maharashtra and covers 7148 sq. km. area. The entire study is based on secondary data. The period of 20 years i.e from 1980-81 to 2000-2001 is selected for the temporal changes in crop land use. The tahsil is a basic unit of investigation .Cartographic techniques are employed to strengthen the analysis of study. The study reveals that during the last two decades the notable changes have taken place in cropping pattern.


## INTRODUCTION:

Agriculture in any region is dominantly controlled by physical and human environment. The physical factors like relief, soil, climate, water supply which sets a broad limit for the agriculture and human factors viz. the economical condition of farmer, demand of crops in the market, prize of crop in market, technological level of farmer, length of occupation etc. affects on agricultural pattern of area. These factors affect on farmers decision to take the particular crops in the agriculture. The cropping pattern is the proportion of the area under various crops at the point of time. Agricultural land use and mainly the cropping pattern which reflects the development of the region, depend upon natural and social environment.

The data regarding crops have been collected through Socio-economic and Statistical Abstract of Raigarh District and Agricultural Department for special organization, the data collected, converted into percentage to the gross cropped area. The crop percentage is arranged into class categories. Maps are prepared and finally displayed the spatial distribution.

## STUDY REGION:

Raigarh district is situated in Konkan region of Maharashtra state. It lies between 170.15 / and $190.50 / \mathrm{N}$. latitude and $720.51 /$ and $730.40 / \mathrm{E}$. longitude. It is surrounded by Mumbai Suburban district to the northwest, Thane district to the north, Pune district to the east, Ratnagiri district to the south Satara district to the south east and Arabian sea to the west. The study region has an area of 7148 sq . km . which is about 3.32 percent of the total area of the state and a population was 2205972 as per 2001 census of which 75.78 percent is rural and 24.22 percent is urban population. For administrative purpose the district is divided in to 15 tahsils. The district as whole is a part of the coastal low land. The study region is drained mostly by short west word flowing parallel streams originating from the Sahayadri ranges. The Climate of the study region is generally hot and moist. The district receives seasonal rainfall from south west monsoon during June and

September and the average annual rainfall for the district as a whole is 3029 mm . The soil of the district is essentially derived from the Deccan trap which is the predominant rock formation of the district. The main types of the soils in the district are laterite soil, forest soil, coastal alluvium and khar or salty soil. Rice and Nachani are the major crops in the study region. Horticulture is also well developed in the region. Two National high ways viz. NH-4 Mumbai- Pune - Banglore and NH-17 Mumbai - Goa - Mangalore and Konkan broad gauge railway line passes from the district and there are fourteen railway stations in the study region.

## OBJECTIVE:

- To analyze the change in cropping pattern for twenty years. i.e. 1981 to 2001.
- To find out the reasons of the change in cropping pattren.

DATABASE AND METHODOLOGY:
The data is collected from secondary sources namely, socio economic review, District census Hand-back, District Gazetteer, Agricultural Epitomes, Periodicals, Seasons and Crop reports published by Government of Maharashtra and department of Agriculture.

The data obtained for the study period of 1980-81 and 2000-01, converted into percentage to the gross cropped area. The crop percentage is arranged into class categories. The percentage is categories in different groups. The amount of area involved in change for every areal unit is calculated for individual crop and the crops of leading increase and decrease are marked and mapped in every tahsil providing a comparative view of the direction of change. Tahsil is selected as a basic unit of investigation.

## TEMPORAL VARIATION IN AGRICULTURAL LAND USE

(1980-80 to 2000-01)
Rice, Wari, Nachni, Pulses, Spices, Oil Seeds, Fruits and vegetables and Fodder crops are the major eight crops grown in the study area. Kharip season starts in the month of June or July and ends in September. Rice, wari and nachni are the major kharip crops in Raigarh district. Rabi season commences from September or October and ends in April month. Pulses, oilseeds, spices, vegetables and fodder crops are grown in rabi season

In the overall cropping pattern of the study region, the total gross cropped area was 29.14 per cent in 1980-8,it was increased by 4.81 per cent and reached up to 33.95 per cent in 2000-01. The net sown area was 26.91 per cent area in 1980-81and during 2000-01 it was increased by 2.62 per cent and reached up to 29.53 per cent.

Table-1 Raigarh District - Agricultural Land Use Pattern

| Sr. <br> No. | Name of the <br> Crop | Year 1980-81 |  | Year 2000-01 |  | Change |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
| 1 | Rice | 142198 | 71.02 | 134294 | 57.58 | -13.44 |
| 2 | Nachni | 16321 | 8.15 | 12101 | 5.19 | -2.96 |
| 3 | Wari | 7154 | 3.57 | 7843 | 3.36 | -0.21 |
| 4 | Pulses | 7221 | 3.61 | 13182 | 5.65 | +2.04 |
| 5 | Spices | 1073 | 0.54 | 417 | 0.18 | -0.36 |
| 6 | Fruits \& Veg. | 2923 | 1.46 | 20744 | 8.89 | +7.43 |


| 7 | Oilseeds | 1805 | 0.90 | 3971 | 1.70 | +0.8 |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| 8 | Fodder crops | 22818 | 11.40 | 42386 | 18.17 | +6.77 |

Source - Computed by author based on Socio-Economic Review and Statistical Abstract of Raigarh District from 1981 to 2001
The highest positive change has observed in fruits and vegetable crops where the area was 1.46 per cent in 1980-81, increased by 7.43 per cent and reached up to 8.89 per cent in 2000-01. The highest negative change has recorded in Rice crop where the area has decreased by 13.44 per cent in the study period. Table 4.1 shows the temporal change in the whole region. Fodder crops ( 6.77 per cent), pulses ( 2.04 per cent) and oil seeds ( 0.8 per cent) crops shows increasing trend while wari ( 0.21 per cent), nachni ( 2.96 per cent) and spices ( 0.36 per cent) ) shows declining trend between 198081 and 2000-01.
Rice
In general, the area under rice was 71.02 per cent in 1980-81and it decreased by 13.44 per cent during the study period and reached up to 57.58 per cent in 2000-01. Nine tahsils has observed the high change while six tahsils have observed lower change. The highest positive change is observed in Tala tahsil 58.86 per cent and the highest negative change is recorded is 39.31 per cent in Uran tahsil. Fig-1 reveals the change in the rice cultivation in the region.

Very high change has recorded in Tala and Roha tahsil. The high change ranging from 0 to 10 per cent observed in Panvel, Karjat, Khalapur, Pen, Mangaon and Shrivardhan tahsils. Moderate change has recorded in only Alibaug tahsil (-12.12 per cent). Low change has observed in Murud, Sudhagad, Mhasla, Mahad and Poladpur tahsil ranging form -20 to -30 per cent lower than the district average due to increase in area under fruits and fodder crops. The lowest negative change is 39.31 per cent found in Uran tahsil because of increasing the area under kharland and growing industrial activities in the tahsil.

## Nachni

Nachni is the second food grain crop cultivated in the study region grown on slope of hills and Sahayadri mountain ranges. In general, the area under nachni has decreased by 2.96 per cent, during the study period. Eight tahsils had observed the high change, while six tahsils had low change. The highest change has seen in Tala tahsil ( 7.12 per cent) and lowest change is -13.28 per cent observed in Mhasala tahsil. Fig.- 2 shows the distribution of nachni crop in Raigarh district

The Very high change has recorded in Uran tahsil and it was 0.07 per cent. Moderate change had seen in eight tahsils namely Panvel, Karjat, Khalapur, Pen, Alibaug, Murud, Roha and Mangaon tahsil between 0 to - 4 per cent.Low change, ranging between 4 to -8 per cent had observed in Shrivardhan and Mahad tahsils, while very low change, less than -8 per cent has recorded in Sudhagad, Mhasla and Poladpur tahsils due to low production of the crop.
Wari
Wari is a food grain crop grown on the sloppy land of the hilly region. The area under wari was 3.57 per cent in 1980-81 and 3.36 per cent in 2000-01 of the total cropped area. The area under wari had decreased by 0.21 per cent in the study region. Eleven tahsils in the district have recorded positive change in the percentage area, in the study region where as decline has observed in four tahsils in the district. The highest increase is 4.98 per cent found in Tala tahsil and the lowest change is found in Poladpur tahsil (- 5.49 per cent). Fig. 3 shows the temporal change in the study region.

The Very high change had observed in Tala tahsil (4.98 per cent) while high change ranging form 0 to 2 per cent had seen in Uran, Sudhagad, Panvel, Karjat, Khalapur, Alibaug and Roha tahsil.

Moderate change had seen in Pen, Murud, and Mhasla tahsils ranging from 0 to 2 per cent. Low change had observed in Mangaon and Mahad tahsils while very low change (less than - 4 per cent) has recorded in Shrivardhan and Poladpur tahsils

## Pulses

Gram, Tur, Moong, (Black gram) wal, etc are the major pulses well grown in the central and eastern part of the district and near the foot hill of the mountain The district stands first throughout the state in raising wal.

The total area under pulses was 3.61 per cent in 1980-81 and 5.65 per cent in 2000-01. It was increased by 2.05 per cent in twenty years. The increase has found in nine tahsils namely Uran, Khalapur, Pen, Roha, Sudhagad, Mangaon, Tala, Shrivardhan, and Mhasala tahsil and decrease has observed in six tahsils namely Panvel, Karjat, Alibaug, Murud, Mahad and Poladpur tahsils in the study region (Fig.- 4). Highest increase is recorded in Mhasla tahsil with 8.58 per cent and lowest increase with - 6.58 per cent in Karjat tahsil.

Very high change had seen in Mhasla ( 8.58 per cent) and Tala ( 6.34 per cent) tahsils. High change ranging form 3 to 6 per cent had observed in Sudhagad, Mangaon and Shrivardhan tahsils. Moderate change had found in four tahsils, namely Uran, Khalapur, pen and Roha tahsil between 0 to 3 per cent. Low change between 0 to -3 per cent was recorded in coastal and mountains tahsils like Panvel, Alibaug, Murud, Mahad and Poladpur due to saline soil in the coastal area while lowest change found in Karjat tahsil due to sloppy land in the tahsil and it was 6.58 per cent. The aerial strength of the cultivation of pulses is useful for increasing the fertility of the soil, specifically nitrogen content. It provides the amount of proteins to the local people.

## Spices

Black pepper, cinnamon, nutmeg, are newly introduced spices crops in the study area. These are mostly the inter crops in the coconut and areca nut orchids. The area under spices in 1980-81 was 0.54 per cent and it was reduced by 0.36 per cent and reached up to 0.18 per cent in 2000-01 The highest increase had observed in Tala tahsil and it is 3.18 per cent and the lowest decrease was observed in Shrivardhan tahsil is 3.11 per cent. Nine tahsils has shown increase in the spices cultivation while six tahsils recorded decrease in the spice cultivation. Fig.-5 display the spices cultivation in the study region.

High change between 0 to 1 per cent had recorded in Uran, Pen, Panvel and Sudhagad tahsils. Moderate change between 0 to -1 per cent is observed in eight tahsils namely, Karjat, Khalapur, Alibaug Roha, Mangaon, Mhasla, Mahad and Poladpur tahsil. Low change i.e. less than -1 per cent is found in Murud and Shrivardhan tahsil in the study region.

## Fruits and Vegetables

Raigarh district is basically known for Rice cultivation but due to proximity of Mumbai metropolitan region, farmers are slowly moving towards horticulture. As a result of this, the region shows the increase in the cultivation of fruits and vegetables in last decade. The total area under cultivation has 1.46 per cent in 1980-81. It was increased by 7.43 per cent and reached up to 8.89 per cent, in 2000-01. (Fig.-6)

Mango, cashew nut, coconut, chiku, ratambi, water-melons, jack fruits, guavas, betel nut, papaya are the major fruits cultivated in the study region.


Ladyfinger, bitter-guard, bottle-guard, sweet guard, cucumber, spinach, chilli, white onions are the major vegetables grown in the district.

All tahsils except Khalapur tahsil, shows decrease in the cultivation of fruits and vegetables in the region. The highest increase had observed in Shrivardhan tahsil and it was 27.76 per cent and the lowest change is - 324 per cent recorded in Khalapur tahsil. Very high change i.e. more than 20 per cent had found in Shrivardhan, Sudhagad and Mhasla tahsils and high change between 10 to 20 per cent had observed in Uran, Karjat Murud, Mangaon and Poladpur tahsils. The high change is a result of systematic
plantation done by Agricultural department of Raigarh district and its efforts to motivate the farmers for the plantation of fruit crops in the region. This department has alone done 67082 hectares plantation in last ten years. Moderate change was found in Panvel, Pen, Alibaug, Roha Tala and Mahad tahsils which is between 0 to 10 per cent and the low change has observed in only one tahsil Khalapur and it was 3.42 per cent.

## Oil Seeds

Ground nut, sesames and linseeds are grown as oil seeds in the study region. In 1980-81 the area under oil seeds is recorded 0.90 per cent of the cropped area and it occupied 1.90 per cent area. In 2000-01, it was increased by 0.80 per cent between 1980-81 and 2000-01. Six tahsils has recorded increase in the oil seed cultivation, while nine tahsils has recorded decrease in oil seed cultivation than the district average. The highest change has found in Mahad tahsil with 5.35 per cent and the lowest decline has recorded in Mhasla tahsil with 2.07 per cent. (Fig.-7)

High change ( 2 to 4 per cent) had observed in Alibaug and Shrivardhan tahsils. Moderate change in oil seed cultivation has been observed in seven tahsils Uran, Karjat, Panvel, Pen, Sudhagad, Mangaon and Tala tahsils between 0 to 2 per cent. Low change between 0 to -2 per cent has recorded in Khalapur, Roha, Mahad, Poladpur and Mhasla tahsil

## Fodder Crops

Under this category non food crops like grass, maize etc. had considered as fodder corps. In 1980.81 areas under fodder crops was 11.40 per cent of the total cropped area of the region. It was increased by 6.78 per cent and reached up to 18.17 per cent in 2000-01. Fig. 4.8 show the temporal variation in fodder crops cultivation. Nine tahsils show the increase, while six tahsils show decrease in the area under fodder crops in the region. The highest change is recorded in Mahad tahsil ( 27.16 per cent) and lowest change is found in Shrivardhan tahsil (11.05 per cent).

The very high change (more than 16 per cent) is seen in Uran, Tala, Mahad and Poladpur tahsils. High change has recorded in Murud Mhasla, Alibaug and Sudhagad tahsils which is between 8 to 16 per cent. The increase in fodder crop area is due to increase in the domestic animals and demand of milk in the region. Moderate change has found in Panvel, Khalapur and Mangaon tahsil which is between 0 to 8 per cent. Low change than the district average ( 0 to -8 per cent) is recorded in Karjat and Pen tahsils while very low change has observed in Roha (-10.90 per cent) and Shrivardhan (-11.05 per cent) tahsil in the study region.

## CONCLUSION:

The pattern of cropping is complex and it shows the fluctuations in the study period. The district has increase in percentage of area under net sown and decrease in cultivable waste during the study period. This shows the efforts of farmers to bring the maximum land under cultivation.

Rice is the major food crop grown in the study region. Rice covers more than fifty per cent to the net sown area and shows declining trend in the study period. Nachni and Wari shows high decrease in area under cultivation in the study period. Mostly in coastal and hilly tahsils of the district. Increasing the Kharland is the major cause for declining the area under rice cultivation in coastal region. Gram, tur, moong, wal, chawli are the major pulses grown in rabbi season and the area under pulses is increased by 2.05 per cent in study the period. Pulses are grown after rice cultivation with limited irrigation. Spices are grown as an inter crop in coconut and areca nut farms, declined by 0.36 per cent in twenty years. The area under fruits and vegetables show remarkable
increase by 7.43 per cent in the period of 1991 to 2001. Oil seeds mostly grown on plateau region of the district, shows overall growth of Fodder crop includes maize, kadwal and grass covers 18.17 per cent area in 2000-01. It is increased by 6.78 per cent Proximity of Mumbai Metropolitan region is the cause for increasing trend of milk farming among the farmers. The rise in fodder crop cultivation is a result of the same REFERENCES:

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# Growth of Population in Kolhapur District (Maharashtra) 

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#### Abstract

In this paper attempt has been made to analysis the growth of population in Kolhapur district. It is one of the least urbanized district in the state having about one fourth population in urban areas whereas about two-fifth of state's population lives in urban areas. It has been studied on the basis census of India reports of 1991 and 2001.The total population of the district 17.85 percent increase and urban area is observed to increase 33.46 percent whereas in rural area it is increased 12.27 percent. The Hatkanangle and Karvirtahsil has been reported to be increased by urban population as 39.18 percent and 31.12 percent respectively during this decade. The Gaganbavada and Kagaltahsil has been reopened to be increased by rural population as 17.07 and 16.38 percent respectively during this decade. The Hatkanangle and Karvirtahsil has been reported to be increased by Total population as 25.08 percent and 22.81 percent respectively during this decade.The results have been discussed with the help of standard deviation and coefficient of variation, which are computed to be 4.38 and 28.25 respectively. In this paper the present study reveals the tahsil wise growth of population in Kolhapur district, during 1991-2001.


Key words: Total, Rural and Urban Growth of population, Male-Female differential growth.

## INTRODUCTION:

One of the important aspects of world population is its uneven distribution. The population of India is highly concentrated in some pockets such as highly urbanized and industrialized areas and areas of high agricultural prosperity. There are fewer people in high mountains, arid lands, thickly forested areas and cold polar areas. The growing pressure of population on resource base, especially on arable land, has created many socio-economic, cultural, political, ecological and environmental problems.

The imbalance between trends of population and development places the population of a region to inadequacies of amenities and results in hunger, malnutrition, poverty, low standard of living, unemployment, overcrowding in schools and hospitals etc. (Mishra, 1995).

The higher growth of population has led to various environmental, socio-economic problems. This district compares with the villages of mostly the rich people based on agricultural economy. Migration of the people from hill place to plain place. It is the process of reducing regional disparities at different stages of economic, social, political and cultural development and imbalanced investment in men and material leads to internal migration for economic reasons. The district is famous for sugar, lather and silver industry all over the state. The economy of the district is mainly dependent on agriculture.

## STUDY AREA:

Kolhapur district is located in the extreme southern part of Maharashtra state (fig. no.1). It lies between $15^{\circ} 43^{\prime}$ and $17^{\circ} 17^{\prime}$ north latitude and $73^{\circ} 40^{\prime}$ and $74^{\circ} 42^{\prime}$ east longitude. It is surrounded by sangli District to the north Belgaum District of Karnataka state, to the east and south and Ratnagiri and Sindhudurg District to the west. The Sahyadri ranges to the west and Varna River to the north from natural boundaries.

The District has an area of 7746.40 sq. kms. Which is about 2.50 per cent of total area of the and population 3523162 as per the 2001 census the district as a whole is a part of the Deccan table land and slopes towards the south-east in general the Physiography of the district may be grouped into three parts i.e. The Sahyadri Hills, The plateau and The River Valleys. From the human point of view these are the most important areas of the District and have fertile soil. They are well cultivated and area densely populated.

It is an Industrial, Educational, Commercial administrative centre and now provides the various facilities to the surrounding region. At present there are twelve Tehsils Viz. Shahuwadi, Panhala, Hatkanangale, Shirol, Karvir, Gaganbavada, Radhanagari, Kagal, Bhudargad, Ajara, Gadhinglaj and Chandgad. All these twelve tahsils are considered for the study (Fig. No. 1).


Fig. 1: Location Map of Study Region

## OBJECTIVES:

The objective of this paper is analysis the tehsil wise total, rural and urban, Male-female differential growth of Population in percentage of Kolhapur District during 1991-2001.

## DATE BASE AND METHODOLOGY:

The present study is based on the tehsil wise census data of 1991 and 2001 census at India reports. The data have been analyses for total, rural urban and malefemale growth of population in percentage. Calculate the standard deviation and coefficient of variation from this analysis has supported the interpretation of the results. The
secondary data have been collected and computed by recent research techniques and the results have been brought through tables and maps. The population growth rate is measured with following formula.

PGR=P2-P1/P1 $\times 100$
Where,
PGR is the population growth rate
$P 2$ is the population of ' $X$ ' tehsil in the later decade
$P 1$ is the population of the same tehsil of ' $X$ ' initial decade
Thus, the percentage growth in the population of Kolhapur district during the 1991-2001.

## RESULT AND DISCUSSION:

## Spatial Differential:

Table No.1Shows the growth in population during 1991-2001 both in rural and urban ares along with male and female of Kolhapur district and different tahsils and fig.No. 2 shows the maps growth population of different tahils within this period. It is clear that urban population is increasing at a fast rate in few tahsils in the district compared to rural population.

1) Total population of the district in urban area is observed to increase 33.46 percentWhereas in rural area it is increased to 12.27 percent.
2) Population in urban area of Hatkanangletahsil has increased by 39.18 percent whereas rural area of these tahsil has shown increases of 10.38 percent respectively.

Table No. 1
Population Growth in Kolhapur District during 1991-2001.

| Sr.No. | District/Tahsils | Total Rural | Percentage of Growth |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  | Urban | Total | Male | Female |
| $\mathbf{1 )}$ | Shahuwadi | Total | 11.53 | 13.05 | 10.11 |
|  |  | Rural | 11.75 | 10.20 | 10.20 |
|  |  | Urban | 05.08 | 07.37 | 07.37 |
| 2) | Panhala | Total | 15.23 | 16.88 | 13.48 |
|  |  | Rural | 15.21 | 16.72 | 13.65 |
|  |  | Urban | 16.31 | 27.53 | 0.02 |
| 3) | Hatkanangle | Total | 25.08 | 23.14 | 17.06 |
|  |  | Rural | 10.38 | 10.39 | 10.34 |
|  |  | Urban | 39.18 | 38.94 | 39.44 |
| 4) | Shirol | Total | 16.58 | 16.13 | 17.06 |
|  |  | Rural | 16.33 | 15.78 | 16.96 |
| 5) | Karvir | Urban | 17.76 | 17.76 | 17.69 |
|  |  | Total | 22.81 | 22.90 | 22.71 |
|  |  | Rural | 11.93 | 12.87 | 10.90 |
| 6) | Gaganbavada | Urban | 31.12 | 30.54 | 31.76 |
|  |  | Total | 17.07 | 17.88 | 1.24 |
|  |  | Rural | 17.07 | 17.88 | 16.24 |
| 7) | Radhanagari | Urban | Notal | 11.28 | Nil |
|  |  | Rural | 11.28 | Nil |  |
|  |  | Urban | Nil | Nil | Nil |
| 8) | Bhudargad | Total | 13.61 | 9.72 |  |
|  |  | Rural | 13.61 | 15.28 | 11.98 |


|  |  | Urban | Nil | Nil | Nil |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 9$)$ | Ajra | Total | 14.10 | 17.42 | 11.18 |
|  |  | Rural | 14.01 | 15.82 | 11.01 |
|  |  | Urban | 14.73 | 16.89 | 12.89 |
| $\mathbf{1 0 )}$ | Gadhinglaj | Total | 9.44 | 9.66 | 9.22 |
|  |  | Rural | 8.95 | 9.29 | 8.51 |
|  |  | Urban | 13.27 | 12.38 | 14.22 |
| $\mathbf{1 1 )}$ | Kagal | Total | 16.50 | 17.73 | 15.23 |
|  |  | Rural | 16.38 | 17.85 | 14.88 |
|  |  | Urban | 17.27 | 16.95 | 14.59 |
| $\mathbf{1 2 )}$ | Chandgad | Total | 17.85 | 18.54 | 17.11 |
|  |  | Rural | 12.27 | 13.16 | 11.35 |
|  |  | Urban | 33.46 | 33.09 | 33.85 |
|  | District | Total | 17.85 | 18.54 | 17.11 |
|  | Total | Rural | 12.27 | 13.16 | 11.35 |
|  |  | Urban | 33.46 | 33.09 | 33.85 |

Source: Computed by Author.
3) Population in urban areas of other tahsils viz. Shahuwadi,Panhala,Shirol,Ajra,Gadhingalaj and Kagal has Shown increases as 05.08, $16.31,17.76,14.73,13.27$ and 17.27 percent respectively. This is relatively less compare


Fig. 2 : KOLHAUR DISTRICT: GROWTH OF POPULATION IN PERCENTAGE DURING 1991-2001.
increase in population of their rural areas $11.75,15.21,16.33,14.01,8.95$ and 16.38 percent respectively.
4) The Gaganbavada, Radhanagari, Bhudargad, Chandgad etc. tahsils entirely ruralarea.Thesetahsils are rural population 1707, 11.28, 13.61 and 13.17 percent respectively. These tahsils no urban area.
5) Table No. 2 shows that the coefficient of variations has increased from 18.48 and 52.02 in case of rural and urban respectively. In case of females the correspondingFigures are 20.92 and 63.38 as against 18.30 and 51.69 formales.
Hatkanangle and karvirtahsils have shown urban population to be increased as they are connected to railway, Nationalhighway, airport, educationalcenter,market,development of religious centres,etc.localized factors are responsible for the urbangrowth.
Panhala,Shirol,ajra,Gadhinglaj,Kagal etc. tahsils have high urban population growth as compared to rural population, because there are socio-economic factorsdevelopment (as administrative services, NationalHighway, Agro-based industries, marketCentre, silver decorating ornament at Hupari, tobacco market at Jaysingpur,Tourism at panhala,Market of agriculture at Gadhinglaj, rice factories at Ajra etc.).ShahuwadiTahsil is only one less urban growth as compared to rural population growth, because entirely tahsil has undeveloped. So urban area is less.
Male - Female Differential Population Growth in percentage during
1991 -2007.
Table No. 2 it also gives the increases in the percentage of population in terms of males and female of the rural and urban areas. Whereas, total urban females have shownfast increase 33.85 percent as against 33.09 percent compared to males. In Shahuwaditahsil male -female are in rural area as compared to urban area. In Panhalatahsil in mail is high urban area (27.53\%) and female is low urban area (4.02) and compered to urban area male high and low in rural area. In panhalatahsil females are less in urban area (4.02\%) than the rural area (13.65\%).In Hatkanangle and Karvirtahsils males and females are more in urban area than the rural area respectively. In Gaganbavada,Radhanagari,Bhudargad and Chandgadtahsils has no urban area. So all male - females are lived rural area respectively. In Ajra and gadhinglajtahsils male and females are more in urban area than the rural area lived respectively.InKagaltahsil have more male - females lived in rural area as compared to urban area respectively. Table - 2 Kolhapur District: Coefficient of variation and standard during 1991-2001.

| Population | Total |  | Male |  | Female |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | St.Dev. | Coeffi.var. | St.Dev. | Coff.Var. | St.Dev. | Coff.Var. |
| Total | 4.38 | 28.25 | 3.74 | 22.79 | 4.50 | 31.90 |
| Rural | 2.46 | 18.48 | 2.62 | 18.30 | 2.56 | 20.92 |
| Urban | 10.06 | 52.02 | 10.59 | 51.69 | 11.24 | 63.28 |
|  |  |  |  |  |  |  |

Source: Computed by Author.

## CONCLUSION:

On the basis of above results and discussion it can be concluded that Hatkanangle and Karvirtahsils of the district are growing urbanization fast rate than shahuwadi,panahala,Sirol, Ajra, Gadhinglajand Kagaltahsils.Gaganbavada, Radhanagari,Bhudargad and Chandgadetc. tehsils entirely rural area of Kolhapur district because hill area, lack of industrilization, undeveloped transportation and agriculture. This district is highly urbanization in particular place e.g. Karvirand Hatkanangale tahsils.

Socio-economic, natural resources, educational, commercial, market, industrial, transportation and technological progress. Above these causes the population imbalance in rural and urban area of the district.

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## A Study Attraction of Tourismin Raigad District of Maharashtra

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#### Abstract

Tourism is considered as an activity essential to the life of nation because of its direct effects on the social, cultural, educational and economical sectors of national societies and their international relation (UN 1981.5). Tourism is a socio - economic phenomenon which is widely recognized as the world's largest and fastest growing industry. Raigad district has great treasure of tourism attractions. Tourism industry provides employment opportunities for the local people. Due to tourism potential large numbers of tourists are attracted in Raigad district. This results in the change of life style of local people and increase in the levels of economic development. A variety of sites have emerged to cater pleasure, relaxation, adventure, curiosity, interest and knowledge. Tourism industry also provides supports to local handicrafts, arts and culture. Raigad district is in proximity to Mumbai. There are numerous natural, historical, religious and cultural tourism attractions in Raigad district such as Raigad fort, Murud - Janjira fort, Elephanta caves, Karnala Bird Sanctuary and fort, Kashid beach, Murud beach etc.


Key words- Tourism, employment, pleasure

## INTRODUCTION

Tourism is a socio - economic phenomenon which is widely recognized as the world's largest and fastest growing industry. Raigad district has great treasure of tourism attractions. Tourism industry provides employment opportunities for the local people. Due to tourism potential large numbers of tourists are attracted in Raigad district. This results in the change of life style of local people and increase in the levels of economic development. A variety of sites have emerged to cater pleasure, relaxation, adventure, curiosity, interest and knowledge. Tourism industry also provides supports to local handicrafts, arts and culture. Raigad district is in proximity to Mumbai. Therefore large numbers of tourists are visited in Raigad's tourist places because Raigad district has great treasure of tourism attractions. There are numerous natural, historical, religious and cultural tourism attractions.

## OBJECTIVES

The objectives of the present paper are

1) To study the present attractions in the study region.
2) To study the potential tourism for the development of tourism in the study region STUDY REGION

Raigad district is a coastal district situated on the western coast of Maharashtra, and renamed after Raigad, the fort and former capital of the Maratha Leader Shivaji Maharaj. Raigad district spreads between $17^{\circ} 51^{\prime} \mathrm{N}$ to $19^{\circ} 80^{\prime} \mathrm{N}$ latitude and $72^{\circ} 51^{\prime} \mathrm{E}$ to $73^{\circ} 40$ E longitude. The district had a population of 22, 07, 929 persons as per the 2001 census, out of which 24.2 percent was urban and 75.8 percent rural population. The total area of the district is 7152 sq.kms., it occupied 2.32 percent area of the total area of the Maharashtra State. The district having north - south length is 150 kms and east - west
width is $24-48 \mathrm{kms}$. The district head quarter is located at Alibag. The district has a long indented coastline with 240 kms , having a number of creeks and inlets suggesting submergence. The district is bounded by Mumbai harbor to the North West, Thane district to the north, Pune district to the east, Ratnagiri district to the south and Arabian Sea to the west. Geographically the Raigad district has considerable varieties in relief, climate and socio - economic status. The district is a narrow strip with hilly and rugged topographic features.

## DATABASE AND RESEARCH METHODOLOGY

For the present paper is based on primary and secondary data. Primary data have been collected through visiting field work. Matheran, Elephanta Caves, Karnala Bird Sanctary and KarnalaFort, Raigad fort and Janjira fort are selected for the present study. On the basis of collected information, analysis is made and a few suggestions are given to development of tourism in the study region.

## TOURIST ATTRACTIONS:

1) MATHERAN ( Photo Plate - 1.1 to 1.4)

Matheran is situated in Karjat tahsil of Raigad district. Matheran is an important hill station of Maharashtra, as it is the closest to Mumbai and Pune. The geographical location of the Matheran is $18^{\circ} 59^{\prime} \mathrm{N}$ to $73^{\circ} 10^{\prime} \mathrm{E}$ with an 800 meter altitude from the MSL. Matheran was discovered by Hugh Poyntz Malet, District Collector of Thane district in May, 1850. Matheran is connected to the town of Neral, which are lies at the base of the hill. A tar road connects Neral to Dasturi Naka which is 11 kms from Matheran. All types of vehicles are not allowed inside the hill station beyond Dasturi Naka. Only horses and hand-pulled rickshaws can move inside the hill station, that means provides the opportunities for job to the local people. A mini (TOY) train has run from Neral to Matheran, which is narrow gauge covers a distance of 21 kms . Apart from toy train Mini S.T. buses ( 25 setters), share -a - taxi services also available at Neral up to Dasturi Naka and 2.5 kms walk from Dasturi Naka to Matheran

Matheran has been declared as eco- sensitive region by the Union Environment Ministry and it is called as'Health Sana tourism'. As per the accommodation is concerned, there are 25 hotels and resorts with budget and luxury accommodations are easily available. Matheran has 38 tourist points such as Mount Berry, Luisa, Echo, Panorama, Porcupine, One Tree, Monkey, Heart, Malet spring, King George, Charlotte, Rastomji Point etc. Also colorful main bazaar of Matheran with Kolhapuri Chappals, Leather Bags and Belts, Sweet Mart, Chikki Marts, Honey Shops are attractions of tourists.
2) ELEPHANTA CAVES (Photo -2.1to 2.4)

The island of elephanta is popularly known as 'Gharapuri' and located in Uran tahsil of Raigad district. Caves are situated 12 kms away from North-West of Gateway of India. The geographical location of Gharapuri is $18^{\circ} 50^{\prime} \mathrm{N}$ to $72^{\circ} 55^{\prime} \mathrm{E}$ with an altitude 125 kms above the MSL. The island is Small Island in the Arabian Sea with covers 8 sq.kms area. This island is a popular tourist destination for a day trip.

In ancient time known as Gharapuri, the present name Elephanta was given by $17^{\text {th }}$ century. One statue of elephant head found near the shore of sea and several caves are found in the island, hence this island is known as Elephanta Caves. Now at present the statue of elephant has been moved to the Dr. Daji Bhau Lad Museum, formerly known as Bombay's Victoria Garden.

Elephanta caves have fine house rock cut temples dating back to the $5^{\text {th }}$ century A.D. Elephanta caves declared as a World Heritage Site in the year 1987 by UNESCO. The mos important attraction of Elephanta caves is "Trimetric Sadashiva" In the main
caves first sculpture is seen Maheshmurti, with height of 20 ft . The monument is maintained by the Archaeological Survey of India, Mumbai.

The Elephanta caves consists of seven caves, out of these most important cave is Maheshmurti. The wall of these caves depicts images of Lord Shiva in many forms. The Trimurti of Sadashiva shows three headed of Lord Shiva represents three aspects i.e. the creator, the preserver and destroyer.

| Uma / Vamdeva | The Creator | Right half |
| :--- | :--- | :--- |
| Tatpursha/ Mahadeva | The Preserver | Central full head |
| Aghora / Bhairava | The Destroyer | Left half |
| The Fourth Face is not visible - Sadyojata / Nandin |  |  |
| And the Fifth face immanent face transcends the sight of mortals and is therefore never |  |  |
| carved |  |  |

Apart from Trimurti other attractions are Elephanta dance festival, Toy Train, Shiv Temple, Cannon hill, greenery and very pleasant climate etc. The island provides some facilities such as MTDC approved restaurant, toilet blocks, drinking water, hotels, numerous gift items lane, literature of elephant caves, snakes etc. The island is full of great biodiversity; this is the main attraction for Botanists, Geographers and Zoologist. The large number of tourist visit to Elephanta caves during the period of Elephanta festival, the festival of music and dance is organized by MTDC. Over the year, the festival has become a major tourist attraction for Mumbaikars as well as incoming domestic and foreign tourists. The island is easily accessible by ferry from Gateway of India, Mora in Uran tahsl and JNPT to Elephanta island. Boats are leave daily form the gateway of India. The monument is open on all days except Monday from sunrise to sunset. The Entry fees for domestic visitors = Rs 10 / - , for foreign visitors \$ 5 or Rs. 250 / and free entry below 15 year of age.
3) KARNALA BIRD SANCTUARY AND KARNALA FORT (Photo Plate 3.1 to 3.4)

The Karnala Bird Sanctuary is located in Panvel Taluka of Raigad District. It is declared as sanctuary in the year 1968. It lies just off the Mumbai-Pune highway NH-17 and 12 kms away from Panvel. The Sanctuary area lies in between $18^{\circ} 51^{\prime} \mathrm{N}$ to $18^{\circ} 54^{\prime} \mathrm{N}$ latitude and 738 E to 7310 E longitude with cover 12.10 sq.km area. ( 6.56 sq.km - R.F and $5.55 \mathrm{sq} . \mathrm{km}$ - A.F ) In Karnala Bird Sanctuary there are over 147 species of resident and 37 species of migratory birds who visit the sanctuary during winter. Two rare birds i.e. Ashy Minivet and Malabar Trogon have been sighted here. It is one of the more popular destinations for avid bird-watchers and hikers in the Mumbai area.

## 3.1) KARNALA FORT

Karnala Bird Sanctaury is also famous for the Karnala Fort. The geographical location of the Kanala fort is $18^{\circ} 33^{\prime} \mathrm{N}$ to $73^{\circ} 07^{\prime} \mathrm{E}$. The karnala fort is situated at 445 meter elevation from MSL. The shape of the fort is like thumb shaped. The Karnala Fort dates back to the 12th Century. In 1670 Chhatrapati Shivaji Maharaj attacked the fort and took it in possession from the Moghuls. After the death of Chhtrapati Shivaji Maharaj, the moughals Emperor, Aurangzeb was incharge of the fort. In 1740 the Peshwas again attacked the fort and got it back from Moghuls. Afterwards the Britisher attacked it frequently and finally took it in their possession from the Marathas in 1818. Krantiveer Vasudeo Phadake's grandfather was fort keeper of Karnala fort till 1818. Karnala fort, a historically very important feature of the Sanctuary has been major attraction for tourists and trekkers. Karnala Bird Sanctuary and fort area is well known for tourism.

## 3.2) THE FLORA AND FAUNA

The scope of the karnala Bird sanctuary is very vast as forest of Karnala is rich in
flora and fauna diversity. The earlier report of this area suggests of 642 species of trees which are of mostly deciduous types. It is characterised by species Koshimb, Mango, Kula, kalam, Asana, Umber, Teak, Dhavada etc. The sanctuary is a home for over 147 species of resident and 37 species of migratory birds.

These migratory birds visit the sanctuary during winter season. There are two rare birds named Ashy Minimet and Spotted Heart Woodpecker are sighted in sanctuary. It has two distinct seasons for bird watching. Some of these species are Emerald Dove, Racket Tail Drongo, Crested Serpent Eagle, Shaheen Falcon, Indian Gray Hornbill, Three Toed Kingfisher, Blach Headed Oriole, Green Pigeon, and Indian Pitta, Shama etc. As many as 67 types of birds have been sighted by bird watchers on a single visit. The sanctuary is also a home for the animals such as Four- Horned Antelope, Wild Boar, Common Langur, African Monkeys and Barking Boar etc.

## 3.3) INFRASTRUCTURAL FACILITIES

The Karnala Bird Sanctuary has inadequate infra structural. Mumbai - Goa National Highway No-17 passes through this sanctuary. The facilities are Forest rest house \& Cottage The rest house is primarily meant for forest officer but it is made available for tourists on request. In rest house two VIP rooms \& two common rooms are available. Nature Information Centre: This centre gives information about flora \& fauna of sanctuary. It is helpful for awareness amongst visitors about nature conservation.
Nature Trails: Nature trails mostly used for bird watchers \& nature lovers. Hariyal, Mortaka, garmal trails are developed in sanctuary. And Toilet Blocks, Bathroom \& Drinking Water etc. all facilities are available in sanctuary.

## 3.4) POTENTIALS IN SANCTUARY

The karnala bird sanctuary consists of major potentials for the tourists attraction. These Potentials are Sanctuary area is having potential to act as an open laboratory for researcher and especially for students of Botany, Zoology \& Geography from adjoining Universities. To conduct the lecture on "Significance of Flora \& Fauna" on the occasion of 'World Environment Day' on $5^{\text {th }}$ June. One seminar hall can be developed in sanctuary. Honey industry should be developed. Rope way facility should be developed in Karnala fort.

## 4) RAIGAD FORT (Photos 4.1 to 4.4 )

Raigad fort is located in Mahad tahsil of Raigad district. It lies in between $18^{\circ} 30^{\prime}$ $N$ to $73^{\circ} 00^{\prime} \mathrm{E}$ with 820 meter above the MSL. It is the most important forts of Maharashtra, especially for the followers of Shivaji. Shivaji built his capital city in the $14^{\text {th }}$ century, and crowned himself Chhatrapati in 1674. For six years up to his death, Raigad remained the capital of the Maratha with its broad gates and magnificent monuments. As per the Historians say this was in keeping with Shivaji's tactics of making the approach to his forts 'easy for friends but impossible for foes'. Owing the its proximity towards Mumbai, Raigad is important from tourism point of view. Major attractions in Raigad are Jit Darwaja, Main Darwaja, Jijabai Samadhi, Khoob Ladha Burug, Nagarkhana Darwaja, Takmak tok, Palkhi Dawaja, Bazaar Peth, etc. The Raigad ropeway has made it possible for tourists to make a complete trip of the fort without exerting their legs. Apart from historical significance of Raigad, Raigad is a fascinating place for trekking enthusiasts.

## 5) JANJIRA FORT (Photos 5.1 to 5.2)

Janjira fort is located in Murud tahsil of Raigad district. It lies in between $17^{\circ} 45^{\prime} \mathrm{N}$ to $73^{\circ} 05^{\prime} \mathrm{E}$. Murud town is famous for the impregnable fort of Janjira. Janjira fort is spread over an area of 22 acres. Specialty of this fort is that it is situated 3 kms deep in the sea from Murud near Rajpuri creek. The word Janjira is not native to India, have
originated after the Arabic word 'Jezeera' which means an 'Island'. The Janjira fort was built by the Burhankhan( A Minister of Nisamshah) in the $15^{\text {th }}$ century. During shivchhatrapati rule three times, this fort was attacked but they were fruitless, after Sambhajiraje and Peshwas then tried to win this fort but they didn't get success. The majestic sea fort which remained unconquered till the end. Murud - Janjira is the local name for a fort is situated at Rajpuri coastal village of Murud. Sail boats are available from Rajpuri village. Kalal Bangadi, Landa Kasam, cannons Fresh water wells, Bustions are attractions inside the Janjira fort As per accommodations are concerned, deluxe hotels, resorts, lodges, MTDC approved home, Bungalows, etc are available at Murud town. Also other infra-structural are available at Murud town like Banking, ATM, Toilet Blocks, Auto rickshaws, Parking facilities are easily available at Murud town.

| Sr <br> No | Type | Name of the Tourist Places |
| :---: | :---: | :---: |
| 1 | Natural |  |
|  | Beach | Akshi, Mandave, Chaul, Sasawane, Awas, Pirwadi, Valenshwer, <br> Diveagar, Bagmandala, etc |
|  | Waterfall | Shiddeshwer, Dhodane, Varsoli, Ashane - Koshane, Morzoth, Savatkada, Fansad etc <br> Kakner, Sav, Javali, Vadawali |
|  | Sanctuary | Dhak, Fansad |
|  | Hill Station | Tadgaon, Mahalgiri |
| 2 | Historical | Kulaba, Thal, Sagargad, Hirakot, Chanderi, Prabalgad, Manikgad <br> Peb Bikatgad, Irsalgad, Kotligad, Rajmachi, Avchitgad, Ghosalgad, <br> Birwadi fort, Surgad, Ratangad, Mangad, Vishramgad, Lingana <br> Chambhargad, Songad, Kawalagad, Sagargad, Surgad, Sarasgad, <br> Bhorapgad, Kangori, Mangalgad, Songiri, Taksai, Kasa, Madgad <br> Dhongad, Khanderi - Underi, Kasa, Padmadurg, etc. |
| 3 | Cultural | Ramdharne, Kondane, Mandad, Kol, Pale gandhar, Khadsambale, <br> Thanale, Gomeshi, Kude, Agarkot, Karmarkar Mesueaum, Tungi, |


|  |  | Bhira, Pachad, Nana Fadnis Mamorial, Nawab Palace, <br> Choudar tale |
| :---: | :---: | :--- |
| 4 | Religious | Panbadevi, Paleshwer, Rameshwer, Shiddeshwer Ganpati, <br> Chirner, Rasayani, Uran, Londhor, Mugawali, Matwan, <br> Sajgaon,etc. |

## CONCLUSION

After the analysis of study, the Raigad district has treasure of tourism potentials. The Raigad has variety of tourism attractions like nature's beauty, historical, cultural and religious tourist's places. The district is very close to Mumbai and Pune. In the peak period, large numbers of tourists are visited at Riagad district because all infrastructural facilities like accessibility, accommodation, amenities and ancillary services are easily available.

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# Ratnagiri District Land Use Efficiency 

(1982-87 and 1997-2002)
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#### Abstract

In this paper an attempt has been made to measure the level of Agricultural Land Use Efficiency in Ratnagiri District. Jasbir Singh's Method of Land Use Efficiency is employed to measure the land use efficiency. Ratnagiri District are chosen as unit of study. The variations in spatial pattern of land use efficiency are examined for the years 1982-87 and 1997-2002. This study also proposed plans for sustainable agricultural development in the study area.

\section*{INTRODUCTION}

In the field of the geography the concept of land use efficiency measurement is not new one. It is a dynamic but complex phenomenon. The efficiency of land use in a study region is determined by the interaction of physical, socio-economic and technological factors. A combination of nature and manmade factors makes land use efficiency a complex device.

Land use efficiency represents the degree of optimum use and performance of cultivated as well as cultivable land. Land use efficiency indicates micro-regional differences, the result of spatial variations in the combinations of environmental and non environmental (socio-economic) factors and analysis of about 20 years in land use efficiency would throw light on the impact of various measures. It is generally believed that the efficiency of agricultural reflects itself in the yield and so the yield figure has been used as the quantitative basis for the measurement of agricultural efficiency. M.G. Kenall (1939) was the first to develop a measure for agriculture land use efficiency on the basis of output per unit area and he devised the system of ranking coefficient method. Previously this method was applied in different countries of the world by L.D. Stamp (1960) and in Uttar Pradesh by Shafi (1960). Sapre and Deshpande (1964) suggested an equation to measure land use efficiency to multiplying and ranking of crops with that of land share divided by the total of crop land share. Bhatia (1967), Gupta (1968) and M. Ali (1972) among Indian Geographers paid attention to the study of land use efficiency in India. Jasbir Singh (1972, P. 316) explained land use efficiency as "The extent to which the net sown area cropped or resown". Here the total area cropped as a percentage of the net sown and it indicates the intensity of cropping.

\section*{STUDY AREA}

The present study region, Ratnagiri is one of the coastal districts in the state of Maharashtra. Ratnagiri district is lying between $16^{\circ} 30^{\prime}$ to $18^{\circ} 04^{\prime}$ north latitude and $73^{\circ} 02^{\prime}$ to $73^{\circ} 52^{\prime}$ east longitude. The district with an area of $8249 \mathrm{sq} . \mathrm{km}$ and has a population of 1696777. The district has a north south length of about 180 km and east-west extension is 64 km . It has a coast line of 187 km . The district has nine tahsils and 8 towns with 1519 villages. The study region is western part of Maharashtra bounded by Raigad district in the north, Arabian sea in the west, Sindhudurg district in the south and Sahyadri hills in the east. Beyond the Sahyadri hills Satara, Sangli and Kolhapur district are located.


## OBJECTIVES

1) To find out tahsilwise lad use efficiency in Ratnagiri District during 20 years.
2) To identify areas of land use efficiency on the basis of Jasbir Singh's Method.

DATABASE AND METHODOLOGY

Land use statistics for the period 1982 to 2002 have been abstracted from the Socio-Economic Abstract of Ratnagiri district. In the present study Jasbir Singh's Index of land Use Efficiency (Intensity of Cropping) method is employed in Ratnagiri District. The regional variations in spatial pattern of land use efficiency are examined from 1982-87 to 1997-2002. The emphasis is on highlighting the basis of existing performance of unit at land which differentiates from one area to another.

The Index of Land use Efficiency is obtained by using the following formula:-
Gross Cropped Area
Index of Land use Efficiency =
Net Sown Area

## LAND USE EFFICIENCY

The land use efficiency is refers to the number of crops grown on the area in any agricultural year. The higher the index of the efficiency of cropping the higher the land use efficiency and the lower the index the lower land use efficiency and less utilized or under utilized the net area sown. (Singh, 1976).

Land use efficiency represents the degree of optimum use and performance f cultivated efficiency indicates micro-regional differences, the result of spatial variations in the combinations of environmental and non environmental factors. Nearly 40.13\% potential and fallow land of the study area can be brought under cultivation. Therefore immediate need is to give more emphasis on intensity of cropping and increasing yield from existing cultivated area. Problems of under use of net sown area, low productivity and risk of crop failure are taxing the rural population and agro based industries. The total area cropped is expressed as a percentage of the net sown and it indicates the intensity of cropping.

The extent to which cropping has been done on the net sown is shown in graph. There are variations in the extent of double-cropping done. In the majority of tahsils Gross cropped area exceeds the net sown area for there is always a part of the lattar which is sown during both the crop seasons. As such the land use efficiency varies slightly from $80 \%$ to over $122 \%$, using average the land use efficiency computed for the period 1997-2002.

Table indicates that Tahsilwise land use efficiency in the Ratnagiri District during the year 1982-87 and 1997-2002. The differences in the extent as area under double cropping between1982-87 and 1997-2002 have been termed as volume of change in land use efficiency.

Table-1 Land use Efficiency in Ratnagiri District

| Sr. no. | Tahsil | 1982-1987 |  |  | 1997-2002 |  |  | Volume of Change in \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Gross cropped area in '00' hect. | Net sown area in '00' hect. | Index of land use efficiency in \% | Gross cropped area in '00' hect. | Net sown area in ' 00 ' hect. | Index of land use efficiency in \% |  |
| 1 | Ratnagiri | 335.6 | 325.2 | 103.19 | 221.75 | 274.4 | 80.81 | -22.38 |
| 2 | Guhagar | 161.8 | 158.4 | 102.14 | 238.5 | 195.6 | 121.93 | 19.79 |
| 3 | Dapoli | 307.6 | 304.4 | 101.05 | 272.25 | 275.8 | 98.71 | -2.34 |
| 4 | Mandangad | 136.2 | 135.4 | 100.59 | 200.75 | 192.6 | 104.23 | 3.46 |
| 5 | Khed | 202.2 | 199.8 | 101.20 | 230.5 | 221.2 | 104.20 | 3.00 |


| 6 | Chiplun | 461.2 | 444.8 | 103.68 | 505.25 | 458.6 | 110.17 | 6.49 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 7 | Sangameshwar | 338.6 | 331.8 | 102.04 | 409 | 355.6 | 115.01 | 12.97 |
| 8 | Lanja | 245.8 | 239 | 102.84 | 276 | 265.6 | 103.91 | 1.07 |
| 9 | Rajapur | 291 | 284.6 | 102.24 | 354.25 | 305 | 116.14 | 13.9 |
| Ratnagiri Dist. |  | 2480 | 2423.4 | 102.33 | 2711.5 | 2547 | 106.45 | 4.12 |

Source : Socio-economic Abstract 1983-84 to 1988-89 and 1997-98 to 2003-04.
In the Ratnagiri District, table indicates that the index of land use efficiency index was slightly increased from 102.33 to $106.45 \%$ during the 1982-87 to 1997-2002. Land use efficiency ranges between $80.81 \%$ and $121.93 \%$ in all tahsils of the study region. For studying the spatial and temporal changes in land use efficiency three land use efficiency categories are low land use efficiency (<100\%), medium ( $100 \%$ to $110 \%$ ) and high land use efficiency (>110\%).


Graph 1.1


Graph 1.2
i) Areas of low Land use Efficiency (below $100 \%$ )

During 1997-2002, low intensity area was recorded in the Ratagiri and Dapoli tahsils. Most of the area was under not cultivated area and other categories in the Ratnagiri and Dapoli tahsils during 1997-2002. Rugged topography, uncultivable waste land, lack of irrigation facilities, poor soil conditions, low use chemical fertilizers, pesticides and other natural as well as socio-economical factors are responsible for low land use efficiency. In Ratnagiri and Dapoli the agricultural land use efficiency decreased
during the year 1982-87 when compared with 1997-2002. It means decrease in percentage area of land use efficiency is relatively less.
ii) Areas of Medium Land use Efficiency (100\% to 110\%)

Areas of medium land use efficiency were observed in Lanja, Khed, Mandangad and Chiplun tahsils in 1997-2002. It ranges from $103 \%$ to $110 \%$ in the district. The highest Medium land use efficiency is recorded in Guhagar tahsils (110.17\%). Land use efficiency increase due to the decrease of non cultivable land in some area. Mostly north eastern part of the district has medium land use efficiency due to the physical and nonphysical determinants of agriculture. During the period of 1982-87 to 1997-2002, volume of change in Index of land use efficiency is positive change observed in four tahsils in the district. About $1 \%$ to $6.49 \%$ positive change in land use efficiency was registered in Lanja, Khed, Mandangad and Chiplun tahsils.
iii)Areas of High Land use Efficiency (above 110\%)

Out of the nine tahsils Guhagar tahsils (121.93\%) had high efficiency observed in the period of investigation. Also Sangameshwar and Rajapur tahsils recorded high efficiency near by $115 \%$ area. The high land use efficiency was found in these tahsils because of possible improvements in cultivation methods and availability of other necessary facilities and also because of less percentage of non cultivable waste lands in it. These tahsils showing high efficiency are located in the central and southern part of the district i.e. in the coastal area. So better moisture, fertility and irrigation conditions lead to large scale cultivation which has contributed to the high efficiency level.

During the period of investigation above 10\% positive change observed in the Sagameshwar, Rajapur and Guhagar tahsils. It means the land use efficiency increased during 1982-87 to 1997-2002. The highest positive change in Guhagar tahsils is recorded $19.79 \%$ due to increase in land use efficiency. It is significant to note that land use efficiency in the district is slightly improved during the 20 years period at various levels.

## CONCLUSION

In an overall analysis of Ratnagiri's land use efficiency the role of environmental factors appears to be decisive in influencing the intensity of cropping. Despite heavy rainfall, actual area under double-cropping is small. This clearly brings out that areas of high values of land use efficiency are associated with the interaction between the relative favorable physical-socio-technical organizational factors. The changes are thus related to the dynamic socio-economic-cultural-organizational controls in the areas of increase and there agronomic hazards in the areas of decrease.

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# Special Economic Zone-Problemes and Solution <br> with Referance to the Sez in Raigarh District of Maharastra State 

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#### Abstract

: The present paper is based on observation by the author in the actual implementation of the SEZ project in the Raigarh district of the state of Maharashtra. The objectives of the paper is to study the grass root level problems in the actual implementation of the SEZ project and possible solution to the implementation of the SEZ project not only in the state but in the entire nation. The paper concluded that the failure of the implementation of the SEZ in Raigarh is mainly due to the non donation of the land by the villagers in the district. The author provides some practical solutions for smooth implementation of the SEZ projects.


Key words: - Special economic zones, Inequalities, land acquisition.

### 1.1.1 INTRODUCTION:

Maharashtra state is fastly developing state in India. Maharashtra state developed the rich industrial base. Mumbai-capital city of the state is the financial capital of the country provides for a large base for revenue generation and major contribution to the national exchequer. In the vicinity of this industrially developed city, Reliance industries want to build the Special economic zone which will become India's biggest SEZ project. For this already the work of land acquisition is started by the company. It runs through several problems. It went to the court also and ultimately the project is cancelled by the government. This raises various issues in the actual building and implementation of the Special economic zones not only in the state but in the entire nation. SEZ in the Raigarh is the lession for the entire nation. This becomes the base for the thinking on the issues of SEZ projects in India and at the same time to provide possible solutions to actual implementation of these projects.

### 1.2 OBJECTIVES: -

The objectives of the present paper are;
I. To examine the grass root problems in building of the SEZ project with special reference to the Raigarh district; and
II. To provide some practical solutions for the smooth handling and building of the SEZ projects in India.

### 1.3 CONCEPT OF SEZ:

Government of India introduced the concept of Special Economic Zones in the year 2000. "SEZs are specifically delineated duty free enclaves treated as a foreign territory for the purpose of industrial, service and trade operations, with exemption from customs duties and a more liberal regime in respect of other levies, foreign investment and other transactions. Domestic regulations, restrictions and infrastructure inadequacies are sought to be eliminated in the SEZs for creating a hassle free environment." ${ }^{1}$

Following the central government 12 states and one union territory have announced their SEZ policies including Maharashtra state.
1.4 A brief history of the SEZ: China has got a huge success in successful implementation of the SEZ projects which attracts the attention of the world towards this tool of development specially the underdeveloped and developing countries of the world.

India too fascinated by the success of China in implementation of the SEZ projects and announced the policies for the actual building of these projects initially in the EXIM policy of India in the year 2000. Then a separate SEZ act is passed by the parliament in the year 2005. SEZ rules become effective from $10^{\text {th }}$ February 2006. The SEZ Act 2005 defines the key role for the state government in export promotion and creation of infrastructural facilities.
1.5 Problems of SEZ With reference to Raigarh district: The failure of the actual implementation of the SEZ project raises the following major issues in the building of the SEZ;
I. Huge land acquisition: - The SEZ developers or main promoters have acquired the large scale of land from the designated area without proper remuneration. The agricultural land is purchased which not only destroys the breed butter of the present generation of the farmers but also the future generations. This increases the anger in the minds of the farmers. This anger has got good leadership in the district and support from various organization and the opposition parties of the state.
II. Land owner will become landless: - By this project the land owner will become the landless laborers. Even the company was not ready to give alternative land for the farmers.
III. Rapid growth of Economic Inequality: - The Company was not ready to give the employment to the local people in the project. At the same time if from one family one person has got the job, this will become very inadequate as families of the farmers consists of number of children. Non availability of the job, lack of education and giving up of the traditional occupation of agriculture will lead these people to the acute poverty and inequality will be increased.
IV. Experience of the CIDCO: - Initially cidco has acquired the land of the villegers of the Thane and Raigarh distrcts. But no proper remuneration is given by the cidco. At the same time huge money received by the people of this area has not helped them in improving their standard of living but resulted in aristocratic life style. This experience of these people further takes them to resist for the establishment of any project.
1.6 Solutions to the SEZ projects: - All these problems can be sorted out provided that there must be genuine efforts on the part of the government in transparent implementation of the SEZ projects. Author wants to give the following solutions for the successful impOlementation of the SEZ projects;
I. Fair deal: - There must be fair deal with the farmers, as the company is not a social organization and it is a profit making organization, it must in future distribute its profit to the previous land owners. One time settlement of the deal will destroy the families of the farmers. Huge amount in one time and lack of knowledge to use this money properly becomes fatal for several families in this area.
II. Employment opportunities: - Employment to just one person in the family can serve the purpose of the family. Company must come forward to enable these people to earn their bread and butter as they are losing their traditional occupation of agriculture and fisheries.
III. Sufficient land to the landowner: - Those who will lose their land must be compensated with equivalent land in other areas so that they can maintain their livelihood.
IV. SEZ on infertile land only: - Projects must be given permission on non agricultural land or semi fertile land of one crop land. This will help in overall agricultural production.
V. Responsibility of the government: - As the government is giving the permission for
the SEZ projects and supplying the land to these companies, it is the prime responsibility of the government to look after all the issues of those who are getting affected by these projects. Wherever the company is working properly in reestablishment of the affected people or not following the terms and conditions of the deal government should step in to pursue the company to remain intact in its follow up of discharging duties of the deal.
VI. Legal framework: - If the company is not following the terms and conditions and government is not stepping in for rectification, then in such situation there must be strict legal framework to force the government and the company to follow rules and regulations.

### 1.7 CONCLUDING REMARKS:

In developing and highly populated country like India, the major problem is of availability of land only. SEZ and other projects are concentrated in the urban and semi urban areas as there is a availability of infrastructural facilities. We have to create the world class infrastructural facilities in the less industrialized areas so that the SEZ projects will get diversified throughout the country. With proper and transparent deal and equally important its implementation with other arrangements will really be helpful in mor and more

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# Prospect of Krishna Lift Irrigation Project, Takarai Section in Sangli District (Maharastra) 

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#### Abstract

Irrigation is the artificial supply of water to the plant growth to maintain moisture availability since deficiency. Indian agriculture is a gamble of mansoon within which Sangli District in Maharashtra State can not excluded. The greater part of the district has to make fight to the famine circumstances year after year. Krishna Koyna lift irrigation project ambitious major public lift irrigation project launched by the Govt. of Maharashtra to minimize the impact of drought condition Takari lift irrigation scheme is one of the parts of it.

The construction of the project was started in year 1986, but it has taken Very big schedule to completion due to inadequate provision of the funds. The project has utilized huge amount of capital e.g. Rs. 383.76 crores up to the April 2007; The revised total cost of the project is Rs. 608.46 crores The aim of the paper is to assess the present situation of the scheme, its construction cost ,proposed irrigated area, actual irrigated area and its maintenance from geographical point of view

\section*{INTRODUCTION :}

Irrigation is an artificial provision of water for agriculture in moisture deficiency region. The northern part of the District Sangli in Maharashtra comprised Kadepur, Khanapur, Tasgaon, Miraj and Palus taluka, where there is uncertainty and inadequacy of rain fall year after year. The area comprised receives rainfall ranging from 500 mm to 650 mm . The spatiotemporal variation is also considerable. To meet the need of irrigation, Krishna Koyna lift irrigation project launched by Krishna Valley Development Corporation. This is lift irrigation project. It was the only path to provide irrigation by major lift from river Krishna.

The Takari Lift irrigation scheme is a section of Krishna Koyna lift irrigation project. The Takari section has proposed to provide irrigation to 27630 Ha . of land in 67 villages in above five talukas in the district Sangli.

The aim of the paper is to assess the present situation of the scheme, proposed irrigated area. Actual irrigated area, water rates and its collection from Geographical point of view.


OBJECTIVES:
The following are the objectives of the paper.

1) To analyse the plan outlay of the Takari Lift irrigation project.
2) To discuss the irrigation, actual utilization from proposed irrigated area.
3) To assess the water charges, collection of water revenue and energy consumption.
4) To analyse the problem and prospect of the scheme.

## DATA BASE AND METHODOLOGY:

The paper has used the data obtained from the irrigation department, divisional office Islampur, Krishna Koyna Lift irrigation project, which is in secondary form. The field survey and observation has also done by visiting each and every village several times. The relevant data and information have been organized, classified, tabulated and mapped using suitable techniques and methods. The attempt has been made to render the interpretation and analysis of the fact as objectively and logically as possible.

## THE REGION:

The work of irrigation project begins with the study of morphology. The region under study located in the north western zone of the district Sangli along with both sides of the river Yerala, a left bank tributary of river Krishna. Hill and Hillock zone of the machindragad - Kamal Bhairav ranges and Machindragad Panhala ranges in the region do not allow as easy as possible flow irrigation method. Foot hill zone of those ranges, intermediate amphitheaters region of the basin of Sonhira nala is suitable to irrigation and gently sloped from west to east up to the river Yerala. The region consist of plain is situated along with the Yerala and Nandini enclosed with east and west contoured from 580 mts to 640 mts of height is best and suitable for easy irrigation. The areas intersperse over the western slope of the water divider of Yerala and Agrani in taluka Tasgaon is plain sloped from east to west.

Although the area under Takari Lift irrigation scheme comprised 67 villages that the actual irrigation facilities provided to only 24 villages in the region under study.

## THE PLAN OUTLAY:

The Takari Lift irrigation scheme starts at villege satpewadi near Takari village. Pump house first is constructed on left bank of the river Krishna. About 16 pump sets of 2000 H.P. each have been set up to lift water and provide to second stage, where the again 16 pump sets of 2000 H.P. each has installed to provide water to the already constructed canal at south of Sagreshwar Sanctuary in village devarashtre in Taluka Kadegaon revealed in figure 1.

The Stage 3rd is introduced and lifts water from Takari main canal at km. 6. It delivers water to chinchani ambak feder canal. The stage $3^{\text {rd }}$ has 4 pumps of 1250 H.p.each. This stage provides water enclosed land and also to the Sonsal K.T. Wair The stage $4^{\text {th }}$ starts from Sonsal K.T. Wair, Installed 3 pumps and provides water to sump well constructed on north western side of Sonsal village from which only Shirasgaon and Sonsal has benefited. The proposed area under various canal are as following -

1. Takari main canal - 23859 Ha.
2. Chinchani Ambak Feder canal - 815 Ha .
3. Sonsal Left bank canal - 2444 Ha .
4. Sonsal Sump well underground gravitational pipeline - 512 Ha .

The total proposed irrigated area under the scheme is 27630 Hectares. The total length of canal is 178 Kms and static head is 220.74 mts revealed in table 1

Table 1: Stage wise Installation of Pumps, Static Head and Proposed Discharge of Water.

| Stages | Total No. of <br> Pump | Static Head <br> Mts. | Proposed Area <br> in Ha. | Proposed <br> Discharge <br> Cumecs |
| :---: | :---: | :---: | :---: | :---: |
| 1 | $14+2$ | 58 | No irrigation | 24.12 |
| 2 | $14+2$ | 58 | 23859 | 24.12 |
| 3 | 4 | 48.05 | 3259 | 5.20 |
| 4 | 3 | 56.69 | 512 | 0.513 |
| Total - |  | 220.74 | 27630 |  |

Source: - Krishna Koyna Lift Irrigation Project, Divisional Office, Islampur, district Sangli. PRESENT SITUATION:

As explained above the scheme proposed to provide irrigation benefits to 27630 Ha. of land, but at present, the construction work of canal, distributaries and field Channels have been completed up to km. 44 of the Takari main canal since 2001. The
chinchani ambak feder canal and work of stage fourth has completed except miner work.
The irrigation has started from 2000-2001 and provides water to 24 villages under above three canals. In 24 benefiter villages, 10552 Ha of the land would have to be irrigated but out of which only 4791.34 has created potential and 2357 Ha of land has been actually irrigated in the year 2006-07for rabbi and hot weather season.

## PROPOSED AREA AND ACTUAL AREA IRRIGATED:

Irrigation potential of a project should then be measured not in term of what was designed but in term of what was actually achieved over a period of time. The percentage of proposed and actual irrigated area for year 2005-06 is considered for analysis here. It represents that out of 24 villages 10 villages have received below 20 percent of irrigation land out of the proposed irrigated area viz. Kumbhargaon, Chinchani, wangi, Ambak, Padali, Sonsal, Shirasgaon, Shivani, Hanmantvadiye, Bhalawani and Shirgaon etc.

The eight villages comprised in the category of 20 to 40 percent area and the category of 40 to 60 percent area has included in two villages viz. Asad and Kadepur. Above 80 percent of the area actual irrigated from proposed, comprised both villages viz. Devarashtre and Tupewadi.

The under utilization of the proposed irrigated potential has been most marked in respect of the major project such as, in Takari scheme, The average actual irrigated land out of proposed area in actual benefited villages is about only $22.34 \%$.

This is very low as it is considered against the cost of construction. Lift irrigation requires huge amount of capital to transport the water due to which energy consumption is main aspect as it is compared to the flow irrigation project.

## WATER CHARGES AND COLLECTION OF REVENUE:

Irrigation water is supplied to the crops on the basis of the demand received through water application invited by the management staff from time to time. The government of Maharashtra has incurred huge amount of money on this scheme. For recover the energy charges, cost of operation and maintenance it is necessary to have collect the required revenue from the benefiters. The benefiters has also essential to give response to collect water revenue,

An electric charge is the major part of the water revenue in lift irrigation scheme. The table 2 exhibits represents revenue collection and defaulter amount. According to the irrigation department and evaluation of data, the total electric bill from 2001-02 to 2006-07 is Rs.965.62 lakhs. The actual paid amount is Rs.547.36 lakhs and defaulter amount is Rs. 418.56 lakhs up to June 2007 to the MSLB by the project administration.

Table.2: Irrigation revenue, collection and defaulter amount-2001-02 to 2006-07 (Amount in lakh Rs.)

| Year | Water Charges | Electric <br> Charges | Collection <br> $\%$ | Defaulter <br> $\%$ |
| :---: | :---: | :---: | :---: | :---: |
| $2001-02$ | - | - | - | - |
| $2000-03$ | 77.91 | 74.12 | 21.40 | 78.60 |
| $2003-04$ | 489.88 | 456.90 | 0.004 | 99.99 |
| $2004-05$ | 83.88 | 77.50 | 60.14 | 39.46 |
| $2005-06$ | 160.41 | 150.37 | 45.30 | 54.70 |
| $2006-07$ | 218.88 | 207.03 | 31.48 | 68.52 |
| Total | 1030.96 | 965.92 | 20.25 | 79.75 |

Source: 1) K K L I S Divisional Office Islampur, district Sangli.

From the year 2001-02 to 2006-07, the collection of revenue and defaulter amount has very big disparity. In all the years than 2004-05, the collection amount has not more than 50 percent. In year 2003-04 has very less collection because of the famine conditions. It is very insignificant amount. The total outstanding amount in six year is 79.75 percent and only 20.25 percent of amount is collected for meet the various cost of the scheme.

The outstanding amount is increasing year after year. The collection amount cannot meet simply the energy charges and o. \& m. cost of the scheme. If this amount is increase in future the government cannot paid again and again the outstanding amount.

This differentiation is tending to alarm the undesirable future of the scheme. This gap is help to widened deficiency year after year. The table 3 revealed represents the village wise distribution of revenue collection and defaulter amount in percentage.

Table 3: Village wise collection and defaulter amount of water revenue in percentages-2005-06

| Sr. <br> No. | Villages | Water Charges <br> in Lakh Rs. | Collection in <br> Percentage | Defaulter <br> amount in <br> Percentage |
| :---: | :---: | :---: | :---: | :---: |
| 1. | Devarashtre | 42.00 | 45.04 | 54.96 |
| 2. | Kumbhargaon | 02.25 | 64.88 | 35.12 |
| 3. | MohiteVadgaon | 10.54 | 56.26 | 43.74 |
| 4. | Asad | 01.99 | 73.36 | 26.64 |
| 5. | Chinchani | 00.75 | 28.00 | 72.00 |
| 6. | Ambak | 08.84 | 79.41 | 20.59 |
| 7. | Wangi | 38.00 | 48.97 | 51.03 |
| 8. | Shirgaon | 09.19 | 29.05 | 70.95 |
| 9. | Ramapur | 08.80 | 50.45 | 49.22 |
| 10. | Balawadi | 01.95 | 75.38 | 24.62 |
| 11. | Jadhavwadi | 01.25 | 78.40 | 21.62 |
| 12. | Hingangaon | 11.57 | 43.56 | 56.44 |
| 13. | Shivani | 02.35 | 21.27 | 78.73 |
| 14. | Amarapur | 00.08 | 00.00 | 100.00 |
| 15. | H.Vadiye | 02.69 | 18.58 | 81.42 |
| 16. | Tupewadi | 01.22 | 00.00 | 100.00 |
| 17. | Bhikawadi | 00.52 | 07.69 | 92.31 |
|  | Total | 59.41 | 45.30 | 54.70 |
|  |  |  |  |  |

In year 2005-2006 the average collection above 75 percent comprised three villages viz. Jadhavwadi, Balawadi and Ambak etc. In the category of 50 to 75 percent, four villages are comprised viz. Kumbhargaon, MohiteVadgaon, Ramapur and Asad etc. The villages included in between 25 to 50 \% revenue collection categorized viz. Shirgaon, Chinchani, Wangi, Hingangaon and Devarashtre. Lastly the category below $25 \%$, the remained villages viz. Kadepur, Shivani Hanmantvadiye, Tupevadi, Bhikawadi and Amrapur exhibited in Table 3

It is observed that maximum of the villages which are located in tail end portions of the existing irrigation system has low proportion of collection of the water revenue.

## PROBLEM AND PROSPECT:

The scheme has provided irrigation facilities on the basis of the water demand
from the farmer. The unlined canal and distributaries are arising problem of water logging in each and every kilometers of the canal on both the sides. The actual data pertaining to this problem is not available but on the basis of observation the author has approximated, there would have to be more than 400 Ha . of land has going to face of danger of salinity in the near future because of the problem of water logging.


The Takari lift irrigation project has proposed 45 percent of the irrigation efficiency. This proportion of efficiency is not correlates the costly water from lift scheme and irrigated area proposed. The scheme lifts water through four stages, due to which the costly water has need to be taken. This costly water would have to be conveying within the lined canal and distributaries system. But the unlined canal and distributaries not only increases the problem of salinity but decreases the area under irrigation and increases the electric bill unavoidable per unit of area in the region under study.

The scheme was sanctioned in 1984, but due to inadequate provision of funds, the scheme is not completed within expected time, so the cost of the scheme is increased 7 times of the original cost. The scheme has carried on and farmers are utilizing the irrigation water at present, because the rate of irrigation is on subsidiary base.

At present the water rate is Rs. 2750 per Hectares per rotation. Even today the cultivators are taking traditional crops, such as cereals and pulses etc. The sugarcane is bumper crop at present in the region but future is not good because of the unstable and insignificant prices against the input cost and cost of water provided to it.

The fruit crops are beneficial to which the climate and physical phenomena is favourable, but unassured supply of water through the scheme, the farmers are not desired to invest big capital in fruit cash crop. There fore the area under fruit crop is not increased. Only 1.88 percent of the area of the total cropped area is under fruit crop at present. This proportion is very insignificant.

## SUGGESTION AND CONCLUSION:

The above observation leads to the suggestions and conclusion;

1) The scheme has required to be increase area under actual irrigation by complete the work of lining with concrete of canal and Distributaries with made available fund in which the efficiency of the canal and distributaries will be increase. Along with it the electricity bill will decrease with per unit of area.
2) The water users associations have to be constituted and hand over the water management system below outlet to the WUA. The work of water revenue collection has to be handover within which the recovery of revenue work will softly. The water
has to be released on the volumetric basis through which the wastage will decrease.
3) Cropping pattern should be changed in which the cash crop will include e.g. sugarcane, fruit, vegetables, flower etc. There are profitable from which the farmers get big profit.
4) Drip irrigation, diffuser and sprinkler irrigation system has to be utilized; those methods are saving more than 60 percent of water. The micro irrigation although costly, it has to be utilized and save the costly water from seepage and wastage unavoidable.

If the proper measures have been not taken, the Govt. definitely will unable to run the project in the future.

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# Fair of Khandoba Temple : A Case Study of Karajkheda Khandoba, Dist. Osmanabad 

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## INTRODUCTION

Fairs are the oldest trading institutions in the world and they still exist in one form or the other in various parts of the world. The fairs and festivals of India are major attractions of the country. Reflecting the vibrant culture of the country, these events occupy a prime place in the Indian tourism industry, as many people visit the country in order to participate in them. The culture of India is aptly reflected through its numerous festivals and fairs. Bringing out the true spirit of the Indian people and their society, the Indian festivals find their roots in the traditions, religious beliefs, myths and the seasons of the country. The fairs, occur occasionally, may be one or twice a year and serve a wider area not only economically but socially, religiously and culturally also. In developed countries the importance of fairs has come down - they have become simply exhibition events. But in developing countries fairs are still important trading institutions; especially the rural community and they play a vital role in regional economic co-operation.

In the present research paper an attempt has been made to highlight the impact of fair on generating employment among rural masses. Here, data is collected in Khandoba fair at Karajkheda, Dist. Osmanabad, Maharashtra. However the specific objectives are as under:

## OBJECTIVES:

Aims of the present study are as under:

1. To highlight commodity structure, merchants and business patterns in fair.
2. To find out and to comment on the morphology of Naldurg Khandoba fair.
3. To highlight the characteristics of merchants in Naldurg Khandoba fair.
4. To find out place and district wise inflow/arrival of merchants in the Khandoba fair.

The present study is entirely based on primary data which is obtained by questionnaire and interview method. 255 merchant have been interviewed.

## STUDY REGION:

The Place Karajkheda is one of the important village in Osmanabad tahsil. Karajkheda is situated at $18^{\circ} 3^{\prime} 19^{\prime \prime}$ North latitude and $76^{\circ} 16^{\prime} 22^{\prime \prime}$ East longitudes and is 35 Km . to east of Tuljapur city on MSH No. 3. This village is situated on both sides of Maharashtra State-Highway no.3.

After the earthquake at Killari in 1993 this village is separated in to four places i.e. gayran vasti, Old village, Chou-rasta vasti and settlement around school.

Major temples in Karajkheda are Vitthal-Rukmini, Maruti, and Khandoba are important. Being lord Khandoba is a village deity of Karajkheda there are two well builted Khandoba temples at Old village and Patoda pati. In old village temple of lord Khandoba is old, spacious and spread over 4400 sq. meter area. Annual fair is held in both places on champa shashti every year. Merchants and thousands of people from adjoining villages, districts in and out of the state attend the fair.

## DATA BASE AND METHODOLOGY:

The study is entirely based on filed work. Data is collected form key informants with the help of in depth interview and questionnaire techniques.

## Morphology of Fair:

Morphology or the layout pattern of the fair simply means the various types of structures erected to perform activities in a fair. All the structures are temporary thus; the fair morphology is also temporary. The fair morphology is determined by the spatial arrangement of shops within a limited 'fair' ground because a fair is an agglomeration of various types of shops. The most important factor influencing morphology of the fair is the local relief, location of the religious spot and permanent construction.


Fig. shows the morphology of the fair held at Karajkheda. It is observed that specific shops are located in specific sites. For example, shops dealing with Bhandara (turmeric powder), Coconut and Prasad (Offerings) are located near the temple and along the path of Khandoba Bagad procession. It is found that although the allotment of shops in the fair is done by the organizing committee through auction, most of the sections and shops are also fixed in this fair.

The shops are organized at front side of the temple and along the lanes around the Gram Panchayat office. Shops are located both side of the lane as well as in between the lane. Eastern section of the fair is in linear shape and is mostly composed of shops dealing with eatables including restaurants, sweets while the north section is consisted of shops dealing with utensil, pots, and images of god and goddess, leather goods, cloths and ready made garments, country blankets.

## Commodity Structure, Merchants and Business Pattern in Fair:

Fair had a complex pattern of commodities is observed in the fair. The common types of shops dealing with various types of commodities in the fair of Khandoba as observed by the author are (Fig. No.2):

Fig.No. 2 Showing Commodity and their quantity


1. Stainless, aluminum, copper and brass utensils, pots, articles and images of Gods and Goddesses.
2. General merchandise shops dealing with fancy articles like bangles, ladies ornaments, face powder, soap, perfumed oil, etc.
3. Cloth and readymade garments, country blanket, woolen dresses, etc.
4. Toys and plastic goods.
5. Shops of eatables including sweets, tea, restaurants, fruits and vegetables, cigarettes, betel leaf and beverages, cold drinks and mineral water.
6. Leather goods, shoes, general goods, dealing with purse, belts, etc.
7. General merchandise shops dealing with prasad (offerings), bhandara (turmeric powder) and coconut.
8. Service shops dealing with entertainment.
9. Miscellaneous.

Table No. 1 Showing District wise distribution of Merchants in Khandoba fair

| Places of Merchants |  | In No. | In \% |
| :---: | :---: | :---: | :---: |
| Osmanabad(101; 59.41 \%) | Osmanabad | 40 | 23.53 |
|  | Bhum | 6 | 3.53 |
|  | Kalamb | 3 | 1.76 |
|  | Lohara | 9 | 5.29 |
|  | Paranda | 4 | 2.35 |
|  | Umarga | 4 | 2.35 |
|  | Yedashi | 2 | 1.18 |
|  | Tuljapur | 33 | 19.41 |
| Solapur (32; 18.82 \%) | Barshi | 14 | 8.24 |
|  | Solapur | 18 | 10.59 |
| Satara (4; $2.35 \%$ ) | Dahivadi | 2 | 1.18 |
|  | Phaltan | 2 | 1.18 |
| Pune (2; 1.18 \%) | Indapur | 2 | 1.18 |
| Latur (28; 16.74 \%) | Ahmadpur | 2 | 1.18 |
|  | Ausa | 13 | 7.65 |
|  | Latur | 13 | 7.65 |
| Beed (3; 1.76 \%) | Ambejogai | 2 | 1.18 |
|  | Beed | 1 | 0.59 |
|  | Total | 170 | 100.00 |

Source: - Field work (2010)
Following are the salient characteristics of the merchants observed in the Karajkheda Khandoba fair.

1. Out of total sampling (170) merchants in the Naldurg Khandoba fair, 159 are mobile or traveling merchants.
2. Only 11 ( 6.47 percent) merchants in the Khandoba fair are local.
3. Among the various districts maximum ( 49.41 percent) merchants came from within the Osmanabad district followed by Solapur (18.82 percent), Latur (16.74 percent).
4. Among the tahsil within the Osmanabad district 40 ( 23.53 percent) merchant came from Osmanabad followed by Tuljapur 33(19.41 percent).

Table No. 2 Showing Classification of Shops and Merchants in the Fair

| Sr.No | Types of Shop | Shops |  | Places of Merchants | Total Average Income During stay of fair (In Rs.) | Kuldaiwat of Merchants |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{array}{\|c\|} \hline \text { In } \\ \text { Nos. } \end{array}$ | In \% |  |  | Yes | No |
| 1 | UTENSIL, POTS, AND IMAGES OF GOD AND GODDESS | 33 |  | Tuljapur (3) <br> Ausa (4) <br> Latur (3) <br> Umarga (2) <br> Ambejogai (2) <br> Solapur (3) <br> Barshi (6) <br> Lohara (5) <br> Osmanabad (3) <br> Indapur (2) | 13860 | 10 | 23 |
| 2 | CLOTHS AND READYMADE <br> GARMENTS, WOOLEN <br> DRESSES  | 18 |  | Ausa (5) <br> Lohara (4) <br> Umarga (2) <br> Tuljapur (4) <br> Solapur (3) | 4932 | 7 | 11 |
| 3 | GENERAL MERCHANT SHOP DEALING WITH ARTICLE | 29 |  | Bembali (3) <br> Ausa (3) <br> Latur (5) <br> Osmanabad (4) <br> Barshi (3) <br> Phaltan (2) <br> Ahmadpur (2) <br> Gondavale (2) <br> Solapur (5) | 5191 | 6 | 23 |
| 4 | LEATHER GOODS | 7 | $4.12$ | Tuljapur (2) <br> Barshi (2) <br> Ausa (1) <br> Osmanabad (2) | 2520 | 4 | 3 |
| 5 | TOYS AND PLASTIC GOODS | 35 |  | Bembali (3) <br> Tuljapur (5) <br> Latur (4) <br> Osmanabd (6) <br> Naldurg (4) <br> Kalamb (3) <br> Paranda (4) <br> Barshi (30 <br> Solapur (3) | 14700 | 10 | 25 |


| 6 | EATABLES, BEVERAGES AND COLD DRINKS | 18 | $10.59$ | Karjkheda (2) <br> Bembali (2) <br> Solapur (4) <br> Tuljapur (4) <br> Osmanaba(4) <br> Vadgaon lakh <br> $(2)$ | 14760 | 2 | 16 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 7 | ENTERTAINMENT | 2 | 1.18 | $\begin{array}{\|l\|} \hline \text { Beed (1) } \\ \hline \text { Latur (1) } \\ \hline \end{array}$ | 600 | 0 | 2 |
| 8 | OFFERINGS | 20 | 11.76 | Karjkheda (7) <br> Tuljapur (5) <br> Kunthalgiri (6) <br> Yedashi (2) | 3860 | 18 | 2 |
| 9 | MISCELLANEOUS SHOPS | 8 | 4.71 | Karjkheda (2) <br> Kanegaon (3) <br> Bhandari (1) <br> Takviki (2) | 6880 | 7 | 1 |
|  | Total | 170 | 100.00 |  | 67303 | $\begin{gathered} 64 \\ (39.91 \\ \%) \end{gathered}$ | $\begin{gathered} 106 \\ (60.09 \%) \end{gathered}$ |

Source: - Field work (2010)

## CONCLUSION:

- In all merchants of Karajkheda Khandoba fair, merchants of toys and plastic goods are maximum in number (20.69 percent) followed by utensil, pots, and images of god and goddess ( 19.41 percent) and then general merchant shop dealing with fancy article (17.06 percent).
- Merchant dealing with entertainment are in few numbers ie. 1.18 percent.
- Out of the total sampling (170) merchants in the Naldurg Khandoba fair, 159(93.53 per cent) are mobile or traveling merchants.
- Only 11(6.47 per cent) merchants in the fair are local.
- Among the various districts maximum (49.41 percent) merchants came from within the Osmanabad district followed by Solapur (18.82 percent), Latur (16.74 percent).
- Out of the total merchants (170) in the fair, only 64(39.91 per cent) have Khandoba as their Kuldaivat.
- During fair period of two- three days average trade is made more than Rs. sixty thousand.


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# A Geographical Study of Distribution and Growth of Population in Raigarh District (Maharashtra) 

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#### Abstract

The development of any country depends upon its population and availability of resources. But various problems are created due to the growth of population in the country. After dependence various problems were created due to the growth of population in India. Therefore government of India started population studies. Even after completion of 60 years of independence, India still is not much developed. There are many reasons of underdevelopment. Out of many reasons of underdevelopment, population growth is most important. . Population growth is a dynamic concept that changes according to the region. The study of population characteristics of Raigarh district of Maharashtra is helpful in understanding the demographic situation of the district in relation to its socio-economic, and health development. Raigarh district in Maharashtra state is not exception for this. Therefore it is necessary to study of population in Raigarh district.


Key wards: Distribution of population, density and growth.

### 1.1 INTRODUCTION

The study of population is one of the important aspects of research on human development. The varying content and methodologies of different disciplines studying population notwithstanding, each social science has made valuable contributions towards the understanding of spatiotemporal patterns of population (Woods, 1979). In United Kingdom, the contributions of Arthur Geddes (1941) signaled the growing awareness among geographers about the significance of population studies in geography. The geographical study of distribution, growth and characteristics of population helps in understanding population situation of a geographical area in order to improve and sustain the human development through plans, policies and programmes. The present research is interested to study the population distribution and growth of Raigarh district.

### 1.2 Study Area

Raigarh district is situated in Konkan region of Maharashtra State. It lies between $17^{\circ} 15^{\prime} \mathrm{N}$. and $19^{\circ} 80^{\prime} \mathrm{N}$. latitude and $72^{\circ} 51^{\prime} \mathrm{E}$. and $73^{\circ} 40^{\prime} \mathrm{E}$. longitude. It is surrounded by Mumbai Sub urban district to the North West, Thane district to the north, Pune district to the east, Satara district to the south east, Ratnagiri district to the south and Arabian Sea to the west. The study region has an area of 7152 sq . kms. This is about 2.32 percent of the total area of the state. For administrative purpose the district is divided into 15 tahsils. Raigarh district has 26 towns and 1,859 villages. The climate of study region is generally hot and humid and the average annual rainfall is 3169 mm . and average minimum temperature is $11^{\circ}$ cand maximum average temperature is $41^{\circ} \mathrm{C}$ in the year.


Figure - 1.1 Location map of study area

### 1.3 OBJECTIVES

1. To study Tahsil-wise density and distribution of population;
2. To study Tahsil-wise growth of population;

### 1.4 DATA SOURCE AND RESEARCH METHODOLOGY

The present research study of population density, distribution and growth etc. is based on secondary data. The information was collected from Census of India 1971, 1981, 1991 and 2001. Primary Census Abstract and Census Handbook of India and Maharashtra, and District Census Handbook of Raigarh district were referred. Besides these, some other items of population related information were collected from Gazetteer and annual reports, and other publications by the state and central government organizations. In addition, Ph. D. theses, periodicals and books relevant to this research topic were also referred for the study.

### 1.5 DENSITY OF POPULATION

Population density is one of the basic and important population characteristics. Density of population plays an important role in the studies related to population geography. Table 1.1 (Figure 1.2) explains the density of population per square kilometer for Raigarh district for the year 1971 and 2001 and its variation during this period. According to 2001 census, Uran Tahsil has highest population density ( 753 persons per sq.km.) and it ranges from a low of 137 in Sudhagad. Panvel Tahsil has highest variation in population density, an addition of 465 persons in 2001 census from census in 1971, and the lowest variation is noticed in Poladpur Tahsil ( 25 additional persons). The population density was higher Uran Tahsil (366) which ranges to a lower density in Sudhagad Tahsil (99). The variation of population density during 1971-2001 was lower in Raigarh district (134) as compared to that of Maharashtra (151).

Table - 1.1 Density of population in Raigarh district (in sq. kms.)

| Sr. |  | Year |  |  |  | Variation |
| :---: | :--- | :---: | :---: | :---: | :---: | :---: |
| No. | Tahsil | $\mathbf{1 9 7 1}$ | $\mathbf{1 9 8 1}$ | $\mathbf{1 9 9 1}$ | $\mathbf{2 0 0 1}$ | $\mathbf{1 9 7 1 - 2 0 0 1}$ |
| 1 | Uran | 366 | 483 | 562 | 753 | 387 |
| 2 | Panvel | 266 | 349 | 485 | 731 | 465 |


| 3 | Karjat | 176 | 199 | 244 | 283 | 107 |
| :---: | :--- | :---: | :---: | :---: | :---: | :---: |
| 4 | Khalapur | 178 | 242 | 356 | 542 | 274 |
| 5 | Pen | 194 | 239 | 297 | 354 | 160 |
| 6 | Alibag | 282 | 329 | 371 | 444 | 162 |
| 7 | Murud | 149 | 211 | 244 | 272 | 123 |
| 8 | Roha | 135 | 171 | 211 | 256 | 121 |
| 9 | Sudhagad | 99 | 101 | 134 | 137 | 38 |
| 10 | Mangaon | 151 | 169 | 196 | 224 | 73 |
| 11 | Tala | ${ }^{*}$ | ${ }^{*}$ | ${ }^{*}$ | 169 | 0 |
| 12 | Shrivardhan | 233 | 266 | 302 | 327 | 94 |
| 13 | Mhasla | 136 | 168 | 185 | 196 | 60 |
| 14 | Mahad | 164 | 177 | 201 | 230 | 66 |
| 15 | Poladpur | 121 | 136 | 149 | 146 | 25 |
|  | District | 175 | 208 | 255 | 309 | 134 |
|  | Maharashtra | 164 | 204 | 257 | 315 | 151 |

Source: a) Kolaba District Census Handbook, 1971
b) Raigad District Census Handbook, 2001
*Tala Tahsil was not formed till 1991.

### 1.6 POPULATION DISTRIBUTION

Population distribution is an important aspect while studying population density and other implied socio-economic problems in a geographical area. Table 1.2 (Figure 1.3) deals with distribution of population of Raigarh district by Tahsil and residence during 1971 to 2001 and its


Figure - 1.2 Density of population in Raigarh district, 1971 and 2001
variation. The data reveals that the absolute population among Tahsils of Raigarh district in 2001 Census is concerned, Panvel Tahsil has recorded highest population (422522) and Tala Tahsil has recorded lowest population (42869) in 2001.
Whereas in 1971, Panvel Tahsil has recorded highest population (148348) and Mhasla

Tahsil has recorded lowest population (45182). The population variation during 19712001 varies from a high of 274174 in Panvel Tahsil to a low of 8206 in Mangoan Tahsil. The population variation of Raigarh district is lower (944926 i.e. 74.81\%) than that of Maharashtra (46466392 i.e. 92.17\%) during this period.

The data of population distribution of Raigarh district by Tahsil and residence in 1971 and 2001. It is observed that Panvel Tahsil has recorded highest population both in rural (218186) and urban areas (204336) in 2001. Whereas, Tala Tahsil has the lowest rural population and Poladpur Tahsil has the lowest urban population in the same year. As far as the 1971 census has highest rural population. Roha Tahsil (8631) has the lowest urban population and Murud has highest rural population. Roha Tahsil (8631) has the lowest urban population and Murud Tahsil (40271) has lowest rural population. It is noted that Tala Tahsil was not formed in 1971, but it

Table-1.2 Distribution of population in Raigarh district

| Sr. <br> No. | Tahsil | 1971 |  |  | 2001 |  |  | ```Variation ( Total) 1971- 2001``` |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Total | Rural | Urban | Total | Rural | Urban |  |
| 1 | Uran | 71342 | 58726 | 12616 | 140351 | 109177 | 31174 | 50377 |
| 2 | Panvel | 148348 | 119728 | 28620 | 422522 | 218186 | 204336 | 220940 |
| 3 | Karjat | 110122 | 93013 | 17109 | 184420 | 139011 | 45409 | 54928 |
| 4 | Khalapur | 72203 | 54051 | 18152 | 183604 | 109407 | 74197 | 85512 |
| 5 | Pen | 100169 | 88415 | 11754 | 176681 | 146480 | 30201 | 57736 |
| 6 | Alibag | 143056 | 124400 | 18656 | 221661 | 202165 | 19496 | 57700 |
| 7 | Murud | 50481 | 40271 | 11210 | 72046 | 59494 | 12552 | 16151 |
| 8 | Roha | 90564 | 81933 | 8631 | 161750 | 127405 | 34345 | 53430 |
| 9 | Sudhagad | 44915 | 44915 | - | 62852 | 54680 | 8172 | 16425 |
| 10 | Mangaon | 144064 | 144064 | - | 152270 | 138111 | 14159 | -5801 |
| 11 | Tala | - | - | - | 42869 | 42869 | - |  |
| 12 | Shrivardhan | 63237 | 50895 | 12342 | 85071 | 69885 | 15186 | 15773 |
| 13 | Mhasla | 45182 | 45182 | - | 61010 | 52247 | 8763 | 8667 |
| 14 | Mahad | 132488 | 118988 | 13500 | 186521 | 154973 | 31548 | 42809 |
| 15 | Poladpur | 45832 | 45832 | - | 54301 | 49004 | 5297 | 3961 |
|  | District | 1263003 | 1110413 | 152590 | 2207929 | 1673094 | 534835 | 721477 |
|  | Maharashtra | 50412235 | 34701024 | 15711211 | 96878627 | 55777647 | 41100980 | 34094457 |

Source: a) Kolaba District Census Handbook, 1971
b) Raigarh District Census Handbook-1981,1991 and 2001


Figure - 1.3 Distribution of population in Raigarh district, 1971 and 2001 became Tahsil with no urban population in 2001. The Tahsils like Sudhagad, Mangoan, Mhasla and Poladpur have no urban areas in 1971. While looking at the population figures of Raigarh district and Maharashtra state, one can understand that there is a significant increase in urban population and decrease in rural population during the period 1971-2001.
According to Census of 1971 and 2001 the data reveals that there were 1699 villages in 1971 which increased to 1859 villages in 2001 in Raigarh district.

### 1.7 GROWTH OF POPULATION

There are various factors affecting the growth of population in Raigarh district. Out of these, birth rate, death rate and migration are the important demographic components for the measurement of population.

## Birth rate

The data presents the crude birth rate for Tahsils of Raigarh district during 1971-2001. The results reveal that the crude birth rate in Raigarh district in 2001 was 38.04 showintg an increase of 30 percent over 1971 census.

## Death rate

The data reveals that the crude death rate of Raigarh district in 1971 was 11.90 and 11.11 in 2001. This has been well evidenced with low decreased variation in the district ( -0.79 ) during the period 1971-2001

## Migration

According to 2001 Census, 83.88 \% of population in Raigargh district is nonmigrants, which has decreased from 91.85 \% in 1971. In Raigarh district, 57.44 \% of population was migrants, which has decreased from $71.53 \%$ in 1971.
According to migrants by place of last residence, $86 \%$ of population non-migrants which is slightly decreased from $90 \%$ in 1971. These migrants in the district, whose last residence was elsewhere of the district was other states, was $61 \%$ which is decreased from 67 \% in 1971.

## DECADAL GROWTH OF POPULATION

Table 1.3 explains the percentage of decadal growth rate of population of Raigarh district by Tahsil during the censuses 1971-2001. The data reveals that Panvel Tahsil has recorded highest percentage of decadal growth rate of population ( $50.15 \%$ ) during the decade 1991-2001 followed by Uran (31.53 \%) and Khalapur (27.14 \%) among all the

Tahsils of Raigarh district, whereas the Tahsil Poladpur has recorded lowest percentage of decadal growth rate ( $-1.80 \%$ )

Table-1.3
Decadal growth rate of population by Tahsil, Raigarh district, 1971-2001

| Sr. | Tahsil | Decadal growth |  |  |
| :---: | :--- | :---: | :---: | :---: |
| No. |  | $\mathbf{1 9 7 1 - 1 9 8 1}$ | $\mathbf{1 9 8 1 - 1 9 9 1}$ | $\mathbf{1 9 9 1 - \mathbf { 2 0 0 1 }}$ |
| 1 | Uran | 26.12 | 18.59 | 31.53 |
| 2 | Panvel | 35.88 | 39.59 | 50.15 |
| 3 | Karjat | 17.59 | 19.88 | 18.79 |
| 4 | Khalapur | 35.86 | 47.21 | 27.14 |
| 5 | Pen | 18.74 | 24.48 | 18.96 |
| 6 | Alibag | 14.61 | 13.49 | 19.12 |
| 7 | Murud | 8.57 | 15.12 | 12.03 |
| 8 | Roha | 19.61 | 28.05 | 16.61 |
| 9 | Sudhagad | 3.37 | 33.11 | 1.71 |
| 10 | Mangaon | 9.72 | 15.41 | 8.28 |
| 11 | Tala | - | - | 2.55 |
| 12 | Shrivardhan | 9.58 | 12.63 | 9.00 |
| 13 | Mhasla | 15.85 | 10.81 | 5.20 |
| 14 | Mahad | 8.47 | 14.04 | 13.8 |
| 15 | Poladpur | 9.84 | 9.85 | -1.8 |
|  | District | 17.69 | 22.76 | 21.00 |
|  | Maharashtra | 24.54 | 25.73 | 22.73 |

Source : a) Kolaba District Census Handbook -1971
b) Raigarh District Census Handbook1981,1991 and 2001
which shows a slight decline in the decadal growth rate of population. While Panvel Tahsil shows a diligent and increasing trend in decadal growth rate of population over three decades, Mhasla Tahsil shows a decreasing trend. It is noteworthy to mention that the decadal growth rate of population of both Raigarh district (17.69 to 22.76) and Maharashtra state (24.74 to 25.73) and has increased between the decades 1971-1981 to 1981-1991. But, during the decade from 1991-2001, the growth rate has decreased (21.00 and 22.73 respectively).

### 1.8. CONCLUSIONS

1. The population of Raigad district is continuously increasing since 1971 to 2001 i.e. 1263003 and 2205972 respectively.
2. The density of population increases continuously from 1971 to 2001, Uran and Panvel tahasil have highest density i.e. 736 and 727 in 2001 respectively.
3. Urbanization is also growing up, there were 14 towns 1971 but now in 2001 there are 26 towns in the district, it means 12 towns increased.
4. Female population decreased from 1971 to 2001, with 1056 to 976 per thousand male.
1.9. SUGGESTIONS
5. It is necessary to control the growth of population to avoid the burden on natural resources, public services, sanitation, roads and other resources in Raigad district by centralizing industries in other districts.
6. To maintain the population in Panvel and Uran city it is need of today to break the development of service sector and other development in rest tahasils of Raigad district.
7. At last we need to say that, to maintain the male female ratio in Raigad district, specific steps should be implement by the government. We have experience of effect of education about female protection in India, so it can be apply in the Raigad district.

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# A Study of Patern of Plan Expenditure of Government of Maharashtra 

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#### Abstract

Plan expenditure arises out of schemes freshly introduced in an on-going five year plan period; it helps in enhancing the productive capacity of the economy. The objective of the paper is to study the pattern of plan expenditure of government of Maharashtra, to investigate impact of net state domestic product and per capita income on plan expenditure and to study growth trend in plan expenditure over a period of thirty years from 1975-76 to 2004-05. The secondary data is collected through RBI and State government publications. The Wagner's law of increasing state activity in plan expenditure is tested. The result refutes the presence of Wagner's law in plan expenditure of government of Maharashtra.

Key Words: - Plan expenditure, Wagner's Law, Growth rate, Per capita income, Net State Domestic Product.

\section*{INTRODUCTION: -}

Maharashtra is a leading state in Indian federation as far as efforts of development are concerned. Maharashtra state is considered to be a disciplined state in financial management of the resources. In the classification of public expenditure broadly we are using plan and non-plan expenditure, capital and revenue expenditure and developmental and non-developmental expenditure. Out of this in the present paper we can study the pattern of plan expenditure of the government of Maharashtra.

According to the draft of the Tenth Five Year Plan, "Plan expenditure arises out of schemes freshly introduced in an on-going five year plan period. In the same period, non plan expenditure arises out of schemes carried forward from previous FYP period. Non plan expenditure, therefore, supports the old schemes of government and plan expenditure, the new schemes. Since the new schemes add to the economy's productive capacity as the old schemes did in the past, plan expenditure reflects government investment in enhancing the economy's productive capacity. Thus, non plan expenditure maintains the existing capacities and plan expenditure adds to it." ${ }^{11}$


## 2. OBJECTIVES OF STUDY:

To study the Pattern of plan expenditure of government of Maharashtra over the period of thirty years from1975-2005.
I.
investigate impact of net state domestic product and per capita income on plan expenditure.
II.
study growth trend in plan expenditure over a period of thirty years from 1975-76 to 2004-05.

## 3. HYPOTHESIS OF THE STUDY:-

I.
rowth rate in plan expenditure of Maharashtra is greater than growth rate in net state domestic product of Maharashtra.

## II.

rowth rate of per capita plan expenditure is greater than growth rate in per capita income of Maharashtra.

## 4. DATA COLLECTION: -

Data for study collected through secondary sources only which includes budget documents of the state of Maharashtra. Data also collected from Reserve Bank of India bulletin and state finances: a study of the budgets of the state governments. Economic survey of Maharashtra was also helpful in providing data on NSDP and Per capita income of the state.

## 5. SCOPE OF THE STUDY: -

The study is restricted to the plan expenditure of government of Maharashtra only for the period of thirty years from 1975 to 2005. The expenditure made by private enterprises, central and local self government are neglected.

## 6. REVIEW OF LITERATURE: -

Empirical study of the state expenditure policy and its impact on the other variables, relationship with national income and other variables was studied by the German economists Adolph Wagner ${ }^{2}$. This law of the Wagner is explanatory rather than prescriptive in character. According to Wiseman and Peacock", "Its aim is to establish generalizations about government expenditure, not from postulates about the logic of choice, but rather by direct inference from historical evidence." Adolph has based his law of increasing state activities on historical facts. Adolph Wagner arguing that government expenditure must increase at an even faster rate than output. According to Wagner, income elasticity of the public expenditure is greater than unity. It means that rate of increase of government expenditure is greater than the rate of increase of the economy. Arthur Mann ${ }^{4}$ tries to test this law but has got contradictory results. Here we will use following models for testing Wagner's law ${ }^{5}$
7. STATISTICAL TECHNIQUE: -

The regression analysis for thirty years is made with the statistical package ' $R$ ' which is freely available on internet.
A) Log linear model for plan expenditure: - The log linear models are being used for to see elasticity of Plan expenditure with NSDP of the state. This gives us how much increase in plan expenditure occurs because of an increase in NSDP of the state. The model is as follows;

Log PE=A+ Log NSDP+ w1 ----------------------------------Equation-I
B) Instantaneous growth rate and compound growth rate:- Instantaneous growth rate is calculated by taking time as an independent variable and log of plan expenditure as dependent variable.

Plan Exp $=A+b Y E A R+W$ $\qquad$ Equation-II
The value of $b$ indicates an instantaneous growth rate of plan of expenditure over a period of thirty years.
C) Compound growth rate of plan expenditure: - For this, antilog of coefficient of plan expenditure was taken and this is deducted from one to reach to the value of compound growth rate.

Compound growth rate = antilog (b)-1 ----------------------------- Equation-III
8. ANALYSIS OF PLAN EXPENDITURE: -

In the table no. 1.1, we have given the regression results. Elasticity of plan expenditure to NSDP is 0.75 , which is less than one. The same result is observed for the per capita plan expenditure to per capita income of the state i.e. elasticity of per capita
plan expenditure to PCl of the state is 0.70 . This will disprove the Wagnerian hypothesis in plan expenditure in Maharashtra state.

Table No.1.1: - Elasticity of plan expenditure, per capita plan expenditure and Instantaneous and compound growth rate of plan expenditure and NSDP

| Category | Plan exp | PCPE | NSDP | Plan exp | PCI | PCPE |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Intercept | -0.4 | -0.50 | 8.70 | 10.72 | 7.00 | 4.42 |
| Coefficient | 0.75 | 0.70 | 0.143 | 0.1074 | 0.121 | 0.085 |
| SE I | 0.42 | 0.40 | 0.037 | 0.102 | 0.036 | 0.10 |
| SE C | 0.03 | 0.04 | 0.002 | 0.0057 | 0.002 | 0.005 |
| t-I | -0.94 | -1.24 | 234.24 | 105.06 | 192.0 | 44.15 |
| $\mathrm{t}-\mathrm{C}$ | 19.38 | 15.54 | 68.44 | 18.68 | 59.1 | 15.17 |
| $\mathrm{R}^{2}$ | 0.93 | 0.89 | 0.99 | 0.925 | 0.992 | 0.891 |
| $\mathrm{R}^{-2}$ | 0.93 | 0.89 | 0.99 | 0.923 | 0.991 | 0.887 |
| Compound Growth Rate | -- | -- | 0.153 | 0.1133 | 0.129 | 0.0893 |

Source: - Authors Calculations on the basis of Table No.1.2. All intercepts and coefficients are significant at $1 \%$ level of significance. SE I- Standard error of Intercept, SE C- SE of Coefficient, $t-I \& t-C$ stands for $t$ values of intercept and coefficient, $R^{2} \& R^{-2}$ are Multiple and adjusted $\mathrm{R}^{2}$, CGR- Compound growth rate.

Alternatively, to test the theory further, we can use compound growth rate of NSDP, plan expenditure, per capita income and per capita plan expenditure of the state. Compound growth rate of NSDP and plan expenditure are 0.153 or 15.3 and 0.113 or 11.3. For per capita category, per capita income growth is higher than per capita plan expenditure i.e. 0.129 or 12.9 and 0.0893 or 8.93 . Here, too, Wagnerian hypothesis is rejected of higher growth in expenditure of the state than growth in income of the state.

## 9. CONCLUSION: -

We have tested the Wagnerian hypothesis of higher growth in expenditure than state income but our statistical results rejected this hypothesis. This type of result may occur because of non-inclusion of private expenditure and expenditures of central and local self governments. As all these expenditures have an impact on growth of NSDP of the state.

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Table No. 1.2 Plan and per capita plan expenditure

| Year | Total Plan Exp. (Laks Rs.) | PCPE(Rs.) | NSDP(Cr.) | PCSI(Rs.) |
| :--- | :--- | :--- | :--- | :--- |
| $1975-76$ | 30947 | 55.913 | 7676.8 | 1387 |
| $1976-77$ | 47765 | 84.481 | 8573.6 | 1516.4 |
| $1977-78$ | 54965 | 95.119 | 9624.8 | 1665.6 |
| $1978-79$ | 64290 | 108.85 | 10658 | 1804.5 |
| $1979-80$ | 67614 | 112.01 | 12145.7 | 2012 |
| $1980-81$ | 73791 | 118.51 | 15113.3 | 2427.3 |
| $1981-82$ | 91470 | 143.87 | 16965.8 | 2668.5 |
| $1982-83$ | 114121 | 175.65 | 18277.4 | 2813.1 |
| $1983-84$ | 139368 | 209.85 | 21151.6 | 3184.9 |
| $1984-85$ | 157483 | 232.17 | 22628 | 3335.9 |
| $1985-86$ | 139028 | 200.98 | 26467 | 3826 |
| $1986-87$ | 190016 | 267 | 28431 | 3995 |
| $1987-88$ | 215005 | 295.29 | 33770 | 4638 |
| $1988-89$ | 247352 | 331.86 | 40472 | 5430 |
| $1989-90$ | 274149 | 359.23 | 50139 | 6570 |
| $1990-91$ | 293196 | 375.16 | 58137 | 7439 |
| $1991-92$ | 303104 | 379.62 | 65808 | 8242 |
| $1992-93$ | 371155 | 455.83 | 82076 | 10080 |
| $1993-94$ | 392539 | 474.05 | 101767 | 12290 |
| $1994-95$ | 665889 | 789.47 | 116507 | 13813 |
| $1995-96$ | 639858 | 744.71 | 140730 | 16379 |
| $1996-97$ | 712843 | 801.6 | 158682 | 17844 |
| $1997-98$ | 734630 | 809.69 | 195168 | 21511 |
| $1998-99$ | 630141 | 681.11 | 214557 | 23191 |
| $1999-00$ | 578757 | 613.18 | 247830 | 26257 |
| $2000-01$ | 693403 | 721.04 | 252283 | 26234 |
| $2001-02$ | 472547 | 482.56 | 274113 | 27992 |
| $2002-03$ | 516735 | 520.01 | 300476 | 30238 |
| $2003-04$ | 754843 | 748.62 | 341424 | 33861 |
| $2004-05$ | 922951 | 899.86 | 387390 | 37770 |
| 5049 | 6098 |  |  | A |

Source: - Compiled from State finance- A study of Budgets and RBI Bulletin various issues, Green books Govt. of Maharashtra and Economic Survey of Maharashtra Various issues

# Geographical Study of Agricultural Landuse and Cropping Pattern in Sangli District 

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#### Abstract

: Agriculture being a basic activity plays a vital role in Indian economy in which $78.8 \%$ people are engaged in this activity. Agriculture is affected by physical, socio economic, as well as organizational factors. The Indian agriculture gamble with the monsoon, specifically in drought prone areas. Inadequate rainfall of monsoon and frequent drought conditions affect on general land use and hampered the development of agriculture of the region, resulting in high fluctuations in production.

The Sangli District is selected for study, which falls in drought prone area of Maharashtra. The paper aims to understand the Agricultural land use and to analyse the associated cropping pattern. The very low and inadequate rainfall of this area dominates the land use and cropping pattern.

In study area middle and western part has the highest proportion of land under sugar cane. In Miraj, Walva, Palus and Shirala tahsils major agriculture land is under sugar cane and soyabean because this area is irrigated. Generally cropping pattern of


 district is different from the eastern dry zone VS western wet land.
## INTRODUCTION :

Land is a basic natural resource. Land and water resources play a major role in the development of any region. The proper utilization of land and Water resources of a region helps to achieve the desired level of development.

No subject is probably causing a worldwide concern as ecology in general and environmental degradation in particular. Land is one of the most significant gifts of nature to mankind, which should be utilized carefully. But there is no doubt that most of our present environment difficulties originate from man's ecological misbehavior (Ward 1972). Demographic explosion, technological excesses development process, ever increasing needs and man's ability to transform and utilize the land, at his will, have changed seriously the physical and chemical properties of soil leading to their deterioration.

Agricultural land use simply means the proportion of the area under different crops. It is related to the ecological situation, socio-economic condition and other technological factors.

## THE REGION :

Forming part of famous Deccan plateau Sangli district is one of the southern most districts of Maharashtra state. It is situated between $16^{\circ} 45^{\prime}$ and $17^{\circ} 33^{\prime}$ North Latitude and the $73^{\circ} 41^{\prime}$ and $75^{\circ} 41^{\prime}$ East.Longitude. It is bounded by Solapur and Satara districts in the north, Bijapur in the east, Belgaum in the south and The Ratnagiri district to the West. Total area of the district is 8572 Sq. km. The district headquarter is located at Sangli. There are 10 tehsils, 731 villages and 8 towns in the district. Area of 629200 hectares is under agriculture in Sangli district. According to 2001 Census population of district is 2581835. The density of population is 258 per sq km. The literacy rate of the study region was $76.7 \%$ in 2001.

## OBJECTIVES:

1) To understand the Agricultural land use pattern of the study region.
2) To study the cropping pattern of study region.
3) To study the dry zone and wet land cropping pattern in Sangli District.

## DATA SOURCE :

The data of different kinds have been collected from the primary and secondary sources. The primary data collected through interviews and discussions and secondary data from published and unpublished reports and abstracts such as socio-economic review, Agricultural office, Tehsildar office and Zilhla Parishad Sangli.

## METHODOLOGY :

As the entire study is based on the data collected by various sources \& interviews, discussions with the knowledgeable persons the following methodology is adopted.
i) The Tehsil is considered as unit of investigation and percentage of area under various crops in both Kharif and Rubbi season in considered.
ii) Agricultural landuse information on cadastral map, land record and field notes are also used for the study.
iii) Information and results are presented through Tables and suitable Diagrams.


## DISCUSSION AND ANALYSIS

The Sangli district is the southern district of Maharashtra. The varieties of crops are produced in this region but the food grains are the major crops of this area which posses highest proportion of land of the net sown area. Generally the rain feed crops are
the major crops of eastern side of Sangli distrct Jawar, Bajara and Pulses are important crops of the draught prone area. (Table Nos 1 and 2 and Fig. 1.A, 1.B ).

TABLE NO 1.
AREA UNDER DIFFERENT CROPS IN SANGLI DISTRICT( 2005-06)

| Sr.no | Crops | Miraj | Jath | Khanapur | Kadegaon | Walva | Tasgaon | Palus | Shirala | Atpadi | K.Mahankal | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Kharif Jowar | 12290 | 197 | 2900 | 16960 | 6185 | 30620 | 6100 | 2790 | 200 | 9134 | 87376 |
| 2 | Rabbi Jowar | 13705 | 54328 | 1450 | 870 | 3065 | 2100 | 1350 | 1510 | 16450 | 18530 | 113358 |
| 3 | Bajara | 7920 | 22238 | 6500 | 1785 | 85 | 540 | - | - | 20500 | 13720 | 73288 |
| 4 | Maize | 500 | 1932 | 400 | 105 | 655 | 220 | 140 | 165 | 600 | 390 | 5107 |
| 5 | Wheat | 4600 | 3120 | 2500 | 1560 | 4485 | 2560 | 2300 | 1540 | 840 | 1225 | 24730 |
| 6 | Other cereals | 70 | 12 | 255 | 65 | - | 80 | - | - | - | - | 482 |
| 7 | Gram | 5050 | 1624 | 3100 | 530 | 6335 | 4050 | 2610 | 1680 | 750 | 2530 | 28259 |
| 8 | Tur | 1410 | 262 | 3600 | 2403 | 665 | 2190 | 270 | 172 | 1100 | 910 | 12982 |
| 9 | Other Pulses | 4500 | 2241 | 3800 | 4130 | 655 | 2430 | 980 | 1310 | 1500 | 2870 | 24416 |
| 10 | Sugarcane | 11610 | 151 | 10 | 742 | 18070 | 630 | 4475 | 4190 | 18 | 200 | 40096 |
| 11 | Cotton | 500 | 1800 | 155 | 105 | 15 | 40 | - | - | 450 | 60 | 3125 |
| 12 | Groundnut | 100 | 22 | 100 | 70 | 15 | - | 15 | - | - | 90 | 412 |
| 13 | Soyabean | 16307 | 14 | 4300 | 7534 | 23100 | 5600 | 7185 | 3860 | 200 | 460 | 68560 |
| 14 | Other oil seeds | 16 | 5 | 25 | 15 | 15 | 5 | - | - | 45 | - | 126 |
|  | Total | 78578 | 87946 | 29095 | 36874 | 63345 | 51065 | 25425 | 17217 | 42653 | 50119 | 482317 |

NB: Area in Hectares
Source - Agriculture Office , Zilla Parishad Sangli.
The varieties of crops are produced in the study region. But the dominance of drought prone condition of the area reflects in the cropping pattern. Food grains are the major crops of the region, which accounts highest proportion of land of the total net sown area. The main food grains grown are jawar (41.61\%) Bajara (15.19\%) Maize (1.05\%) Wheat ( $5.12 \%$ ) other cereals ( $0.09 \%$ ) whereas, pulses covers about $13.60 \%$ of land which includes Gram ( $5.85 \%$ ) Tur ( $2.69 \%$ ) and other pulses ( $5.06 \%$ ) observed in study area.

The proportion of oilseeds remains only $14.31 \%$ in the study area, which includes the groundnut $(0.08 \%$ ) soyabean ( $14.21 \%$ ) other oilseeds shares is $(0.02 \%)$, besides this sugarcane ( $8.31 \%$ ).

The eastern study area possesses the dry farming nature of the agriculture and agricultural land depends upon the monsoon rainfall and only few area is under irrigation by well, tube well and canal irrigation through tank is developed in the study area.

TABLE NO 2 PERCENTAGE TO TOTAL NET SOWN AREA IN SANGLI DISTRICT

| Sr.no | Crops | Miraj | Jath | Khanapur | Kadegaon | Walva | Tasgaon | Palus | Shirala | Atpadi | K.Mahankal | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Kharif Jowar | 2.54 | 0.04 | 0.6 | 3.51 | 1.28 | 6.34 | 1.26 | 0.57 | 0.04 | 1.89 | 18.07 |
| 2 | Rabbi Jowar | 2.84 | 11.26 | 0.3 | 0.18 | 0.63 | 0.43 | 0.27 | 0.31 | 3.41 | 3.84 | 23.47 |
| 3 | Bajara | 1.64 | 4.61 | 1.34 | 0.37 | 0.01 | 0.11 | - | - | 4.25 | 2.84 | 15.17 |
| 4 | Maize | 0.1 | 0.4 | 0.08 | 0.02 | 0.13 | 0.04 | 0.02 | 0.03 | 0.12 | 0.08 | 1.02 |
| 5 | Wheat | 0.95 | 0.64 | 0.51 | 0.32 | 0.92 | 0.53 | 0.47 | 0.31 | 0.17 | 0.25 | 5.07 |
| 6 | Other cereals | 0.01 | - | 0.05 | 0.01 | - | 0.01 | - | - | - | - | 0.08 |
| 7 | Gram | 1.04 | 0.33 | 0.64 | 0.1 | 1.31 | 0.83 | 0.54 | 0.34 | 0.15 | 0.52 | 5.8 |
| 8 | Tur | 0.29 | 0.05 | 0.74 | 0.49 | 0.13 | 0.45 | 0.05 | 0.03 | 0.22 | 0.18 | 2.63 |
| 9 | Other Pulses | 0.93 | 0.46 | 0.78 | 0.85 | 0.13 | 0.5 | 0.2 | 0.27 | 0.31 | 0.59 | 5.02 |
| 10 | Sugarcane | 2.4 | 0.03 | - | 0.15 | 3.74 | 0.13 | 0.92 | 0.86 | - | 0.04 | 8.76 |
| 11 | Cotton | 0.1 | 0.37 | 0.03 | 0.02 | - | - | - | - | 0.09 | - | 0.61 |
| 12 | Groundnut | 0.02 | - | 0.02 | 0.01 | - | - | - | - | - | 0.01 | 0.06 |
| 13 | Soyabean | 3.38 | - | 0.89 | 1.56 | 4.78 | 1.16 | 1.48 | 0.8 | 0.08 | 0.09 | 14.22 |
| 14 | Other oil seeds | - | - | - | - | - | - | - | - | - | - | 0.02 |
|  | Total | 16.29 | 18.23 | 6.03 | 7.64 | 13.13 | 10.58 | 5.27 | 3.56 | 8.88 | 10.39 | 100 |

Fig.1.A. AREA UNDER JOWAR AND PULSES IN SANGLI DISTRICT


Fig.1.B


| ----------------- | Pulses |
| :---: | :---: |
| $-----\quad$ Tur |  |

## CONCLUSIONS:

- Natural, socio-economic and other technological factors have affected the ' pattern of studu region
- The eastern part of Sangli district falls in droughtprone area which affects the cropping pattern in resulting the four crop combination.
- Generally, the rain fed crops are the major crops of this area for i.e. Bajara, Kharif Jowar, Pulses and Rubbi Jowar in eastern study region.
- The cropping pattern of this area hampered frequently through the frequent drought conditions.
- Very low per cent of the cultivated land in dry zone of eastern part is under irrigation by means of wells, tube wells and tank irrigation in the study area which can not replaced the specific cropping pattern of this study region.
- Various projects, which are taken by the Govt. of Maharashtra specifically for the droughtprone area named Mahishal, Takari and Tembu, are in the progressive stage. After the competition of three projects water is supplied to the agriculture by Canals then and then the total scenario of the existing cropping pattern may be chang in the drought prone areas in near future.
- The main food grains grown are jowar (41.61\%) Bajara (15.19\%) Maize (1.05\%) Wheat ( $5.12 \%$ ) other cereals ( $0.09 \%$ ) whereas, pulses covers about $13.60 \%$ of land which includes Gram (5.85\%) Tur (2.69\%) and other pulses (5.06\%) observed in study area.


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# Problems in the Tourism Development of Sagareshwar in Sangli District : A Geographical Study of the Sanctuary 

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## INTRODUCTION

Tourism or traveling is a very ancient phenomenon. Since long ago, man has been by traveling. In past, number of tourists was a few, as means of transportation were limited. Now tourism is increasing day by day, as a result of increase in the means of transportation. Now a days, the important destinations of tourism are places having cool atmosphere, natural scenery, as well as historical places, sanctuaries and National parks. In case of sanctuary, it can be defined as forests providing security, to animals. Sanctuary may be natural or may be man made, as per needs. For the balance in environment, at least $33 \%$ of the land should be occupied by the forests.

In India, there are 277 sanctuaries and 52 National parks, which include Melghat, Ranthambor, Indrawati, Gautam Buddha, Damya, Simlipal, Manas, Sunderban, Bhimabandh, Dandoli Sanctuary for tiger, Nal lake for Birds and Rehkuri for Black Bug in Maharashtra, there are 34 sanctuaries including Radhanagari (Bison), Sagareshwar (Deer) Melghat (Tiger), Karnala (The Great Indian Bustard), Rehkuri (Black Bug) etc. These are important tourist spots also.

Sagareshwar Sanctuary is a developing tourist spot in kadegaon tahsil ; a draught prone area in Sangli district. It is situated. 50 Kms away from Sangli city towards North west, 46 kms away from karad towards South East and 29 kms away from Vita towards west.

Various places in Maharashtra have been developing as tourist destinations because of their geographical as well as historical, cultural and religious aspect, cool atmosphere, national parks and sanctuaries etc. As a result, tourism has developed in Maharashtra. Sagareshwar Sanctuary has spread over Kadegaon, Walwa and Palus Tahisils but most of the area of Sagareshwar falls under Kadegaon Tahsil. With the intention of conservation of Spotted Dear, Antelop, Black Bug, the Government of Maharashtra established this sanctuary in 1985. from 1985 to 2000, number of Spotted Deer, Antelop and Black Bug was more, but nowadays, it has decreased.

## LOCATION :

Sagareshwar is situated 55 Kms north west from Sangli headguarters, 40 Kms southeast from Karad, 25 Kms notheast from Islamopur and 24 Kms west from Vita.

Latitudinal Extent : $17^{\circ} 4^{\prime} 21^{\prime N}$ To $17^{\circ} 4^{\prime} 45^{\prime N}$
Longitudinal Extent : $74^{0} 42^{\prime} 12^{\prime \prime} \mathrm{E}$ To $74^{\circ} 43^{\prime} 24^{\prime \prime} \mathrm{E}$
OBJECTIVES :

1. To study the problems in tourism development of Sagareshwar Saretuary.
2. To study the animals in Sagareshwar Sanctuary.
3. To tackle the problems in Sagareshwar Sanctuary.
4. To find out the effects of tourism is that area.

## METHODOLOGY:

- Questionaire and interviews of concerned persons will be taken to collect information.
- To collect more relevant information regional maps, Toposheet, related books and research articles will be reffered.
- Collected information will be revised, analysed, and presented with the help of map.

LOCATION MAP


## ENVIRONMENT AND WILD LIFE RELATION :

Every living thing is significant in environment. From micro organisms to huge animals, all are given equal place in the chain of environment. But today, wild animals are killed for various reasons, which affects food chain badly. So, to create awareness in society, $1^{\text {st }}$ Oct to $7^{\text {th }}$ Oct is celebrated as "Wildlife Week". This week is celebrated to create awareness about environment. In India it is celebrated since 1955. This year, it was " $54^{\text {th }}$ Wildlife Week".

The present article illustrates various problems that hinder the development of Sagareshwar Sanctuary as tourist place.

## IDEAL SITUATION FOR TOURISM :

1) Natural Situation :

This sanctuary is situated at the bank of Krishna river on Sagroba Mountain in Kadegaon, Walwa and Palus Tahsils. There is diversity in natural situation. Total area of this sanctuary is 10.87 square kilometers. It is situated at the height of 541 meters to 828 meters (684 meter) from sea level.

## 2) Atmosphere :

It is situated in drought prone area. Here, rain is very uncertain as well as irregular. Average rain in this area is 400 mm . Atmosphere in the region is hot and dry.
3) Trees:

Forest in this area include trees growing in hot and dry atmosphere and bushes as well as meadow plains. In this sanctuary, there are trees like Teak, Curterd Apple, Jambul, Banyan tree, Khair, Palas, Neem, Babul, Tembhurni, Dharada, Karwandi., Custard Apple, Jamun, Bunyan, etc and various types of grass such as Rosha, Pawana, Kushili etc.

## 4) Wild life :

There are various types of birds and animals in this sanctuary. Today, there are 328, Spoted Deer, 229 Deer 84 Wild boar, 250 Black Bug, 82 Peacocks, 35 Rabbits, Purcupine 43, 49 Monkeys, 8 Foxes, 7 varanus, 5 Purcupine Mongoose, 6 Wolves and Parrot, Wear bird Crow, Peasant, Kite, Talcon, Bulbul, moreover. there are Ratsnake, Cobras and Wipers.
5) Availability of water :

Animals need water to drink. An animal can remain without water for 12 to 36 hours. In this sanctuary, there is one lake, three wells and one stream to fulfill the need of water.

## ATTRACTIVE AND FAMOUS TOURIST SPOTS AT SAGARESH WAR :

There are religious places and temples such as Sagareshwar, lingeshwar, Nageshwar, Peermalik, Kamalbhairav, Kadyatil Maruti, Parshwanath, Veerbhadra etc. and tourist spots such as Devtale, Balodyan, Umbrella Bungalow, Venuvihar Lake, Tarasguha, Bamandara, Ranshul Peak, Mahangund, Kirloskar Point, Feta Udawi Point, etc. Most of the tourists visit Sagareshwar especially in winter and rainy season.

No of Animals in Sagareshwar

| Year | Spotted Dear | Antelop | Black Bug | Purcuping |
| :---: | :---: | :---: | :---: | :---: |
| 2001 | 58 | 105 | 50 | 60 |
| 2002 | 68 | 142 | 65 | 45 |
| 2003 | 91 | 162 | 100 | 62 |
| 2004 | 123 | 223 | 120 | 70 |
| 2005 | 127 | 235 | 135 | 72 |
| 2006 | 186 | 266 | 183 | 50 |
| 2007 | 190 | 307 | 189 | 63 |
| 2008 | 229 | 238 | 250 | 68 |

No of Tourist visiting in Sagareshwar Sanctuary

| Year | No of Tourist |
| :---: | :---: |
| 1996 | 48855 |
| 1997 | 71091 |
| 1998 | 60948 |
| 1999 | 49420 |
| 2000 | 50725 |
| 2001 | 46955 |
| 2002 | 31629 |
| 2003 | 28315 |
| 2004 | 36693 |
| 2005 | 33212 |
| 2006 | 34315 |
| 2007 | 49464 |

## PROBLEMS IN THE TOURISM DEVELOPMENT AT SAGARESHWAR

Though there are various spots worth visiting in Sagareshwar, this place is not developed as such. following are the problems :

1) Rainfall is uncertain in the area.
2) Lack of trees in the sanctuary.
3) The fallen leaves are not properly managed. Animals are frightened and pollution is created by burning the leaves.
4) Tourism management is not proper.
5) A few water resources for animals.
6) Inconvenience regarding transport and communication.
7) Accomodation is not available for tourists.
8) Lack of compound.
9) Entry of stray dogs into the sanctuary
10) Entry fee is not reasonable.
11) Drinking water is not available at most of the spots.
12) Water becomes rare in summer that affects health, reproduction and life of animals.
13) Lack of Boards showing directions and giving relevant information.
14) Lack of bust stop and shelter shade.
15) Problem of mud in rainy season.
16) Lack of food for animals in summer.

## SOLUTIONS TO THE TOURISM DEVELOPMENT OF SAGARESHWAR :

1) Need of artificial water supply from Takari Irrigation Scheme which is near the sanctuary.
2) Accommodation as well as food facilities are necessary to attract tourists.
3) Need to create water reservoirs at various places.
4) Drinking water should be made available at various visiting places.
5) Construction of wall compound around the sanctuary for safety.
6) Some action should be taken regarding the stray dogs.
7) To cope with the problem of mud, concrete roads should be prepared.
8) Rest house is necessary nearby the sanctuary.
9) Bus Stop and Shelter shade should be provided.
10) To provide food to animals, seeds of fast growing grass like "Hemata" should be spread all over the sanctuary.
11) Awareness about the safety of wildlife should be created in nighbouring villages
12) Boards showing directions and information will help the tourists in sight seen.

## CONCLUSIONS

1) Sagareshwar is a man-made sanctuary.
2) Number of Black Bug, Spotted Deer and Antelope is increasing day by day.
3) Number of tourists visiting Sagareshwar, every year is not constant.
4) Less entry fee may result in increase in the number of tourist.
5) Tree - Plantation, water supply and wall compound will help to increase the number of animals.
6) To save animals from Stray Dogs, Safeguard with some dress code should be appointed.
7) Supply of drinking water at various tourist spots will encourage tourism.
8) Production of fast growing grass like "Hemata" will result in availability of food for deer.
9) To develop the tourism, tourists should be provided with food and accommodation in economical rates.
10) Developed roads and bus service wild help in the increase of tourist.

# Impacts of Flood: A Case Study of Mouje Digraj (Sangli District) Maharashtra 

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#### Abstract

: Natural hazards, which damage national economy and produce hardships for large sections of population, are one of the single largest concerns for most nations. Human settlements are frequently affected by natural hazards such as Floods, earthquakes, hurricanes, cyclones, land slides, volcanic eruptions which take a heavy toll on human lives, destroy buildings and infrastructure and have for reaching economic and social consequences for communities.

India faces flood problems every year in one or other parts, and about 12.5 per cent of its geographical area comes under flood water. Maharashtra in general and the upper Krishna basin in particular are affected by the floods in the recent years. The low lying villages and villages lying on the banks of the river Krishna and Warna in the Miraj tehsil, of the Sangli district get inundated at the times of floods. The 'Mouje Digraj' is one of the most severely flood affected villages of the Miraj tehsil.

The major objective of the present research paper is to assess the impact of flood on human being. The analysis is based on both the primary and secondary data. The data has been collected for the year 2005 and 2006. The study reveals that the damage of the agriculture and other allied activities is caused due to the flash flood of the river Krishna. Various diseases occurred after the occurrence of flood. The severe floods of 2005 and 2006 also affect on the income of milk production and shopping also. The social response to the flood as a natural disaster is more positive.


### 1.0 INTRODUCTION :

Human settlements are frequently affected by natural hazards such as Floods, earthquakes, hurricanes, cyclones, land slides, volcanic eruptions which take a heavy toll on human lives, destroy buildings and infrastructure and have for reaching economic and social consequences for communities (Randhir Singh, 1999). In recent years there have been a number of significant riverine floods all around the world which caused enormous damage both in terms of loss of life and economics. In the past years thousands of lives have been lost directly or indirectly from the flooding. In fact, of all natural risks, flood poses the widely distributed risk to life today (Dinand Alkema, 2004).

It may be pointed out that flood is a natural phenomenon and is a response to colossal loss to human lives and property. It is also important to note that floods are also aggravated by human activity and thus flood hazard is both natural as well as maninduced rather than man accentuated phenomenon (Savindra Singh, 2001). "Flood, is a natural hazard which changes the socio-cultural identity and landscapes of any region" (Gupta and Sharma, 1998). Flood is a social disaster which affect the poor more than rich (Thakur B., 2003,PP. 2-3).

In the Sangli district, especially in the Miraj tehsil, the low lying villages on the banks of the river Krishna, and Warna get inundated at the times of floods. The 'Mouje Digraj' is one of the most flood prone villages of the district Sangli. After the flood recede various diseases occurred as an impact of flood in the 'Mouje Digraj'.

So, there is need to study the impacts of flood disaster on human life from the Geographical point of view and suggest eradication measures to the problem. Because geographers also, play an important role in solving the flood problems and management of flood. By knowing the importance of this kind of study the present research paper is related to "Impacts of Flood: A Case Study of Mouje Digraj (Sangli District) Maharashtra."

### 2.0 THE STUDY REGION:

The 'Mouje Digraj' is one of the most severely flood affected villages of the Miraj tehsil. It is located on $16^{\circ} 54^{\prime} 40^{\prime \prime} \mathrm{N}$ latitude and $74^{\circ} 31^{\prime} 24^{\prime \prime} \mathrm{E}$ longitude. It lies on the left Bank of River Krishna (Fig.1). According to 2001 Census, the population of the "Mouje Digraj", is 4455 persons. The climate of the Mouje Digraj is temperate. It receives average annual rainfall less than 60 cm .

### 3.0 OBJECTIVES:

The major objective of the present research paper is to assess the impact of flood on human being. However, the specific objectives are as under:
1 To highlight the impact of flood on the agriculture and livestock in the study region.
2 To analyze the various diseases occurred due to the floods of the year 2005 and 2006 in the study region.
3 To discuss the loss of houses and shops due to the flood disaster.
4 To suggest a comprehensive plan to minimize the loss of human being and economy of the region.

### 4.0 DATA SOURCE AND RESEARCH METHODOLOGY:

The present research paper is entirely based on the both the primary and secondary data. Primary data regarding the floods occurred during 2005 and 2006 and their consequences in the study region have been collected through interview technique, the post flood field work and observation method. The secondary data and information have been taken from the various government reports, news papers, and the research journals. Village as a whole is used as a basic unit of investigation. In spite of this, NASA's satellite image, maps, diagrams and tables are supplemented for strengthening the analysis of the flood as a disaster.

### 5.0 IMPACT OF FLOOD:-

Flood water causes distraction of weak structures, wash off property and, drown living beings and cut off communications marooning people for a few days. Secondary effects are felt in the form of epidemics and also electrocution through short circuiting or breaking of high tension wires. (Marathe, 2006, P.7)

In the study region, the flash floods during 2005 and 2006 affected on the social as well as economic conditions very badly. The flash floods of 2005 and 2006 are most disastrous in the history of "Mouje Digraj." The highest flood water level was recorded 48.05 metres by taking the Ankali Bridge a as base level in the year 2005 in the study region.

### 5.1 IMPACT OF FLOOD ON AGRICULTURE:

The disastrous effects of the floods on the agriculture are no related to the level of flood water, but related to the legibility of the flood. i.e., for how long time various crops are inundated under flood water continuously.

Table -I Flood Affected Cropland in the Mouje Digraj during 2005 and 2006.

| Sr. | Crops | 2005 <br> No. | 2006 <br> (area in hectares) |
| :---: | :---: | :---: | :---: | | Flood Affected Crops |
| :---: |
| (area in hectares) |


|  |  | Below 50\% | Above 50\% | Below 50\% | Above 50\% |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Sugarcane | 78.49 | 278.25 | 64.10 | 183.52 |
|  | Soyabean | - | 99.75 | 0.10 | 21.43 |
|  | Groundnut | - | 10.55 | 0.35 | 8.46 |
|  | Jawar | - | 4.60 | 0.19 | 2.01 |
|  | Maize | - | 1.50 | 0.40 | 0.80 |
|  | Rice | - | 1.53 | - | 0.99 |
|  | Turmeric | - | 1.79 | - | - |
|  | Vegetables | - | 19.59 | - | 5.29 |
|  | Fruits | 0.60 | 7.17 | 2.4 | 0.13 |
|  | Other Crops | 0.20 | 10.67 | - | 2.06 |
|  | Fodder Crops | 0.70 | 18.26 | 0.85 | 11.21 |
| 2. | Total | 79.99 | 445.66 | 68.39 | 235.9 |

Source: - Final Flood Report (2005-2006): Mouje Digraj, Talahti Office.
In the study region various crops were inundated for more than 10 days continuously during 2005 and for more than five days continuously during 2006. Hence 2005 flood was more disastrous than 2006 flood. Sugarcane, Soyabean, Groundnut and Jowar are the major flood affected crops during 2005 (Table -l) Minor flood damaged crops include Maize (4.50ha.) Rice (1.53ha.), Turmeric (1.79ha.). The vegetables and fruits are also worst affected by the flood of the 2005. Cropland of 525.65 hectares of the 1018 farmers of a worth of more than 69 lakh were worst affected. Out of the total flood affected cropland, only 79.99 hectares of cropland affected as below $50 \%$ while remaining cropland affected as above $50 \%$.

The Flood 2006 is comparatively less disastrous than the flood 2005. During 2006, an area of 304 hectares of the 584 farmers of an worth of more than 41 lakh are affected by the flood. Among the flood affected crops sugarcane is major one (247.62ha). Soyabean (21.53ha) Groundnut (8.81ha) Jowar (2.20ha) Maize (1.20ha) are other important crops affected by the flood. The flood affected farmers received the grant amount of Rs. $40,25,025$ in the year 2005 and Rs. 31, 43,055 in the year 2006 from the Government.

### 5.2 IMPACT ON LIVESTOCK:

Both 2005 and 2006 floods affect on the livestock. During 2005 six cattle lost their lives but during 2006 no such type of loss noticed. The various cattle were also suffered by the various diseases and shortage of fodder crops. Area of 19.86 hectares and 12.06 hectares of fodder crops was destroyed as a result of 2005 and 2006 floods respectively
and creates acute shortage of fodder crops to the livestock in the study region.

### 5.3 IMPACT OF FLOOD ON HOUSES AND HOUSEHOLDS:-

Floods are worst affected on the houses and shops also in both floods. During 2005 flood, 522 houses were affected by the flood. More than 50 houses were affected by the flood as either partially or fully. Villagers received a grant of Rs.26, 96, 000 from the government.

During 2006 flood 195 houses were affected. The flood affected households were rehabilited in the "Harijan Vasahat", Zila Parishad's school No. 2 and to the other villages. During 2006 flood 20 houses were partially affected. The loss was assessed as Rs.54, 000 but in reality they received Rs. 28,891 only. 770 persons of 195 households received the grant of Rs. 7, 70, 000 .

### 5.4 IMPACT ON SHOPS AND OTHER ECONOMIC ACTIVITIES:-

The floods of 2005 and 2006, worst affected on the shops. 22 shops were affected by the floods of 2005 and 2006. Loss of 7 .lack rupees was recorded due to the disastrous floods of the 2005 and 2006. But they receives only Rs. 3, 70,000, as a grant from the government

The milk production is another important occupation of the people of the study region. Daily collection of milk is 3000 Litres in the study region. The flash floods of the 2005 and 2006 worst affected on the income of the people from milk production. The transportation system was disconnected for the 10 days in 2006, and for the four days in 2006. Income of Rs. 4, 50,000 and Rs. 1, 80,000 was lost during floods of 2005 and 2006 respectively.

Apart from these direct economic impacts of the floods of 2005 and 2006, minor indirect impacts of the floods are also most important one. The flash floods of both the years' worst affected on the agricultural workers that they could not get employment for more than a month after the flood recede in both the years. It also affects on income of Hotels, Barbers, shoe makers, Auto Rickshaws and Buses.

### 5.5 IMPACT OF FLOOD ON HEALTH:-

In the study region, the flash floods of the 2005 and 2006 worst affected on the Human health. During 2005 flood 500 persons suffered by various diseases as a result of flash flood. Out of the total ,80 persons suffered by fever, 11 persons suffered by Diaria, 4 persons suffered by Jaundice and remaining ( 405 )persons suffered by sundry diseases.

During 2006 flood total number of persons who suffered form various diseases as a result of flood disaster are 373. It is less than the persons suffered from various diseases During 2005 flood. The persons suffered by the fever, Diaria, and sundry diseases were 53, 5 and 315 respectively.

### 6.0 SOCIAL RESPONSE TO FLOOD DISASTER:-

The social response to disasters is largely determined by the communications of media men like newspaper reporters. Thus communications are of crucial importance in the assessment of and reduction of disaster (Singh, 2001, P. 409).

In the study region the social response to the flood disaster is more positive. This positive social response is most useful for the rescue reduction and rehabilitation of flood affected houses and persons.

The "Hindustan Cabinet Church", Pune provided the essentials of life's in both years. "Church's Auxiliary Social Action" provides the various types of cloths to the flood affected population of the study region. Like this, the "Kolhapur Diocesan Council" provided an essential of life.

Besides this direct help indirect help has been done by the various NGO's and by the school students during and after the flood period.

### 7.0 CONCLUSION AND SUGGESTION

The flash floods of 2005 and 2006 are the most disastrous in the history of study region. These two floods worst affected on the agriculture of the study region. An agricultural area of 525.65 hectares and 304.29 hectares of land and a worth of Rs. 60 lakh and Rs. 41 lakh are affected by the floods during 2005 and 2006 floods respectively. The flash floods of both the years affected houses, houses, shops and other economic activities also. The various diseases are also occurred as a result of flood in the study region. The social response to the flood as a natural disaster is more positive than negative.

It is clear that the 2005flood and 2006 were the most disastrous. Flood is a natural disaster, hence it cannot completely stop. But the disastrous effects of the floods are minimized by proper comprehensive planning. Thus, the comprehensive plan for the reduction of disastrous effects of the floods in the study region is given below.

1 To construct another substitute route from Mouje Digraj through Nandre border. This can help in continuous communication and transportation during the flood period.
2 To construct the bridge on the rivulet which is within the Mouje Digraj and Kavatvat road.
3 To ban on the construction in the low lying areas inundated by the flood frequently.
4 To create flood literacy among the peoples.
$5 \quad$ To cultivate water tolerance varieties of crops in the flood prone zone.
6 To rehabilitate the population living in the low lying area.
7 To do vaccination / immuninization of humans and livestock.
8 To make a proper planning of discharge of water from upstream dams and also from the Almatti dam.

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## New Agricultural Technology of India

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#### Abstract

: Agriculture has always been the back bone of the Indian Economy and despite concentrated industrialization in the last six decades agriculture still occupies a place of pride. It provide employment to around 52 percent of the total work force in the country .The significance of agriculture in the national economy can be best explained by considering the role of agriculture under different heads. The agriculture situation started improving after the middle of 1960s with the introduction of high yielding varieties of crops and the developement of agricultural infrastructure . The high production potential input responsive high yielding varieties (HYV) motivated Indian farmers to adopt improved and modern technologies. Since independence developement and introduction of high yielding seeds, extensive use of chemical fertilsers, pesticides and improved crop production technologies.Mechanisation is also used in agriculture for the promotion agricultural mechanization. The strategy and programmes of the department of Agriculture and Co-operation have been directed towards the promotion of eco-friendly and selective agricultural equipment. The aim is to use technology optimally and efficiently.

Productivity of almost all crops is quite low in most states in India. Indian Institutes under Indian Council of Agricultural Research and State Agricultural Universities have developed variety of technology which is capable of giving much higher output per unite of resources. The higher growth can very well be realized through adoption of available technology.

Agriculture including crop and animal husbandry, fisheries, forestry and agroprocessing provides the underpinnings our food and livelihood security. Agriculture provides significant support for economic growth and social transformation of the country. As one of the world's largest agrarian economies the agricultural sector (including allied activities) in India accounted for 15.7 \% of GDP (according to RBI at present it is $14.6 \%$ ) in 2008-09 compared to $18.9 \%$ in 2004-05 and contributed approximately $10.2 \%$ of total export during 2008-09. Not with standing with the fact that the share of this sector in the GDP has been declining over the years its role remains critical as it provides employment to around $52 \%$ of the work force.

Technology is essential to Indian agriculture because day to day India's population has to be increased. Food is the basic need of population. So we must aware about agricultural production.


INTRODUCTION:
India has been striving to achieve 4 percent growth in agriculture since the $8^{\text {th }}$ five year plan. The $9^{\text {th }}$ plan raised the target to 4.5 percent but subsequently, the National agriculture policy (2000).The $10^{\text {th }}$ plan and more recently $11^{\text {th }}$ plans reiterated the target of 4percent growth in the sector in order to achieve 9percent growth for the whole economy meet the food and nutrition need of a population growing at the rate of more than 1.4 percent per annum and also to achieve the goal of inclusive growth. As consequence of the new agricultural technology, India has achieved relative self sufficiency in food grains and its imports became negligible .India is also able to accumulate large buffer stocks of rice and wheat so that India could face any eventuality resulting from drought in particular year or successively in two or three years. Various
government programmes pertaining to improvement of agricultural implements and machinery have been promoting farm mechanization and the use of improved agricultural implements in country.

## OBJECTIVES:

- To collect information related to latest technologies in Agriculture.
- To study various aspects of new agriculture technology.
- To study economic impact of new agriculture technology.
- To study on technologies used in daily agricultural activities.

DATABASE AND METHODOLOGY:
The present paper is based on secondary and tertiary data. The information is collected from Agriculture Statistic at a Glance, Ministry of Agriculture and cooperation, Census of India 2001, Yojna English (monthly) January 2011, India 2009.

## Biotechnology

Between 1930 and 1975 yield of corn once of the major crops increased three times in the US development. Thanks to the development in area of better varieties, better irrigation system, ample chemical fertilizers and chemical pesticides have become apparent. However biotechnology has taken over many of these challenges are going to revitalize the rate of progress .India achieved its self sufficiency in crop productivity through green revaluation efforts between 1960and 1980 and faced similar adverse impacts. Today our accepting gene revolution to continue progress increased of earlier green revaluation strategies is a similar example .

Biofertilizers and biopesticides have been early contributions of biotechnology to agriculture. While biofertizers have found limited practical application, biopestcides are working well and are going to be of practically significance. The recent biotechnology approach goes far beyond the stage of thinking of fertilizers and biopesticides. Biotechnology covers genetic manipulation to improve yields, crossing barriers for breeding, to get identical seeding in the large number of cell culture including resistance to photogenes and also to pesticides in plants to grow plant cells not as a complete plants but as cell culture tissue culture to harvest a variety of useful chemicals on a commercial sale and remote though it may be ,to make plants use atmospheric nitrogen to solve their nitrogen supply problem. Nutrient film techniques in plant breeding are the new techniques of biotechnology.

## Mechanization and Technology

Mechanization of agriculture has resulted in increased agricultural production and reduction of cost. Besides agricultural machinery has been useful in reclaiming barren lands. Thus the prosperity and richness of peasantry in the western countries has been due largely to the extensive use of farm machinery. Naturally there is now common belief that progressive is impossible without mechanization of agriculture.

## Defination:

Mr. Anwar Alam- "Agricultural mechanization is required to provide engineering inputs to agriculture agro-processing and rural living for increased production and productivity with reduced cost of production, provide technology for efficient handling, transport and storage of agricultural produce, processed products and by products apply technology and management practices for value added agro-processing industries that generate additional income and employment, assuring better quality of life to rural people ,a life that is nutritionally healthy and hygiene - wise secured and free from arduous labour and drudgery."

Mechanization of agriculture is based primarily on advantage of production
made possible by machinery. As Indians present problems is to raise production there is a good case of mechanization of agriculture.

From the point of view of immediate applicability too there is considerable scope for mechanization. For instance tractors are very useful for extensive Jungle and soil conservation operation etc. there is also good scope for pumping sets and electrical operated tube wells can be very usefully adopted for other agricultural operations such as cane crushing, oilseeds crushing, etc. as well as for minor irrigation.

As a result of the joint efforts made by the government and the private sector. The level of mechanization has been increasing steadily over the years. This is the evident from the sale of tractors and power tiller taken as indicators of the adoption of mechanized means of farming during the last five years.

Year wise sale of tractors and tillers

| r.no | Year | Tractors sale (No.s.) | Power tillers sale <br> (No.s.) |
| :---: | :---: | :---: | :---: |
|  | $2004-05$ | $2,47,531$ | 17,481 |
|  | $2005-06$ | $2,76,080$ | 22,303 |
|  | $2006-07$ | $3,52,835$ | 24,791 |
|  | $2007-08$ | $3,46,501$ | 26,135 |
|  | $2008-09$ | $3,24,336$ | 35,294 |
|  | $2009-10$ | $2,39,789$ | 18,375 |

Source- Yojna -January -2011

## MECHANIZATION - OBJECTIVES AND SCOPE:-

1. The main objective of mechanization is to raise agricultural productivity, increases profitability in agriculture and thus improves the quality of life of the farming population.
2. Agricultural mechanization reduces the physical labour and drudgery with various agricultural operations.
3. Use of tools, equipements and machinery it helps to increase agricultural productions.
4. Agricultural mechanization helps efficient handling, transport and storage of agriproduce (post harvest technology) so as to reduce wastage and bring greater revenue to agricultural producer.
5. Agricultural mechanization helps in processing agricultural produce near the places of production, thus adding value to agricultural output.

Under various governments sponsored schemes like Micro Management of Agriculture, Technology Mission on Horticulture and Technology Mission for Oilseeds, Pulses and Maize, Technology Mission on Cotton. Financial assistance is provided to the farmers for the purchase of identified agricultural implements and machines.

## SCOPES:-

1.Machinery training and testing institutes:-

Farm machinery training and testing institute have been established at following places

| Sr.no. | Place | State |
| ---: | :--- | :--- |
| 1 | Bundi | Madhya Pradesh |
| 2 | Hissar | Haryana |
| 3 | Garladinne | Andhra Pradesh |
| 4 | Biswanath | Assam |

The institutes have the capacity to train 5000 personnel annually on various aspects of agricultural mechanization.

These institutes also undertake testing and performance evaluation of agricultural machines including tractors in accordance with national and international standards.

Since inceptions about 93.503 personnel have been trained and about 2162 machines tested by these institutes till $31^{\text {st }}$ March 2006.

## 2. Out sourcing of training:-

This is a new component approved for the $10^{\text {th }}$ plan under the Central sector Scheme," Promotion and strengthening of agricultural mechanization through training, testing and demonstration" in order to train large number of formers at nearby places.

The training programme shall be arranged through the institutions by each state -
State Agricultural Universities.(SAU's)
Agricultural Engineering College / Polytechnics.
This department has released Rs. 73 Lakh during the year 2004-05 38.03 Lakh during 2005-05 to various state government and ICSAR for conducting training at the identified institution.

## 3. State agro industries corporation:-

Seventeen state agro Industries Corporation, Joint sector companies have been promoted by the government of India and by the state government concerned.

The government of India's share in six state agro industries corporation viz Tamilnadu, Karnataka, Rajstan, Gujrat, Uttarpradesh and West Bengal has been disinvested in favour of the respective state government.
4. Legislative Frame work:-

The Dangerous Machines (Regulation) Act -1983 was applied from $14^{\text {th }}$ December 1983- The Act provides for the regulation of trade and commerce and production ,supply and use of products of any industry producing dangerous machines with a view to securing the welfare of persons operating any machines and for payment of compensation for death or bodily injury suffered while operating any such machine. Power threshers used for threshing of the agriculture crop have been brought under the ambit of this act.

The government of India has notified the Dangerous Machines (regulation) Rule 1985 laying down the specification for the feeding chutes and for installation of the power thresher.
5. Demonstration of newly developed /Horticultural equipments - "Promotion and Strengthening of Agricultural Mechanization through Training, Testing and Demonstration under this component $100 \%$ central grant -in-aid is provided to implementing agencies for procurement and demonstration of new equipments. The scheme is implemented through state /central government organization .This component has helped in adoption of new agricultural / horticultural equipments by the farmers .During 2005-06,8099 demonstrations of different new equipments were conducted through the implementing agencies.

## HORTICULTURE:-

The horticulture sector includes a wide range of crops such as fruits, vegetables roots and tuber crops, flowers, aromatic and medicinal plants, spices and plantation crops which facilitate diversification the in agriculture .India is the second largest producer of fruits and vegetables in the world planned development in the sector started with the $7^{\text {th }}$ plan and gained structure and momentum during the $10^{\text {th }}$ and $11^{\text {th }}$ five year
plan periods.
As per draft final estimates of National Horticulture Board, Horticulture production during 2009-10 is estimated to be of the tune of 226.87 million metric tone horticulture Of 21.16 million/Ha, recording annual growth rate of $5.66 \%$ over the year 2008-09. During this period growth rate of production of fruits has been estimated to be $7.39 \%$ which is higher than the annual growth rate of $4.39 \%$ over year 2007-08. Annual growth rate of vegetable production during the year 2009-10 has been only $5.51 \%$ which only marginally higher than previous growth rate of $4.89 \%$

Fruits:- India is the second highest producer of fruits in the world, eg.mango, banana, sapota pomegranate and aonla.

Mango produce $40 \%$ and banana and papaya produce $30 \%$ of the world's population India ranks first in productivity of grapes in the world constituted $40 \%$ share in total production between 2004-05 and 2008-09.

Vegetables:- Vegetable are important crop in the horticulture sector and occupy an area of 8.0 million ha with total production of 129 million tones and have productivity of 16.2 tones per ha in 2008-09 . India is the second largest producer of vegetables and is a leader in the production of peas.Besides India occupies second position in production of brinjal, cabbage, cauliflower, onion third in potato and tomato in the world.

Flowers:- India has made noticeable advancement in the production of flowers particularly cut flowers which have high potential for exports. Floriculture during 2008-09 covered an area of 1.17 million ha with production of 0.98 million metric tones of loose and 11362 million no of cut flowers.

Spices:- India is the largest producer, consumer and exporter of spices and spice products. The total production of spices during 2008-09 was 4.14 million metric tones from an area of 2.6 million ha. The total production of plantation crops during 2008-09 has been 11.33 million metric tones from an area of 3.20 million ha.

Medicinal and Aromatic Plants:- In term of biodiversity, India is considered a treasure house of valuable medicinal and aromatic plants which provides raw material for formulation of indigenous medicines apart from exports. The Govt of India has identified and documented over 9500 plant spices considering their importance in the pharmaceutical industry.

## Programmes for horticulture development:-

The development of horticulture in the country is mainly through developmental programmes of the Department of Agriculture and Co-operation.

## THE SCHEME UNDER IMPLEMENTATION

1) National Horticulture Mission (NHM)

The NHM was launched during 2005-06 with the objectives of providing holistic growth to the horticulture sector through an area based regionally different strategy. The supply of quality planting materials through nurseries and tissue culture units ,production, productivity improvement programmes ,technology promotion extension ,post harvesting management and marketing in consonance with the comparative are the major programmers of the scheme.

Table- 1 Progress under NHM
(Area in lakh hectares)

| r. no | Items | $2005-06$ to <br> $2008-09$ | DURING <br> $2009-10$ |
| :--- | :--- | :---: | :---: |
|  | Nurseries ( No) | 1,905 | 201 |
|  | Area coverage | 12.79 | 2.96 |


|  | Rejuvenation of senile orchards | 2.09 | 0.37 |
| :--- | :--- | :--- | :--- |
|  | Organic farming Pest Management | 1.03 | 0.17 |
|  | Integrated P4 <br> /Integrated Nutrient Management | 1.73 |  |
|  | PACK House (No) | 662 | 153 |
|  | Cold Storage(No) | 97 | 157 |
|  | Markets (No) | 134 | 83 |

Source- Agriculture at a glance.

## 2) Technology Mission on Integrated Development of Horticulture in the North Eastern States (TMNE)

North eastern states including Sikkim, State of Jammu and Kashmir, Himachal Pradesh and Uttarakhand have been covered in this mission.

## 3) Centrally Sponsored Scheme on Micro-irrigation :-

It has been launched in January 2006 during $10^{\text {th }}$ plan for implementing drip and sprinkler irrigation in the country. The main objective of the scheme is to increase the coverage of area under improved methods of irrigation in the country for better water use efficiency along with other benefits like fertigation, quality production .etc.
4) Coconut Development Board (CBD):-

The CBD is a statutory body set up by the Govt of India for looking after the integrated development of coconut cultivation and industry in the country.

## 5) National Horticulture Board (NHB):

It established in 1984 as an autonomous registered society under this department, with it's headquarter in Gurgaon and 35 field offices located all over the country. Its main objectives are the creation of production hubs for commercial horticulture development, post harvest, infrastructure and cold chain facilities, promotion of new technology, introduction and promotion of new crops and promotion of growers association.
6) National Bamboo Mission :-

The National Bamboo Mission was launched in 2006-07 as a centrally sponsored scheme, with a total outlay of Rs. 568.23 core. The mission envisages the promotion of growth of the bamboo sector through an area -based, regionally differentiated strategy.

## 7) Central Institute of Horticulture

This institute support for the development of horticulture in the North east region .a central sector scheme, the Establishment of Central Institute of Horticulture (CIH) in Nagaland has been approved for implementation in 2005-06.

## CONCLUSION:-

New agriculture technology has help India to increase its production world wide. As we see in biotechnology India achieved its self sufficiency in crop productivity through green revolution efforts,Biofertilizers and Biopestcides have contributed to biotechnology in agriculture from early age also limited application have been found .But recently biotechnology approached goes far beyond the stage of thinking of common man. Thus it has prove to be blessing for India.

The level of mechanization in India has been increasing steadily over the year's .AS we see sale of tractors, power tillers are taken as indicators for the adoption of mechanize means of farming and also good scope for pumping sets and electrical tube wells is found electric motors and diesel engine are adopted for agricultural occupation like cane crushing, oil seed crushing and so on. The govt.have also set up acts in
consideration life and health of farmers. Although all such schemes are introduced by govt.In mechanization its means drought back is that the average farmers could not afford for new mechanics technology as the economical condition are not stable and tend to commit suicides which is curse to the India's development .Horticulture is one of the latest and upcoming technology of India. In world India is second largest producers of fruits and vegetables has main noticeable advance in production of flowers especially cut flowers is the larger producer and exporter of spice products. According to 2008-09 senses an annual growth rate of $5.66 \%$ is seen in Horticulture and proves tobe increasing in coming years. Govt.has launches many mission, schemes regarding horticulture based regionally different strategies. The aim of govt. behind these mission is to increase productivity in each and every part of development and it should develop from every sector. Although new technology are coming up on large scale GDP has become decreases but $52 \%$ manpower is work in this sector. Population is increased day by day and with increasing population demand of agriculture production is also increasing .In India the crucial problem is to increase the productivity of land being a scarce resource of the country.

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[^0]:    "मानसिक आरोग्य म्हणजे मनाच्या व शरीराच्या निकोप वाढीचे लक्षण होय किंवा मानसिक आरोग्य म्हणजे कोणत्याही व्याधीपासून मुक्तता मिळविणे होय."

