I J R E E

Indian Journal of Rural Education and Engagement

March 2019 Volume 3



Mahatma Gandhi National Council of Rural Education (MGNCRE)

Department of Higher Education

Ministry of Human Resource Development, Government of India



About the Journal

Indian Journal of Rural Education and Engagement (IJREE) is a blind peer reviewed half yearly Scholarly Journal published by Mahatma Gandhi National Council of Rural Education (MGNCRE), formerly National Council of Rural Institutes, Ministry of Human Resource Development (MHRD), Government of India. The journal is basically intended to diffuse Scholarly information on Academia Community Engagement/ Rural Engagement and its related issues such as Rural Education, University Community Engagement, Rural Tourism, Rural Entrepreneurship and Rural Communication. It publishes research and review papers, intended notes on Community Engagement and Education. It is intended to benefit the academia, policy makers, government departments and all others interested in Rural Community Engagement.

Editor

Dr. W G Prasanna Kumar Chairman MGNCRE

Editorial Board Members

Dr Bharat Pathak, Vice Chairman, MGNCRE

Prof Abdul Shaban, Deputy Director, Tata Institute of Social Sciences, Tuljapur

Dr J K Bajaj, Director, Center for Policy Studies, New Delhi

Dr R Balasubramanian, Founder-Chairman, Grassroots Research and Advocacy Movement, Mysore

Prof Chandrashekar S F, Shiva Shivani Institute of Management, Hyderabad

Prof Ganesh C, HOD Sociology, Osmania University, Hyderabad

Dr Kumaran P, Former Professor, NIRD, Hyderabad

Prof Laldas D K, Director (Retd.), Roda, Mistry College of Social Work, Hyderabad

Prof Mishra R K, Director, Institute of Public Enterprise, TISS, Mumbai

Dr Parasuraman S, Director, Tata Institute of Social Sciences, Mumbai

Dr Rajesh Tandon, UNESCO Co-Chair on Community Based Research and Social Responsibility in Higher Education, PRIA, New Delhi

Prof Sen, Sabujkoli, Director of Studies (Educational Innovations and Rural Reconstruction)

Viswa Bharathi Santiniketan, West Bengal

Prof Shiva Raju S, Deputy Director, Tata Institute of Social Sciences, Hyderabad

Dr Sudarshan Rao S, Principal (Retd.), Arts College Osmania University, Hyderabad

Dr Vinod Pavarala, Professor and UNESCO Chair on Community Media, University of Hyderabad

Prof Sudhakar Venukapalli, School of Education, EFLU, Hyderabad

Disclaimer

The editor or publishers do not assume responsibility for the statements/opinions expressed by the authors of the papers in the journal

Subscription Information

Print Subscription/Renewal

(Annually) India:-

Annual Subscription Rs. 1000/-

For Individuals Rs. 600/- per annum

Outside India:- US \$100

To obtain a copy by air mail \$27 extra

ISBN:

Copyright

© Mahatma Gandhi National Council of Rural Education, Hyderabad

Published by

Sri P Murali Manohar Member Secretary MGNCRE

Indian Journal of Rural Education and Engagement (IJREE)

Contents

Volume No. 3 March 2019

Foreword

Health, Poverty and Wealth Inequality in Rural Areas of District Varanasi, Uttar Pradesh: Study based on Participatory Rural Appraisal

Dr. Alok Kumar Pandey

Toilet Stories from a Coastal Village of Odisha : A Participatory Study of Sanitation and Social Change Dr Bidu Bhushan Dash

Dr Bijayshree Satpathy

Awareness of Life Skills Among Rural Primary School Students: A Study In The Kangra District Of Himachal Pradesh

Dr Anu G S

Political Participation of Tribal Women in Panchayati Raj Institutions: A Case Study of Jharkhand Dr Anju Helen Bara

Safe Sanitation

Dr Anup Soni

Foreword

Mahatma Gandhi National Council of Rural Education (MGNCRE) of the Department of Higher Education in the Ministry of Human Resource Development, Government of India, brings out the third issue of its Journal in the field of Rural Community Engagement and Rural Education to diffuse development research and scholarly information as part of meeting its objectives.

The blind peer reviewed Journal's scope has been identified broadly to cover the areas of Academia-Rural Community Engagement and Higher Education focusing on Rural Concerns. Areas covered include: Rural Education, University-Community Engagement, Rural Tourism, Rural Entrepreneurship, Rural Management and Rural Communication among other aspects of rural concerns. The Journal publishes research papers, review papers, case studies, including Notes on current issues of concern to the Rural Community Engagement and Rural Education sectors. Efforts have been made to identify potential authors and scholars who have been working in rural community engagement and rural education through the journal databases and the literature scan in the field. Request letters have been sent to the research institutes and universities in India and also to the individual scholars and academics to contribute their research manuscripts for publishing in the journal. All the manuscripts received have been put for anti-plagiarism verification and those articles which have more than 25% of similarity have been sent back to the authors concerned to minimize and edit their papers. Further, those articles which were well within the limits of plagiarism have been sent to the identified Reviewers and Peer Reviewers to review and to offer their remarks on the papers about their worthiness and also to suggest any corrections needed in the paper before they are accepted for publishing. This is the third issue of the Journal based on recommendations by peers. The journal includes Action Research Projects on rural concerns by distinguished academicians.

The Journal takes pride in having eminent scholars, researchers and administrators on its Editorial Board. The Journal is intended primarily for the academia, policy makers, departments in the government and for all others interested in Rural Community Engagement and Rural Education. Majority of India still lives in villages and so the topic of rural education in India is of utmost importance. Further, we firmly believe that the Journal will meet the objective of disseminating the current developments in rural community education and engagement.

Dr. W G Prasanna Kumar Chairman MGNCRE

Health, Poverty and Wealth Inequality in Rural Areas of District Varanasi, Uttar Pradesh: Study based on Participatory Rural Appraisal

Dr. Alok Kumar Pandey

Abstract

In India the rural areas significantly contribute in terms of supply of food grains to growing population. They also generate employment to over half of the labour force, provide raw materials to industries for industrial products, thus earning foreign exchange earnings too. The emphasis of the present government is to double the farmers' income over the next five years. To reduce regional disparities an economic plan has been put in place. Economic prosperity and its distribution have been the subject matter of deep analysis. The problem of poverty itself is quite complex. The conventional measures of poverty relate to household per capita income or expenditure estimates. This method fails to capture important dimensions of poverty and it often fails to reflect subjective perceptions of well-being. The economic status of any society is determined by the amount of wealth and sources of income, social position and the mode of living. This economic measure to great extent, determines the standard of living of any group or society. Disparity is a global phenomena and it exists even among various developed countries. It is of utmost importance to understand the regional disparity in terms of consumption expenditure on consumer durables, housing quality and household amenities of the economy. This paper presents a need of combining the effect of different indicators for assessing the level of development. It talks about how the development of science, technology and environment extends support to the process and quality of economic growth. It emphasises that the impact of developmental activities cannot be evaluated fully by any single indicator because it is a multi-dimensional process.it presents the need for participatory rural appraisal (pra). It shows us how the pra method is cost effective, accurate and less time consuming. Dr Alok Pandey has conducted the study in the village Tula chak using innovative methods like drawing a map of the village with rangoli etc. Every tool and methodology used to draw out the disparity at the village level has been conducted with the help of the villagers themselves!

Keywords: Rural Economy, Disparity, participatory approach , Participatory Rural Appraisal (PRA):, Inequality, social mapping, Measures of Disparity and Inequality, Range Ratio , Measures of Poverty, social map

I Introduction

India is a rural economy and the role played by the rural sector cannot be ignored. In India, rural areas hold an important place as they account for 68.84 percent of the population (Census 2011). Rural areas significantly contribute in terms of supply of food grains to growing population, providing employment to over half of the labour force, raw materials to industries, foreign exchange earnings, market for the industrial products etc.

Agriculture and allied activities are one of the important sources of livelihood in rural areas. The emphasis of the present government is to double the farmers' incomes over the next five years. But at the same time Rangarajan pointed out that even though it is a legitimate objective, it might not be easily achieved. He argued that when growth in agricultural GDP is only 4% and it is shared by the very large number of farm households there are difficulties in achieving the target of doubling of farm income unless there is a much larger investment in the primary sector targeting higher profitability. -. Development has been appropriately conceptualized as a process, which improves the quality of life of people. Economic planning has been used in the country as an instrument for bringing about uniform regional development because one of the main objectives of the developmental programmers' has been a progressive reduction in regional disparities in the pace of development. Programmes of development have been taken up in the country in a planned way through various five year plans. The Green Revolution in the agriculture sector and commendable progress in the industrial front have certainly increased the overall total production, but there is no indication that

these achievements have been able to reduce substantially the regional inequalities in the level of development.

Economic prosperity and its distribution have been the subject matter of deep analysis right from mercantile school to classical economist led by Adam Smith and others. However, the issue has got prime importance among the economist and policy makers especially after Second World War when various under developed economies of the world were trying to accelerate the pace of their respective economic development which were destroyed due to colonial exploitation and World War II.

The problem of poverty is quite complex. Extreme poverty is an evil because it deprives some people to live with dignity, the way more fortunate live (Pandey 2007). The issue has to be addressed and eliminated by taking corrective policy decisions. Different criteria have been used to define poverty. Chambers (1988) describes the general condition of people who are badly off and encompasses many aspects of wants and disadvantages. The conventional measures of poverty relate to household per capita income or expenditure estimates to a poverty line derived from a nutrition-based estimate of minimum income or expenditure. There is widespread criticism of this approach on the grounds that it fails to capture important dimensions of poverty and that it often fails to reflect subjective perceptions of well-being. Greeley (1994) argues that the polemic on method is misdirected and it confuses measures of poverty with the measure of well-being and counting problems with conceptual problems. The capabilities approach rejects monetary income as a measure of well-being. Dreze and Sen (1989) describe poverty as a several failures of basic capabilities.

The economic status of any society is determined by the amount of wealth and sources of income, social position and the mode of living. This economic measure to great extent, determines the standard of living of any group or society. With economic and social progression of the nation the minimal basket of basic human needs which a society would expect for its citizen may be expected to keep expanding. These changes in the basic needs of the society may be affordable by the level of income. The level of income of the households ensures the minimum standard of living in the society. In 2008, the World Bank came out with a revised figure of \$1.25 at 2005 purchasing-power parity (PPP) (Martin, Chen and Sangraula 2009). The central target of the millennium development goal (MDGs) is to halve, between 1990 and 2015, the proportion of people in developing countries whose income is less than \$1/day (Issued by the UN Department of Public Information – DPI/2650 A/Rev.1 – September 2010).

Disparity is a global phenomena and it exists even among various developed countries. Disparity in the society exist in various forms like; income disparity, property disparity, disparity in opportunity of education specially in higher education and professional education, disparity in getting employment, disparity in consumption of public and private goods, etc. (Prasad, 1993). In the context of the growth performance during last two decades, economists and policymakers have become interested in the trends in regional inequality during this period. Rising regional inequality can create economic, social and political problems for any country. For the Indian economy, it has serious ramification for the continuation of the reform process. Hence, it is of utmost importance to understand the regional disparity in terms of consumption expenditure on consumer durables, housing quality and household amenities of the economy.

In underdeveloped countries, the poverty line is commonly set at subsistence level, but what is the level of subsistence for each dimension of poverty and vulnerability? In developed countries, poverty is often considered as a relative concept. The level of the poverty line is often expressed as a percentage of the central tendency. Such ambiguous choices often induce controversy, especially because the incidence of poverty can be very sensitive to the level of the poverty line.

Streeten (1979), defined poverty in very broad terms, such as being unable to meet basic needs. Basic needs refer to the physical (food, health care, education, shelter, etc.) and nonphysical (participation, identity, etc.) requirements of a meaningful life. Sen (1983) has related the concept of poverty to the various bundles of goods and services over which one has command, taking into consideration the means by which goods are acquired and the availability of the needed goods. Although resource transfers are being executed in backward regions of the country, it has been observed that the regional disparities in terms of socioeconomic development are not declining over time.

Comprehensive anti poverty programmes are being executed to improve the socio-economic conditions of the people living in the rural areas. The industrial development of rural areas is also very important. Rising of the installed capacity of power generation is an essential measure for augmentation of industrial production. The development of science, technology and environment extends support to the process and quality of economic growth. A number of programmes are in operation in the country for promoting scientific temper and environmental protection. The system of education in the country is designed to promote its socio-cultural heritage. The impact of developmental activities cannot be evaluated fully by any single indicator because it is a multi-dimensional process. Moreover, a number of indicators when analyzed individually do not provide an integrated and easily comprehensible picture of reality. Hence there is a need of combining the effect of different indicators for assessing the level of development.

Need for Participatory Rural Appraisal (PRA)

The participatory approach is an informal way of learning from rural people about the problems and opportunities in a given rural area. It involves a methodology which produces authentic information about the village problems, resources and solutions. PRA is required for:

- Cutting down time consuming in survey method.
- People themselves are "solution agents" for their needs and problems.
- Dispensing with normal "professional" biasness and alienation of resource among poor farmers.
- Sustained change and the need for accurate and timely information.

The PRA method is Cost effective, accurate and less time consuming.

Objectives of the Research

- In the light of above the objectives of the present study are:
- To identify the natural, human and economic resources of the village, village problems, village amenities available in the village and prioritize them with the help of the villagers.
- To assess the livelihood conditions and sources of income and consumption of the villagers and improvement in their socioeconomic status.
- To estimate poverty and inequality in terms of consumption and income among the households.
- To explore the potential areas of the livelihood and prepare an action plan for the development of livelihood sources in the village.
- To know the health status of villagers and frequency of illness and villager's perceptions.
- To identify sources of treatment in villages, local treatment, indigenous medicines available and the number of villagers going without treatment.
- To know the method and process for the improvement of health facilities at village level

II Review of Literature and Research Methodology:

Review of literature:

Gangopadhyay and Mukhopadhyay (2010)1 carried out Participatory Learning and Action (PLA) exercise during 25 to 29 April, 2009 at Didhsari, Uttarkashi, Uttarakhand, India. They studied and analysed some of the critical factors like socio-economic condition of the village including present status of agriculture, education and health, poverty, unemployment and livelihoods of the people and people's perception on the Panchayati Raj Institutions.

Neela Mukherjee2 (1992) discussed the problems of the use of official poverty line indicators to identify the poor. She describes her work in two villages in West Bengal where mapping was used to identify different strata of poor people. The villagers' perceptions of poverty include a much greater range of indicators, such as access to common property resources and quality of land which are not related to income levels. She cautions against the use of a single, income-related indicator to target the poor in poverty alleviation programmes.

Glewwe and Vander Gaag3, 1990 pointed out problem related to poverty measurement. According to them common focus on money income for measuring poverty has major flaws because access to basic needs is ignored in the process. So the criterion of per capita or household consumption (in value terms or in calorie terms) adopt the food ratio approach (which is a fraction of household budget spent on food) or use the basic needs approach in measuring poverty.

The issue is how the villagers identify poor households and on what basis they rank different groups of households (Mukherjee 1992). It is important to account for the villagers' perceptions on poverty and to recognise major differences with the official poverty line. This would improve the selection of intended beneficiaries and, therefore, the performance of poverty alleviation programmes by incorporating more field-level realities.

Income may influence the distribution of diseases and other factors which result in the lowering of health status (e.g. malnutrition), as well as food production, consumption patterns and utilisation of health services (Victoria and Vaughan⁴ 1985; Ghirotti⁵ 1988). The estimation of wealth is therefore one of the primary variables to be investigated in household studies. It is, however, a long and difficult task (Ghirotti ⁶1992).

¹ Mukhopadhyay A. K. and D. Gangopadhyay (2010), "Participatory learning and action for sustainable rural development in India - A case study of Didhsari village, Uttarkashi, Uttarakhand", Journal Of Rural Development, vol 29 no 2, pp199-227.

² Neela Mukherjee (1992) "Villages' perceptions of rural poverty through the mapping methods of PRA", RRA Notes , Issue 15, pp.21–26, IIED London

³ Glewwe, P. and Gaag J. Vander, 1990. Identifying the poor in developing countries: do different definitions matter? World Development p. 804.

⁴ Victoria C G and Vaughan P J. 1985. Land tenure patterns and child health in Southern Brazil: the relationship between agricultural production, malnutrition and child mortality. International Journal of Health Services, 15, 253-274.

⁵ Ghirotti M, (1992), "A simple method for scoring housing conditions as income proxy in Ethiopia", Source: RRA Notes (1992), Issue 15, pp.43–47, IIED London

⁶ Ghirotti M. 1988. Farming Systems, Household Economics and Child Malnutrition in Sidamo, Istituto Superiore di Sanita, Rome.	

5

Paul, (1988) studied the importance of household composition in the analysis of inequality measurement based on the National Sample Survey data (25th round). The results for rural Punjab reveal that the ranking of households by per equivalent adult consumption expenditure (PEAE) differs significantly from the ranking by per capita consumption expenditure (PCE). Many households classified as poor according to the criterion of PCE are not so classified by the criterion of PEAE. The exercise also reveals that the distribution of HCE, if not adjusted for household size and composition effects, gives biased measures of the extent of true inequality.

Dubey and Gangopadhyay (1998) in their analytical report mention intra-state disparities by using NSSO consumption income data set. There are several states in India where the incidence of poverty across regions within a state is very high. They reported for seven regions of Madhya Pradesh, poverty incidence varied from one of the lowest in the country in the western region to one of the highest in the eastern region.

Blacklow and Ray, (2000) in their paper compare, using Australian unit record data, income and expenditure inequalities over the period 1975-76 to 1993-94. The study finds inconsistencies between the two inequality movements over much of this period. They, also, observe differences in the nature of income and consumption disparities.

Bögenhold and Fachinger, (2000) used repeated cross sectional data (RCS) in their empirical analysis which is based on the West German Income and Expenditure Survey (IES) in 1973, 1978, 1983, 1988 and 1993. The results revealed that the relationship between income and expenditure is given but it is weak. All in all, the social organisation of consumption is a research object in itself to obtain information about the living standard of individuals and households.

Parthasarathy, Anand and Sankar (2001) pointed out in their paper on "Impact of Growth on access to and change in possession of Land, Education, Empoloyment and consumption and Disparities between SC, ST and Others", examined the access of SC, ST and other to land, education and employment as well as the disparities between the three social groups and the impact of growth on access and disparities".

Singh (2010), in her study examined and analysed the disparities in level of living as measured by monthly per capita consumption expenditure across different income groups in various states in India based on 61st round survey of NSSO. Various measures like gini coefficient and rank for the states in rural and urban areas has been calculated. Disparities in MPCE across income groups are observed in Punjab.

Srivastava and Mohanty (2010) in their study used data from the World Health Survey, India, 2003, covering a nationally representative sample of 10,750 households and 9,994 adults, examines the extent of agreement of monthly per capita consumption expenditure and economic proxies (combined with the wealth index) with the differentials in health estimates.

Cain, Rana, Rhoda and Tandon, (2010) utilise household-level consumption expenditure data to examine the evolution of inequality during 1983-2004 in India. Various measures of inequality show that inequality levels were relatively stable during 1983-93, but increased during 1993-2004. The increases in inequality have not precluded reductions in poverty, however. They are also more of an urban phenomenon and can be accounted for by increases in returns to education in the urban sector to a considerable extent, especially among households that rely on income from education-intensive services and/or education-intensive occupations.

Research Design and Methodology

Participatory Rural Appraisal is an approach and method for learning about rural life and conditions from with and by rural people. Applications of this technique are very varied and growing in the field of rural development. There are hundreds of participatory techniques and tools used around the world. The process and the methods of PRA vary from situation to situation (Mukerjee 2003). In the context of poverty and well-being, wealth grouping has been done by rural communities through the PRA method of social mapping. This method is used by villagers to identify the different socio-economic groups of households, rank groups, identification of the poorest of the poor and move upwards to other groups. The villagers participate and also explained the criteria of such grouping of different households. In the present study different types of PRA techniques like semi-structured interview, participatory mapping and modeling transect walk, trend analysis, seasonal diagramming and well-being and wealth ranking will be used.

To ensure that people are not excluded from participation, these techniques avoid writing wherever possible, relying instead on the tools of oral communication like pictures, symbols, physical objects and group memory. At the initial stage of Participatory Rural Appraisal (PRA) exercise, a meeting of the villagers and women along with the Pradhan and village secretary will be conducted in the village for rapport building. The dates and time for conducting Participatory Rural Appraisal (PRA) exercise will be fixed in consultation with farmers, women's, SHG member, rural artisan etc. separately. The required data will be collected from both primary source and secondary source. The primary data will be collected from direct interaction with villagers during household surveys (through Schedule), PRA exercise, focused group discussions, informal interviews, SHGs meeting, non-participatory observation and other village meetings. The secondary data will be collected from the gram panchayat office, veterinary hospital, revenue office, patwari, anganwadi, primary school, sarpanch and various websites of government organizations

The study will collect information covering various issues such as:

- Size, composition and variations in terms of household income.
- Household consumption and expenditure on food and non-food items including consumption
 expenditure on health and education; expenditure on consumer durables, type of equipment
 in the households.
- Wage and self-employment opportunities and patterns.
- Access of household/members to entitlements, household's assets and liabilities, Risks and vulnerabilities of households, Participation of households in PRIs, SHG, levels of awareness of members of their socioeconomic reality and poverty situation.

PRA Tools

The present study will utilise various tools of Participatory Rural Approach. Under PRA we will focus on transect walk, time line, trend lines, participatory mapping, well being and wealth, health map, poverty map, wealth ranking and distance mapping of wealth/poverty. And many other important tools under PRA will be used in the present study.

Study Area

The present study is conducted in the village Tula Chak. Tula Chak village population of Revenue Uchgaon which is part of Kashi Vidyapeeth block and Rang Raipur village of Arazi line block. The village is located on the border of Arazi line block and Kashi Vidyapeeth block Varanasi Districts of Uttar Pradesh, India.

Location of the Village

Kakarahiya village is located in the Kashi Vidyapeeth block of Varanasi district in the state of Uttar Pradesh. It comes under Kakarahiya Gram Panchayat. It is located 7.8 km from Maduadih, 15 km from District Head quarter Varanasi and 100 km from state capital Lucknow The village is divided into four hamlets. It is situated on upland, and has total geographical area of 45.45 hectares.

Location	of the	village
LUCATION	OI LITE	village

ation of the village	1	1
Village	Tulachak	SC Basti of Unchgoan
Gram panchayat	Ramraipur	unchgoan
Block	Kashi Vidyapeeth	Kashi Vidyapeeth
Tehsil	Sadar	Sadar
District	Varanasi	Varanasi
State	Uttar Pradesh	Uttar Pradesh
Legislative Assembly	Rohaniya	Rohaniya
Parliamentary Constituency	Varanasi	Varanasi

Source: www.villageinfo.com

The Significance of the Study

Villagers' perception of poor households would differ from village to village. Based on the rural perception the government can then apply absolute poverty criteria as the cut on the line for appropriate rural poor. Each village community has its own resource endowment, natural resource base, socioeconomic features, problems, priorities and preferences. Perception of poverty and wellbeing would depend on their perceptions of the relative importance of different factors. Based on rural community's perceptions of poverty and well-being policy measures can be suggested which incorporate health awareness and facilities, food security for poor households, common property resources, special support to households employment opportunity and other supportive measures.

Data Collection:

For the purpose of study we have prepared household questionnaire and collected data from the fifty households (randomly selected). Questionnaire is attached in the annexure.

Data Analysis:

In the present study the disparity in terms of consumer expenditure measured in the above mentioned three rounds of survey. Data provided by NSSO is in the text document. For the analysis of these unit level data we have used statistical software (STATA). Disparity in terms of MPCE calculated for the state wise, region wise, caste, religion and family structure.

Different statistical methods (like; descriptive statistics, range, standard deviation, coefficient of variation, Gini coefficient Lorenz curve, Theil's index, etc.) has been utilised for measuring inequality and disparity.

Various Measures of Disparity and Inequality:

Atkinson (1975), Sen (1974) and others have given the foundations of the modern approach to inequality measurement. These are the criteria (Mean Independence, Population size independence, Symmetry, Pigou Dalton Transfer sensitivity⁷, Decomposability, Statistical Testability) that make a good measure of income inequality. In the present study various measures of disparity are mentioned below:

Range:

Range is one of the easiest method for calculating disparity. Range is the difference between maximum and minimum observations of a particular variable Range = Maximum value – Minimum value

Range Ratio:

The range ratio computed by dividing a value at one predetermined percentile by the value at a lower predetermined percentile. For calculating range ratio we use 90th and 10th percentiles

Range ratio = 90th percentile / 10th percentile

The value of range ratio lies between one and infinity. The smaller value shows lower inequality and higher value reflect the more inequality'

Coefficient of Variation:

Coefficient of variation (CV) is calculated by following formula:

Coefficient of Variation = Standard Deviation / Mean

Main drawback of this measure is that, it can take any value between 0 and infinity, and there is no standard that defines a reasonable value of the measure for the particular phenomena.

Gini-coefficient:

Gini-coefficient is used to attach some absolute measures to the degree of inequality or to give some idea whether the inequality is large or small. The Gini-coefficient ranges from 0 to 1, where 0 represents perfect equality and 1 total inequality. It corresponds to twice the area between the Lorenz curve and diagonal. The Gini-coefficient can be as follows.

 $[\]frac{7}{2}$ The Pigou-Dalton transfer principle requires that any transfer of income from a higher to a lower income earner must reduce the inequality measure (Cowell and Kuga 1981). I(x) will satisfy the transfer principle

$$T_{ji}(X) = \lim_{\varepsilon \to 0} \left\{ \frac{I(x_1, x_2, \dots, x_3, +\varepsilon) - I(x_1, x_2, \dots, x_i, -\varepsilon)}{\varepsilon} \right\}$$

$$G(Y) = 2\left[\sum_{i=1}^{n} 1/n(X_i - Y_i)\right]$$

Where;

G(Y) = Gini-coefficient

n = Number of units

Y_i = Proportion of cumulated SLI up to ith unit

X_i = Proportion of cumulated households up to ith unit

Theil's T statistics:

Among the inequality measures the most widely used are the Theil indices and the mean log deviation measure. Both belong to the family of generalized entropy. The formula is given by

$$GE(\alpha) = \frac{1}{\alpha(\alpha - 1)} \left[\frac{1}{N} \sum_{i=1}^{N} \left(\frac{y_i}{\bar{y}} \right)^{\alpha} - 1 \right]$$

Where y is the mean income per person (or expenditure per capita). The value of the $GE(\alpha)$ measures vary between zero and infinity, with zero representing an equal distribution and higher values representing higher levels of inequality. The parameter α in the GE class represents the weight given to distances between incomes at different parts of the income distribution, and can take any real value. For lower value of α GE is more sensitive to changes in the lower tail of the distribution and for higher values GE is more sensitive to changes the affect the upper tail. The most common values of α used are 0, 1, and 2. GE(1) is Theil's T index and GE(0) is Theil's L (sometimes referred to as the mean log deviation measures) are given by:

$$GE(0) = \frac{1}{N} \sum_{t=1}^{N} \ln\left(\frac{y_t}{y}\right)$$

$$GE(1) = \frac{1}{N} \sum_{t=1}^{N} \frac{y_t}{y} \ln\left(\frac{y_t}{y}\right)$$

Atkinson has proposed another class of inequality measures that are used from time to time. This class also has a weighting parameter ϵ (which measures aversion to inequality). The Atkinson inequality measures defined as

$$\begin{split} A_{\varepsilon} &= 1 - \left[\frac{1}{N} \sum_{i=1}^{N} \left(\frac{y_i}{y}\right)^{1-\varepsilon}\right]^{1/(1-\varepsilon)}, \text{ where } \varepsilon \neq 1 \\ &= 1 - \frac{\prod_{i=1}^{N} \left(y_i^{1/N}\right)}{\frac{1}{N}}, \text{ where } \varepsilon = 1 \end{split}$$

Measures of Poverty

There are various indices for the measures of poverty. The very common is head count index. Head count index measures the proportion of the population that is poor.

Head count index H= q/n

Where q is number of poor and n is the total population. The range of head count index is from 0 to 1 i.e. nobody poor to everybody poor. This index does not differentiate between extremely low incomes and income just below the poverty line.

Poverty gap index measures the extent to which individuals fall below the poverty line as a proportion of the

poverty line.

The Income Gap Ratio (I) is the mean distance of the incomes of the poor from the poverty line, expressed as a proportion of the poverty line.

$$I = \sum_{i \in z(z)} \frac{gi}{q \cdot z}$$

The income gap g_i of any individual i is the difference between the poverty line z and his income y_i .

$$g_i = z - y_i$$

Obviously, g_i is nonnegative for the poor and negative for others.

In 1968 Watts proposed the first distribution sensitive poverty measures. The Watts poverty index is defined as

$$W = \frac{1}{N} \sum_{i=1}^{m} (\log z - \log x_i)$$

$$= \frac{1}{N} \sum_{i=1}^{m} \log \frac{z}{x_i}$$

The Foster Greer Thorbacke (FGT) index is

$$P_{\alpha} = \frac{1}{N} \sum_{i=1}^{q} \left(\frac{z - y_i}{z} \right)^{\alpha}$$

 $\alpha \ge 0$ is poverty aversion. The larger values of α , put higher weight on the poverty gaps of the poorest people. When, $\alpha = 0$ then FGT

$$P_0 = \frac{1}{N} \sum_{i=1}^{q} {z - y_i \choose z}^0$$

$$P_0 = \frac{q}{N}$$

q/N= Head Count Ratio

When, $\alpha = 1$ then FGT

$$P_1 = \frac{1}{N} \sum_{i=1}^{q} \left(\frac{z - y_i}{z}\right)^1$$

$$P_1 = \frac{1}{N} \sum_{i=1}^{q} \frac{z - y_i}{z}$$

P₁ = Poverty Gap Ratio

FGT index can be calculated for the various values of i.e. 0.5, 1.5, 2.0, 2.5, 3.0, 3.5, 4.0, 4.5 and 5.0. Clark Hemming and Ulph took an entirely different approach to constructing a distribution sensitive poverty index with the help of Atkinsion's class of Inequality measures CHU index for poverty is as

$$C_{\beta} = \frac{1}{\beta} \left[H - \frac{1}{n} \sum_{i=1}^{q} \left[\frac{y_i}{z} \right]^{\beta} \right]$$

Where, H=q/n head count index, y_i is the per capita consumption of the j^{th} family, Z is per capita poverty threshold and β is the number of families below the poverty line. The rage of is from 0 to 1.CHU index can be calculated for the various values of β i.e. 0.10, 0.25, 0.50, 0.75 and 0.90.

The Sen Index of poverty

$$PS = H[I+(1-I)G^*]$$

G* is the Gini index of inequality among the poor, H and I are head count and income gap. Sen Index can be written as

$$PS = \frac{2}{(q+1)nz} \sum_{i=1}^{q} (q+1-i)(z-y_i)$$

Where q is number of poor, n is number of person in the population and z is poverty line.

All the indices have been calculated by using STATA 11.0 and "poverty" and "apoverty" programme developed by Kerm (1999) and further Azevedo (2006). In the present paper we have used "apoverty". For the measurement of inequality indices, poverty indices and inequality decomposition programmes "ainequal", "apoverty" and "ineqdeco" in STATA are used.

III Participatory Rural Appraisal of Village Tulachak and SC Basti of Unchgaon: Social Mapping and Time line:

Village development related activity requires involvement of villagers for successful implementation of any programme. In this direction, timeline study is an important exercise in identifying the history and culture of village. The steps in this regard are as follows:

- 1. Introduction of Researcher to the villagers
- 2. Explanation of the purpose of visit and the exercise being undertaken
- 3. Identification of key resource persons/elderly in the village
- 4. Participation of villagers to find out the major events in the history of the village for preparation of timeline
- 5. Preparation of chart for displaying to the villagers

Time line illustrates changes, particularly in land use, over time, although they have been used to indicate other aspects of historical information which have a spatial dimension. Most commonly, a period of several decades was covered. A less well-documented tool than many, they have been used, so far, predominantly to:

• To identify changes occurred over time and space and examine the implications and causes of these changes.

During PRA, the time periods of significant events or changes occurred were recorded. A series of individual transects was draw from memory, generally working from the present time backwards. Time scales covered was depended on individuals and their ages. Changes were represented periodically, with comments added either at the time or after. In this exercise we involved older people, as the depth of history has been recorded in their memory. Table 1 present time line of SC Basti of Unchgoan and Tulachak.

Table 1: Time Line of Tulachak and SC Basti of Unchgoan on dated 22/09/2018

The village wa	s established 200 years ago. People migrated from different village. During British era railway							
line was laid close to Tulachak								
Year	Major Events/ Changes							
1965	First Government Job							
1980	First Concrete House							
1984	irst B. Tech Rajendra and Surendra							
1985	First election of gram panchayat with ballot paper (before 1985 representative were chosen by raising hand)							
1990	Electricity							
1990	Indra Awas Yojana, Lalji, Bechoo, Dular, Kanta, Lalata, Ramlal							
1995	Handpump (Govt.)							
1995	Television							
2000	First MBBS, Dr. Vijendra Prasad (Presently Dy. CMO)							
2000	Old Age Pension, Dukharan, Murahi Jalli							
2005	SHG, Gautam							
2008	Ration Shop							
2008	30 Toilets							
2008	MANREGA							
2009-10	Ambedkar Village declared							
2009-10	Village connected with all weather road and RCC road in village							
2010	Primary School							

2010	First Participation in BDC Election, Savitri, Sakuntala, Jiviti
2012	Anganwadi
2016	Reconstruction of Mazar
2017	LPG connection under UJJAWALA Scheme

Participation: Kanhiya Lal (30 yrs); Sama (90 yrs); Bechoo Ram (58 yrs); Satyanarayan (34 yrs)

Social Map:

- The purpose of social map is to get household wise information.
- To enable community to recognise the present social and infrastructural scenario. This exercise will empower the community to identify the developmental need in the village.

Process:

- Transact walk of village Tulachak to get acquainted with the people and landscape.
- Engaged the community to draw the basic outline of the village indicating the roads and gallis.
- Important landmarks viz. Temple, school, handpump, pond etc. Located the houses and marked the names of the household.
- All this exercise was done using simple tools like rangoli (to outline/draw), paper slips (to indicate names of houses).

Social Mapping



Social Mapping of Tulachak

Venn Diagram Exercise:

In order to understand the institutional relations and importance with the community, the participatory

exercise was conducted and the diagram represents the relations and importance.

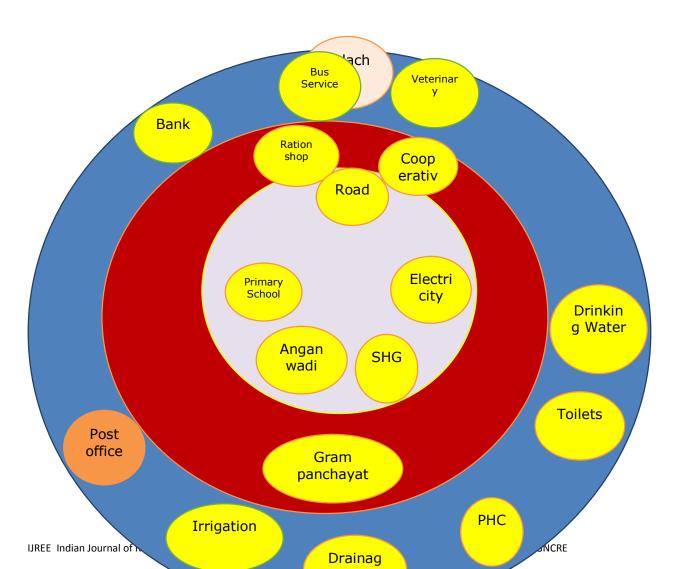
Note:

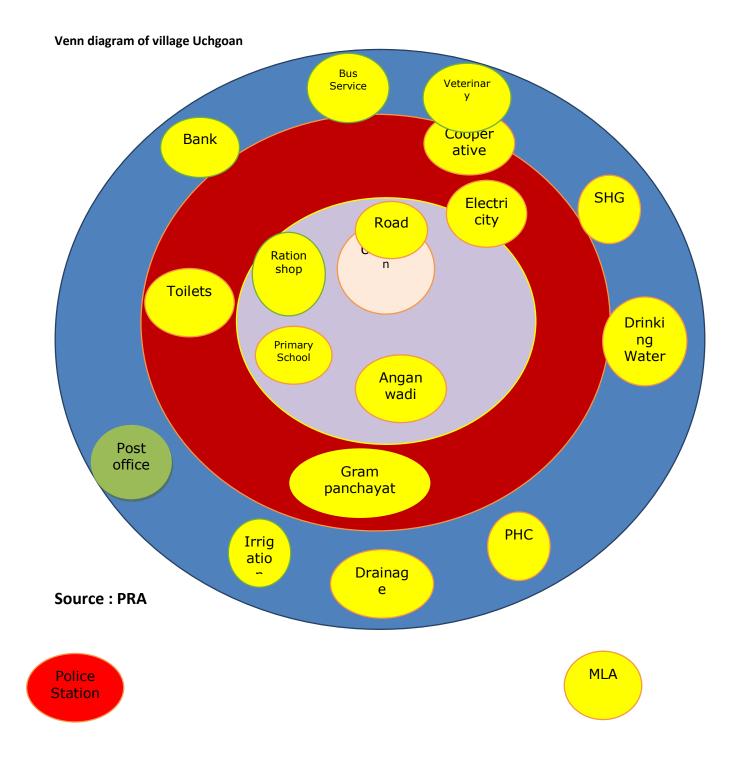


The villagers of tulachak showed very high priority for services related to primary school, bank, SHG, anganwadi, road, electricity, cooperative, ration shop, drinking water, irrigation, gram panchyat, toilets, drainage, PHC, MLA, veterinary hospital and bus service. They showed high priority for post office and low priority for police.

Only five services i.e. primary school, SHG, Anganwadi, road, electricity of very high priority are available in village and also the villagers are satisfied with these facilities. The villagers showed their dissatisfaction towards the facilities related to toilets, drinking water and drainage system.

Venn diagram of village Tulachak





The same exercise of venn diagram (chapatti diagram) was also performed with the villagers of SC basti of Unchgaon. Preferences were similar as in the village tulachak, except the ration shop, to which villagers have given very high priority and it is also available in the village while there is no SHG in the SC basti of Unchagon for which they showed very high preference.

Daily Activity Schedule

We used daily schedule to identify daily working patterns and other activities of the villagers in both the Tulachak and SC basti of Unchgoan. An individual's daily schedules both work type and distribution of workloads throughout the day was discussed with villagers

The objectives for daily schedule have been

- To document activities and timing of activities and also to identify periods where more than
 one
 activity are carried out concurrently
- For discussing new activities and their implication for time management
- For discovering suitable times for meetings and training sessions
- For comparison of differences between schedules.

Daily schedule have also been used to illustrate mobility and periods spent away from the home.

Description

Daily time lines were drawn covering a 24-hour period. This "day" was then subdivided depending on the participant's perception of the day:

- By hour
- By morning, afternoon and evening
- By times when activity changes.

Applications

Daily schedules seem to have focused on women, men and youth activities, and on gender differences in workloads as well as to document domestic workloads including cooking, firewood collection, playing, gossiping, etc. Schedules have mostly been used to examine agricultural commitments, although ultimate aim is income generation and to reduce the drudgery. Most of these activities are varying seasonally

Participation

Documentation of most of the daily schedules has been carried out either with individual men or with representative of youth or with group of women. Group size had generally been small and in some case activities were felt to be private.

Materials

There was a whole range of materials but we used chart paper and marker pen to document their activities. The objective was to document activities as written material. Table 2 represents daily activity of male and female of villagers of SC basti of Unchgaon and Tulachak.

Table 2: Daily Activity Schedule of SC Basti of Unchgoan and Tulachak

Time	Activities of Female	Time	Activies of male
4.00-5.00 am	Get up & Start cleaning	4.00-5.00 am	Sleep
5.00-5.30 am	Go to the Toilet, cleaning house, cleaning utensils	5.00-5.30 am	Get up
5.30-6.00 am	Preparing Tea	5.30-6.30 am	Go to the Toilet, Brushing Teeth and milking
6.00-7.00 am	Brushing Teeth, Bathing and cleaning cloths	6.30-8.00 am	Taking Tea, Animal Grazing
7.00-9.00 am	Cooking	8.00-9.00 am	Take Bath, Breakfast and Go to the Field/Labor work
9.00-11.00 am	Serving Food, Sending Children to school, having Breakfast, Going to field/Labor work or Housework		
9.00-12.00 pm	Field/ Labor Work, Household chores	9.00-12.00 pm	Field/Labour work
12.00-1.00 pm	Lunch, Afternoon Rest	12.00-1.00 pm	Lunch, Afternoon Rest
1.00-5.00 pm	Work/ field/Handicraft/other work	1.00-5.00 pm	Work /Field/ Playing cards (entertainment)
5.00-6.00 pm	Bringing Water, cleaning utensils	5.00-7.00 pm	Come back from the field, go to bring livestock from field (entertainment)
6.00-8.00 pm	Cooking	7.00-8.00 pm	Get fresh, take tea, gather to chat with friends /Neighbours
8.00-9.00 pm	Dinner/entertainment	8.00-9.00 pm	Dinner
9.00pm-4.00	Sleep	9.00 pm- 5.00 am	Sleep

Source: PRA, Focused Group Discussion

Seasonality presented in the table 3 for both the villages.

Table 3: Seasonality SC basti of Unchgoan and Tulachak

	Tuble 3. Seasonantly Se Susti of Officingour and Tubletink											
Items	Jan	Fe	March	Α	May	June	July	Au	Sep	Oc	No	Dec
	uar	bru		pr				gu	tem	to	ve	em
	У	ary		il				st	ber	be	mb	ber
										r	er	
Illness	\\	\\			◊	◊	00					$\Diamond \Diamond$
	$\Diamond \Diamond$				⋄	◊	$\Diamond \Diamond$					$\Diamond \Diamond$
	$\Diamond \Diamond$				⋄	◊						$\Diamond \Diamond$
	\Q											◊
Rain							-	•				
							-	-	••			
							-					
							•	•				
Credit							0	0	0			0
							0	0	0			0
							0	0	0			0
Employment			•	•								
			•	•								
			•	•								
Marriage					@	@						
_					@	@						
					@	@						
Festival			##	#						##	###	
			#	#						#		
Income			*	*								
			*	*								
			*	*								
		·					·	·				

Source: PRA, Group discussion.

Table 4 represented seasonality related to health disease among villagers in Unchgoan and Tulachak.

Table 4 : Seasonality of health disease of village SC Basti of Unchgoan and Tulachak

Items	Jan	Fe	March	Α	May	June	July	Au	Sep	Oc	No	Dec
	uar	bru		pr				gu	tem	to	ve	em
	У	ary		il				st	ber	be	mb	ber
										r	er	
Cold/cough	#	#	#		#	#		#			#	
	#		#		#	#		#			#	
					#	#						
Fever	#	#	#	#	#	#	#	#	#		#	
	#		#								#	
Losemotion /	#					#	#					
omitting	#					#	#					
	#					#	#					
Haiza					#	#	#					
						#	#					
Jondise			#	#						#	#	
Luaar/sunstoke				#	#	#						
					#	#						
					#	#						
Maleria/dengu/	#	#	#				#	#	##		#	#
chikengunia		#	#									
		#										

Chikenpox	#	#	#	#	#			
		#			#			

Source: PRA, Group discussion

Results Based on Household Survey

From both the villages total 53 households were surveyed with the help of predesigned interview schedule and percentage distribution of respondents has been shown in table 5. Of total 53 households, 25 households were surveyed from SC Basti of Unchgaon and 28 households were surveyed from Tulachak.

Table 5: Village wise distribution of respondents

Village	Number	Percentage
SC Basti of Unchgaon	25	47.17
Tulachak	28	52.83
Total	53	100.00

Source: Household survey.

Table 6 represents characteristics of the head of households of both the villages. 32.08 percent head of households belong to 41 to 50 years age group. All the head of households are literate and only 3.77 percent of the head of the households are middle class literate.

77.36 percent head of households are male and 22.64 percent head of households are female. It is worth mentioning here that in village Tulachak and SC basti of Unchgoan majority (more than 95 percent) of the population belongs to SC social group. Of total 53 households taken in the survey, 94 percent belong to SC and 6 percent to ST social group. All the selected families belong to Hindu religion.

Table 6: Characteristics of head of household

Characteristics	Freq.	Percent	SC Basti of Unchgoan (%)	Tulachak (%)
Age of the head of				
household				
30 and below 30	7	13.21	57.14	42.86
31 to 40	11	20.75	54.55	45.45
41 to 50	17	32.08	52.94	47.06
51 to 60	14	26.42	28.57	71.43
61 and above 61	4	7.55	50	50
Education of head of				
household				
Literate	31	58.49	48.39	51.61
Below primary	16	30.19	50	50
Primary	4	7.55	25	75
Middle	2	3.77	50	50
Gender				
Male	41	77.36	43.90	56.10
Female	12	22.64	58.33	41.67
Caste				
SC	50	94.34	48.00	52.00
ST	3	5.66	33.33	66.67
Religion				
Hindu	53	100.00	47.17	52.83
Total	53	100.00		

Table 7: Use of different schemes at the households

Characteristics	Freq.	Percent
Aam Adami Bima Yojana		
No	51	96.23
Yes	2	3.77
KCC		
No	51	98.11
Yes	2	1.89
Health insurance		
No	53	100
Yes	0	0
RSBY		
No	53	100
Yes	0	0
Jan Dhan Yojana		
No	32	60.38
Yes	21	39.62

Source: Household survey.

Table 7 represents the different schemes related to insurance and financial inclusion in the village. In both the villages approximately 40 percent head of households reported that they are having Jan Dhan Account. None of the families have taken any health insurance and Rastriya Surksha Bima Yojana.

Table 8: MANREGA, Ujjawala, Ration card and SHG membership among villagers

Characteristics	Number	Percent
MANREGA Job Card		
No	20	37.74
Yes	33	62.26
MANREGA Employment no of days		
0	28	84.85
4	1	3.03
7	1	3.03
15	3	9.09
LPG Ujjawala		
No	20	37.74
Yes	33	62.26
Ration card		
No	8	15.09
Yes	45	84.91
Type of card		
BPL	49	92.45
APL	4	7.55
SHG Member		
No	44	83.02
Yes	9	16.98

Source: Household survey.

Table 8 shows that 33 households have MANREGA job card and only five households reported that they worked under MANREGA scheme. 62.26 percent households reported that they got LPG cylinder under Ujjawala yojana. 92.45 percent families have BPL cards.

Table 9 reveals consumption of tobacco and alcohol. Of total 53 households majority of them (73.58 percent) accepted that they consume tobacco in any form, either chewing or smoking. A large number of households also consume alcohol.

Table 9: Consumption of tobacco and alcohol at households in SC basti of Unchgoan and Tulachak

Characteristics	Freq.	Percent
Tobacco Consumption		
No	14	26.42
Yes	39	73.58
Smoking		
No	45	84.91
Yes	8	15.09
Chewing		
No	16	30.19
Yes	37	69.81
Alcohol		
No	20	37.74
Yes	33	62.26

Source: Household survey.

Table 10 represents housing characteristics of the selected households from both the villages. All the respondents reported that they live in their own houses. 41 percent of respondent reported that they have only one room in their houses and 18 percent respondents reported that they have three or more than three rooms. 17 percent houses are kuchcha houses. Approximately 28 percent respondent reported that they got houses under any scheme from government. It is interesting to know that 49 percent respondents still do not use a toilet in their houses. 24.53 percent respondents reported that there is separate place for cooking food in their houses. Out of total 53 households 16.98 percent also reported that there is closed drainage system in their houses and 39.62 households reported that there is no drainage system in their house. 47.17 percent households do theirwaste management at a common point.

Table 10: Housing facility in SC basti of Unchgoan and Tulachak

Ownership of household	Number	Percent
Own House	53	100
Number of Rooms		
1	22	41.51
2	21	39.62
3 and more than 3	10	18.87
Type of House		
Kuchcha	9	16.98
Semi Pucca	25	47.17
Pucca	19	35.85
House in any scheme		
No	38	71.7
Yes	15	28.3
Toilet facility		
Yes	27	50.94
No	26	49.06
Separate Kitchen		
No	40	75.47
Yes	13	24.53
Drainage System in HH		
Covered	9	16.98
Open	23	43.4
None	21	39.62
Waste Management System		
Door Step	6	11.32

Common point	25	47.17
No collection system	22	41.51

Source: Household survey.

Table 11 represents average family size, monthly and per capita monthly income of the households. Average family size in both the villages is 6.7 members. Average Monthly income of households is Rs. 11937, and per capita monthly income is Rs.1756 while in SC Basti of Unchgoan average monthly income of households is Rs. 10589, and per capita monthly income is Rs.1557 and in village Tulachak average monthly income of households is Rs. 13141, and per capita monthly income is Rs.1934. In table 11 maximum and minimum value of family size, monthly income and per capita monthly income is also presented.

Table 11: Family size, monthly income and per capita monthly income of the respondent

Variables	Average	Minimum	Maximum
Family Size	6.73	4	14
Monthly Income	11937	1500	31500
Per Capita Monthly Income	1756	286	4367
Village Unchgoan			
Family Size	6.68	4	14
Monthly Income	10589	1500	31158
Per Capita Income	1557	286	3371
Village Tulachak			
Family Size	6.78	4	9
Monthly Income	13141	2500	31500
Per Capita Monthly Income	1934	417	4367

Table 12: Measures of disparity in terms of monthly income and per capita income

Variables	Range	CV	RR	GC	TI
Monthly income	30000	0.65	6.00	0.35	0.20
Per capita income	4081	0.59	5.62	0.32	0.16
SC basti of Unchgoan					
Monthly income	29658	0.71	6.50	0.38	0.23
Per capita income	3086	0.59	5.45	0.33	0.17
Village Tulachak					
Monthly income	29000	0.60	5.40	0.32	0.16
Per capita income	3950	0.58	4.77	0.30	0.15

Note: Calculated on the basis of survey data.

Disparity in terms of monthly income and per capita income of the households has been measured by using Range, Range ratio, Coefficient of Variation, Gini Coefficient and Theils Index and results are presented in Table 12. The purpose of these indices is to sketch the shape of income inequality among the villagers. Range for monthly income and per capita monthly income is more than the average income of the households in the study area (Table 11 and Table 12). All the measures of disparity reveal that disparity is more in SC basti of Unchgoan than Tulachak.

Table 13: Inequality Measures in terms of total income and per capita income in both SC basti of Unchgoan and Tulachak

Inequality measures	Income	Per capita Income
Relative mean deviation	0.254	0.228
Coefficient of variation	0.648	0.590
Standard deviation of logs	0.715	0.647
Gini coefficient	0.352	0.321
Mehran measure	0.491	0.450
Piesch measure	0.282	0.256
Kakwani measure	0.110	0.093

Theil index (GE(a), a = 1)	0.198	0.165
Mean Log Deviation (GE(a), a = 0)	0.225	0.185
Entropy index (GE(a), a = -1)	0.320	0.253
Half (Coeff.Var. squared) (GE(a), a = 2)	0.206	0.171
Atkinson inequality measures (eps = 1)	0.201	0.169
Generalized enthrophy (alpha = 1.00)	0.198	0.165
S-Gini inequality measures (d = 2)	0.352	0.321

Note: Calculated on the basis of survey data.

Table 13 shows inequality measure in terms of income and per capita income of the households in SC basti of Unchgoan and Tulachak. In the present study inequality measures like Relative mean deviation Coefficient of variation, Standard deviation of logs, Gini coefficient, Mehran measure, Piesch measure, Kakwani measure, Theil index (GE(a), a = 1), Mean Log Deviation (GE(a), a = 0), Entropy index (GE(a), a = -1), Half (Coeff. Var. squared) (GE(a), a = 2), Atkinson inequality measures (eps = 1) have been calculated. The inequality measures reveal the fact that inequality among households was higher in terms of income of the households.

For the poverty measurement in terms of consumption expenditure of the agriculture households Headcount ratio, Extreme Poverty Headcount ratio, Aggregate poverty gap, Per capita poverty gap, Poverty gap ratio, Income gap ratio, Watts index, FGT⁸(0.5), FGT(1.5), FGT(2.0), FGT(2.5), FGT(3.0), FGT(3.5), FGT(4.0), FGT(4.5), FGT(5.0), Clark et al. (0.10), Clark et al. (0.25), Clark et al. (0.50), Clark et al. (0.75), Clark et al. (0.90), Thon, Sen and Takayama indices have been calculated for both visits and also for the total period and results are presented in the table 14. Poverty measurement in terms of income of the households Headcount ratio Aggregate poverty gap Per capita poverty gap Watts index FGT(0.5) FGT(3.0) FGT(4.0) FGT(4.5) FGT(5.0) Clark et al. index (0.10) Clark et al. index (0.25) reported higher values than per capita income of the households,

Table 14: Poverty measurements in terms of total income and per capita income in both SC basti of Unchgoan and Tulachak

Poverty Measures	Total Income	Per capita Income
Headcount ratio %	22.642	18.868
Extreme Poverty Headcount ratio %	5.66	3.774
Aggregate poverty gap	16884.371	2248.076
Per capita poverty gap	318.573	42.417
Poverty gap ratio %	6.068	5.395
Income gap ratio %	26.801	28.594
Watts index	8.614	7.337
Index FGT(0.5) *100	10.312	9.343
Index FGT(1.5) *100	4.063	3.451
Index FGT(2.0) *100	2.909	2.357
Index FGT(2.5) *100	2.162	1.682
Index FGT(3.0) *100	1.646	1.235
Index FGT(3.5) *100	1.275	0.926
Index FGT(4.0) *100	0.999	0.704
Index FGT(4.5) *100	0.791	0.54
Index FGT(5.0) *100	0.631	0.418
Clark et al. index (0.10) *100	8.283	7.092
Clark et al. index (0.25) *100	7.825	6.749
Clark et al. index (0.50) *100	7.151	6.237
Clark et al. index (0.75) *100	6.57	5.789
Clark et al. index (0.90) *100	6.26	5.547
Thon index *100	11.337	9.964
Sen index *100	8.818	6.734
Takayama index *100	5.715	4.921

Note: Calculated on the basis of household data and poverty line is set at Rs 5250 monthly income (1/2 of median value) and Rs 786 per capita income (1/2 of median value)

Conclusions and Policy Suggestions

On the basis of participatory rural appraisal and household survey conclusions are as follows:

- Both the villages lack the basic facility of drinking water, drainage system, health and public distribution system.
- In both the village anganwadi centre is working but still the basic facilities are not available in the centre. Both the centers are running in rented premises. No health centre is available in the village.
- PDS shop is available in SC basti of Unchgoan but villagers of Tulachak are not having facilities of PDS shop.
- Majority of the households' source of income is from daily wage labourer. Few households earn from the auto driving.
- No job opportunity available in the village. Very few households have agriculture land but the size of land is very small.
- Due to different gram panchayat in both SC basti of Unchgoan and Tulachak and also gram pradhan of both the villages reside in another hemlet it affects the development pace of these two villages.

On the basis of above, suggestions of the study are as follows:

- Any plan related to development can be made through participation of the villagers.
- A new gram panchayat can be announced by joining both SC basti of Unchgoan and Tulachak. This Gram pradhan will be elected from the same village and also pradhan will be in approach of villagers.
- PDS system should be extended for both the villagers.
- Medical facility should be provided through mobile health van at least once or twice in a week.
- One skill centre can be established to provide training to workers both male and female so that they earn more income.

References:

Atkinson, A., (1975), "The Economics of Inequality", Oxford University Press, Delhi.

Ankit Kumar Wats, (2017), "Socio-Economic Development of the Farmer in Bakhariya village of Varanasi District" unpublished internship report (sponsored by NCRI, Hyderabad), CIRD, FSS, BHU.

Blacklow, P. & Ray R., (2000), "A Comparison of Income and Expenditure Inequality Estimates: The Australian Evidence, 1975-76 to 1993-94", Australian Economic Review, The University of Melbourne, Melbourne Institute of Applied Economic and Social Research, vol. 33(4), pages 317-329.

Bourguignon, F., (1979), "Decomposable income inequality measures", Econometrica vol. 47, pp. 901-920.

Cain, J. Salcedo & Hasan, Rana & Magsombol, Rhoda & Tandon, Ajay (2010), "Accounting for Inequality in India: Evidence from Household Expenditures", World Development, Volume 38, Issue 3, pp 282-297. Census (2011), Government of India, New Delhi.

Chambers, R. (1994), "The origins and practice of participatory rural appraisal", World Development, 27 no 7, pp 953-969.

Chambers, R. (2007), "Who Counts? The Quiet Revolution of Participation and Numbers', IDS WORKING

⁸Foster–Greer–Thorbecke class index

⁹ Clark–Hemming–Ulph class index

PAPER 296, Institute of Development Studies at the University of Sussex Brighton BN1 9RE UK

Chambers R. (1988), "Poverty in India Concepts, Research and Reality", Discussion Paper 241, Brighton IDS.

Chambers R. (1995), "Poverty and Livelihood: Whose Reality is Counts?", Discussion Paper 347, Brighton IDS.

Deaton, A. and J. Dreze (2002), Poverty and Inequality in India: A Re-Examination, Economic and Political Weekly, vol. 37 no 36, pp 3729-3748.

Deaton, A., (1997), "The Analysis of Household Surveys: A Microeconometric Approach to Development Policy", The Johns Hopkins University Press, Baltimore.

Deaton Angus and Jean Drèze, (2010), "Nutrition, Poverty and Calorie Fundamentalism: Response to Utsa Patnaik", Economic & Political Weekly, vol XLV, no 14, pp 78-80

Dreze J and A. Sen, (1989), "Hunger and Public Action", Oxford Clarendon Press.

Dubey, A. and S. Gangopadhyay (1998), "Counting the Poor: Where are the Poor in India?", Sarvekshana Analytical Report No.1. Department of Statistics, Government of India.

India village directory, https://villageinfo.in/uttar-pradesh/varanasi/pindra/puari-kala.html, access on 27/01/2018

Mukerjee, N., (1991), "An Alternative approach to Rural Development-Participatory Rural Appraisal, in Yugandhar B N and Mukherjee N (ed), Studies in Village India, Concept Publishing Company, Delhi.

Mukerjee, N., (1997), "Participatory Appraisal of Natural Resources", Concept Publishing Company, Delhi.

Mukerjee, N., (2002), "Participatory Learning and Action with 100 Field Methods", Concept Publishing Company, Delhi.

Mukerjee, N., (2003), "Participatory Rural Appraisal Methodology and Application", Concept Publishing Company, Delhi.

Mukherjee A. (1995), "Participatory Rural Appraisal: Methods and Applications in Rural Planning", Vikas Publishing House Pvt. Ltd, New Delhi.

Parthasarathy, G. Jayashree Anand and C.V.R. Sanker, (2001), "Impact of Growth on access to the Change in Possession of land, Education, Employment, Consumption and Disparities between SC, ST and Others", in A. Goswami (ed), "Regional Disparities in India", Akansha Publishing House, New Delhi, pp87-107.

Paul, S. (1988), "Household Composition and the Measurement of Disparity in Levels of Living", Indian Economic Review, vol. 23, issue 1, pages 83-106

Sen, A., (1974), "Poverty, Inequality and Unemployment: Some conceptual issues in Measurement", in Poverty and Income Distribution in India, e.d. T. N. Srinivasan and P.K. Bardhan, Statistical Publishing Society, Calcutta.

Singh, K., (2010), "Disparities in Level of Living of Different Income Groups in India: An Inter-State Analysis", in A K Thakur and S S S Chauhan (ed), "Inter-Regional disparities in India" Deep & Deep publication Pvt. Lit., New Delhi, pp 229-244.

Srivastava, A. and Mohanty S. K., (2010), "Economic Proxies, Household consumption", Economic and political Weekly, vol. 45, no16, pp 55-63.

Appendices

Picture Gallary















Contributor
Dr. Alok Kumar Pandey
Assistant Professor

Centre for Integrated Rural Development Faculty of Social Sciences Banaras Hindu University Varanasi-05

Toilet Stories from a Coastal Village of Odisha:

A Participatory Study of Sanitation and Social Change

Dr Bidu Bhushan Dash Dr Bijayshree Satpathy

Abstract

The study, "Toilet stories from a coastal village of Odisha: A participatory study of sanitation and social change" looks at the status of toilets in Batighar, a historic and touristic coastal village in Odisha. Through the study, the politics of rural sanitation and social change was understood from the lense of the villagers. The connection of toilets with the power structure, corruption, religious practices and health issues was explored. Participatory approaches, especially various tools and techniques of PRA and PRCA were used to collect data. Various collective stories were harvested from families and analyzed through narrative analysis. It was found that those households, which are associated with the government in any capacity have all the benefits of the government schemes including toilet scheme. Both physical structure and social structure of the village affect proper implementation of the scheme. It was found that due to poor implementation of the scheme, health condition of the villagers was affected.

Introduction

Though toilets in India have a long history since ancient period, people hardly know about it because writing about toilets is always considered as an academic stigma. So, stories of civilizations are read without stories of sanitation. Though there were toilets in the ancient and medieval India, it is least documented. The first documented sanitation bill was passed and came to effect in colonial India in 1878. The bill pushed the municipality to compulsorily construct toilets even in slums and huts of Calcutta (now, Kolkata) – the then capital of the Raj. The government of independent India enacted Sanitation Act in 1993. Construction of dry latrine and its manual cleaning was made an offence under this Act. Still, open defecation is prevalent, because of low family income and a weak state mechanism (Pathak, 1995), conventional mindset (Arulchelvan & Maheswari, 2013), remoteness and its lived nuances (O'Reilly, Dhanju & Goel, 2017). Possession of toilets in the households is limited and usage of toilets is still lower than the possession (Arulchelvan & Maheswari, 2013). Possession of toilets has hardly been considered as one of the important components in social, political and economic upliftment neither for a household nor for a village.

Nevertheless, Agoramoorthy & Hsu (2009) argued that the possession and usage of toilet has significantly reduced the cost of medical treatments of sanitation related diseases. Yet again, much of the under-nutrition in India will disappear in hygienic conditions (Chambers and Medeazza, 2013). A significant progress in this area can be made through awareness creation (Pathak, 1995), through right message in appropriate media to the key influencers and altering the sanitation and hygienic behaviour of the populace (Arulchelvan & Maheswari, 2013). Kumar (2017) cites that sanitation system will fail, if physical construction of toilet is not be integrated with social construction.

Notably, the recent central government has not only formulated various policies relating to rural sanitation but also created awareness and promoted proper implementation of the schemes. After the sanitation campaign, there is a remarkable increase in latrine adoption among villagers in Odisha (Dickinson, Patil, Pattanayak, Poulos & Yang, 2015). Programme like 'No Toilet No Bride' have played a pivotal role in a significant increase in latrine ownership in Haryana (Stopnitzky, 2017). With this background, the researchers studied the status of rural sanitation, especially status of toilets in Batighar, a coastal village of Odisha.

Sanitation Policy in India

The idea of sanitation in the city planning process dates back to 3000 BC; during the Indus Valley civilization. Even in the planning of cities like Harappa and Mohenjo Daro, proper sanitation was considered. During the colonial India, the occurrence of deaths of the British soldiers due to diseases like cholera and diarrhoea led to the realisation of the need of proper sanitary conditions. A Royal Commission was appointed in 1857, to examine the sanitary conditions of the army. Furthermore, for the improvement of sanitary conditions in barracks, hospitals and stations, three presidency commissions were set up in 1864. Following which, the British government introduced the first Sanitation Bill in India in 1878for the compulsory construction of toilets and proposed the construction of public toilets. However, the enforcement was not strict with a fear that it might offend the locales' customs and religious sensibilities (Ramasubban, 1982). Contrarily, the McKenzie committee found that people were willing to submit to any sanitation measures to promote health at pilgrim centres which were the main centres for the spread of diseases. Lack of governmental intervention resulted in further deterioration in public health and sanitation in India, which compelled the international agencies like the League of Nations and the Rockefeller Foundation to initiate steps to address public health challenges (Harrisson, 1998).

The Sanitation systems in India was bucket latrine, which used sweepers drawn from downtrodden communities to empty buckets and that undermine their social position in the society for centuries. As part of freedom struggle, M. K. Gandhi established Harijan Sevak Sangh for the liberation of scavengers and laid the foundation for a rural sanitation movement in India.

Rural Sanitation Programmes after Independence

After independence, in the late 40s, the environmental hygiene committee planned environmental sanitation for the next 40 years to cover 90 percent of the population; however no concerted efforts were taken to implement it (Ghosh, 1995). In the first five year plan, the rural sanitation programme was introduced under health sector. Actual strengthening of sanitation component started during the sixth five year plan with the launch

of the International Drinking Water Supply and Sanitation Decade (IDWSSD) in 1980. Water and sanitation is a state subject even though the central government share for funding is nearly 40 percent to the total investment in this sector. During the IDWSSD the aim was to cover 80 percent of the urban population through formal sanitation facilities and eradicate manual scavenging. Some efforts were made in direction though the sanitation target set for 1991 remains unachieved even now. Due to the subsidies and technical assistance for the construction of household toilets during the last decade, there has been an overall improvement in the coverage of sanitation amenities.

In the Seventh Five Year Plan (1985-90), a new programme of sanitation was introduced at the village level for health centres, schools, anganwadis, etc. The construction of individual household latrines was started under a numbers of government programmes. The Ministry of Rural Development was entrusted with the planning, implementing, supervising and coordinating for the Central Rural Sanitation Programme (CRSP). The funds for implementation of CRSP were shared by both Centre and State governments. The government provided 80 to 100 percent subsidy for the construction of the twin-pit pour-flush latrine with superstructure; which is recommended by the World Bank / United Nations Development Programme Technology Advisory Board. However, it was realized that investment and subsidies alone could not ensure improved coverage of sanitation (Ramasubban, 1982). Furthermore, in the Eighth Five Year Plan, the budgetary allocation for sanitation remained low in comparison to water. Indian government allocated Rs. 6,742 million for sanitation compared to Rs. 108,700 million for drinking water supply. Nonetheless, sanitation finally developed its own identity in state governments' plans, policy announcements and political governance agendas (UNICEF, 2002). Subsequently, a guideline was issued on range of toilet designs, where the information was also provided on sanitation upgrading i.e. a simple design can be started by a household and later it can be upgraded. The Government of India adopted the Restructured Centrally-Sponsored Rural Sanitation Programme, where government shifted from paying high subsidies to no or low subsidies and generated demand for services (Ibid). Here, women self-help groups and small entrepreneurs help expand sanitation delivery; Non Governmental Organisations (NGOs) play a strong role in mobilizing communities, promoting demand and managing rural sanitation centre. The Centre keeps on demonstrating a range of technological options for sanitation. Since independence, the government has been implementing various programmes for raising the quality of life and the health of the people.

The primary responsibility of providing drinking water and sanitation facilities in India lies with the state governments. The central government supplements and provides guidance to states by providing financial assistance mainly under two national flagship programmes:

- 1. The National Rural Drinking Water Programme (NRDWP, 2010) earlier called the Accelerated Rural water Supply Programme (ARWSP implemented since 1972-73), and
- 2. The Total Sanitation Campaign (TSC) being implemented since 1999.

Status of Sanitation in Odisha

During the Seventh Five Year Plan period the norm of 40 litres of water per capita per day was introduced in the ARWSP as the minimum supply norm for rural areas with one source provided for every 250 population. In 1999, the government approved a package of reforms in the sector to address major areas of concern namely, coverage of habitations, quality problems in drinking water and sustainability of sources and systems. The reforms initiative was launched on a pilot basis as Sector Reform Projects in three districts of Odisha i.e., Balasore, Sundargarh and Ganjam. Later in 2002, the reforms initiative was scaled up (Roy, 2012).

In comparison to the rural drinking water programme, the national rural sanitation programme started much later. United Nations International Children's Emergency Fund (UNICEF) supported the implementation of the centrally sponsored Rural Sanitation Programme (CRSP) in five blocks in Odisha. After five years of implementation, the CRSP guidelines were revised in 1991 based on feedbacks from UNICEF and other organizations to include families below poverty line among those eligible for subsidies for latrines, besides Schedule Caste (SC) and Schedule Tribe (ST). The programme also provided for construction of village complexes with bathing facilities, drainage facilities and washing platforms etc. The guidelines were further revised in 1993 to introduce a more comprehensive approach in sanitation which brought in the components of personal hygiene, home sanitation, safe water, garbage disposal, excreta disposal and waste water disposal. The revision in 1993 also emphasised the need for people's participation in promoting sanitation and for generating a "felt need" for sanitation among people through intensive awareness drives. The concept of Rural Sanitary Mart (RSM) was also introduced in this revision for supply of material for construction of sanitary latrines, based on the successful demonstration of RSMs by UNICEF. In 1999, there was a major revision in the national programme guidelines simultaneous with the ushering in of reforms in the sector. The programme, named as TSC is designed as a comprehensive programme to ensure availability and use of sanitation facilities in all homes and institutions (schools and anganwadis). The programme intends to make the entire country free from open defecation (ODF), but it remains a challenge for Odisha. In 12th Five Year Plan stress was put on the convergence of NRDWP and TSC (Roy, 2012).

The study conducted by Centre for Policy Research (Roy and Jhingta, 2018) found that about 80 percent of the schools and 84 percent of students in Odisha have access to toilets in rural areas. Further, 84 percent of rural girl students have access to toilets. The share of schools with toilets drops by almost half if drinking water is not available. In case of Odisha, there are more schools present where water is not available in comparison to the national scene, but is substantially lower than schools where water is available (Ibid). The access to toilets in elementary schools of Odisha was almost 80 percent during 2010-11 though, only 22 percent of the households had access to inhouse latrines during the same period of time (Census of India, 2011). Even within the households who had access to latrine, about 29 percent in rural areas used unimproved mode of sanitation. Since 2010-11, there has been an extensive effort on bridging the gap in household sanitation under the Swachh Bharat Mission. As per the U-DISE report (2015-16), in the schools of Odisha, coverage for boys' toilet is 94 percent and girls' toilet is 98 percent. Even the worst district in Odisha with respect to school sanitation in 2015-16 (Malkangiri), has a coverage for boys' toilet of 72 percent and girls' toilet of 90 percent. Thus, the gap between household and schools is likely to have increased.

There is often greater emphasis on building toilets, rather than getting more people to use

them. Maintenance of toilets is an important issue, and but there is ambiguity about whose responsibility it is to ensure functional toilets in schools (Roy and Jhingta, 2018). The Sarva Sikshya Abhiyan (SSA) has the provision of constructing the toilets while ensuring water and sanitation facilities is the domain of the Ministry of Drinking Water and Sanitation (MDWS), in concurrence with the respective state Governments. The coordination between these two departments to cater to the provision of water and maintenance of toilets is necessary.

There have been efforts to ensure the availability of toilets in schools of the socially and educationally backward blocks of Odisha, but not enough appears to have been done to improve the sanitary facilities at the household level. An example in this regard are the blocks of Nabrangpur district, which have a female literacy of 35.8 percent, and a ST literacy of 38.2 percent (Census of India, 2011). Toilet access might have improved girls' enrolment in some blocks, but in long term might be ineffective in terms of promoting the good sanitary behaviour and a push to use safe sanitation, if the toilet is not available at the houses of the children (Roy and Jhingta, 2018). While school sanitation has the potential to change the sanitation landscape of the country, there is a need for efficient and integrative planning to ensure that this potential is realised. Despite various centre and state schemes and programmes, Odisha is among the nine worst performing states in the country as far as rural sanitation is concerned.

Research Questions

Through the study — "Toilet Stories from a Coastal Village of Odisha: A Participatory Study of Sanitation and Social Change", the researchers have attempted to understand politics of rural sanitation and social change from the lense of the villagers. The researchers have understood the questions like who have and who do not have toilet facilities in the village,. These are directly related (of not having toilets) with the village power structure — involving party politics, caste system, silence of women's voice and poverty. Apart from party politics, class, caste and gender connection to toilets, the researchers explored how the toilet is connected to health issues, education (especially for decreasing school dropouts), livelihood, entrepreneurship, skills, etc. They also explored if toilet is connected to corruption and religious practices. Various stories were collected — failure stories to learn and success stories to be motivated. The researchers also explored how local governance is helping villagers in good sanitation, what kind of IEC (Information, Education and Communication) materials are used to motivate villagers and whether these IEC materials used by the local agencies are effective or not. As it is participatory in nature, the researchers explored other toilet stories during their visit and stay in the village.

Methodology

Participatory approach was used to understand the status of toilet and its contribution to sanitation and social change in Batighar village. Participatory approach not only reflects the reality but also empowering (Chambers, 1994). Researchers spent around 30 days in the village and used various tools and techniques of Participatory Rural Appraisal (PRA) and Participatory Rural Communication Appraisal (PRCA), PRA and PRCA tools are very effective and immediate source of communication (Narayanasamy, 2009). Researchers experienced cross-generational communication while using PRA and PRCA tools and techniques in the village. The tools not only facilitated the process of communication, but also stimulated a process of intense communication among the groups in the village. As the researchers explored a few questions related to uses of IEC material, PRCA was especially used to collect data (See Table 1: Tools Used in the Study). Mosse (1994) cites that PRA constructs local knowledge, which is influenced by existing social relations. So, certain kinds of knowledge are excluded due to the power structure. Hence, PRA needs to be complemented by other methods of participation. Therefore, collective stories from families of different strata (on having a toilet or not), from the village was collected and analysed through narrative analysis. The researchers not only collected data but also presented it in front of villagers or different groups in the village towards end of the project.

Table 1: Tools Used in the Study

SI	Name of the Tool	Purpose	With a particular team		
1	Village Social Map	Understand the village structure	Elderly persons, from diverse caste communities		
2	Venn Diagram	Power centres in the village	Villagers		
3	Well-being Map	Class structure in the village	Villagers		
4	Resource Map	Defecation areas for the villagers	Villagers		
5	Seasonal Calendar (Seasonality)	Open defecation timing	Men, Women, Children		
6	Timeline	Sketch history of the village, including when toilet came first	Elderly persons		
7	Toilet Map	Find out toilet haves and have-nots	Elderly persons including the ward-member(s)		
8	Toilet Timeline	Sketching history of number of toilets in the village chronologically	Toilet Haves		
9	Problem Tree	Causes and effects of not having toilets	Men and Women of Toilet Have-Nots		
10	Matrix/Venn Diagram	Reasons for not having toilets	Household Heads of Toilet Have-Nots		
11	Matrix/Venn Diagram	Issues due to not having toilets	Women of Toilet Have- Nots		

12	Possible Channels of Communication Map		d Decision takers of having toilets in last 2-3 years
13	Venn Diagram	Agencies involved i promotion and construction of toilets	n Toilet Haves n
14	Venn Diagrams	Size and quality of toilet	Toilet Haves
15	Matrix	Cleaning toilets	Toilet Haves

For instance, to sketch the history of the village and to know, when the first toilet and different types of toilet came to the village, the researchers drew timeline, sitting with the villagers. To know, who has a toilet in the village, the researchers prepared a toilet map.

Collective Story

Collective stories as a method were used in the village to help raise awareness about the sanitation system. Collective story is a concept developed by Laurel Richardson, it aims to give voice to those silenced or marginalised by dominant cultural narratives and promote transformative possibilities (Richardson, 1988). The researchers collected both success and failure stories regarding toilets in the village.

Sampling

As the researchers spent around 30 days in the village, most of the villagers participated in the study. So, it is neither census, nor sample in scientific term of research. The researchers used purposive sample in a non-statistical sense for conducting PRA and PRCA activities; collecting individual and collective stories; and conducting Focus Group Discussion (FGD). The researchers invited around five to ten people during each PRA and PRCA exercise. Hence, around 100 people from different strata participated in PRA and PRCA activities. Apart from using PRA and PRCA tools and techniques, the researchers interviewed representatives of various rural institutions like Gram Panchayat, Self-Help Groups, village school committee, youth club, Primary Health Centre (PHC) and local NGO. People from the lower strata in the village society were consciously invited to participate in the research process.

Village Immersion

The researchers were immersed in the village for around 30 days. They visited the village on August 4, 2018 for the first time, with the help of Bidyadhar Rout, a retired professor of Political Science from the locality and Pabitra Rout, a Physical Education Teacher (PET) of Gyanamayee High School in Barakolikhala village of Batighar Gram Panchayat (GP). Pabitra Rout helped the researchers until they were immersed in the village by introducing them to the key people of the village. Later, the researchers worked independently and freely with the different groups of people of the village.

Analysis of the Study

The study was analysed through narrative analysis.

Report Writing and Timeline

Data was transcribed and translated, which was collected through PRA, PRCA, storytelling, interview and FGD during report writing, whereas PRA and PRCA materials were kept in the village as they were the product of villagers' time and effort. People from the remote village of Odisha actively developed PRA and PRCA materials in their mother language, i.e. Odia. The researchers decided to keep all the materials in the village after learning that Voluntary Association for Rural Reconstruction & Appropriate Technology (VARRAT) had conducted PRA exercise in 2008 among the villagers and had taken those with them. Pratima Pani, an Accredited Social Health Activist (ASHA) said that if those old documents would have been kept in the Batighar PHC, villagers could have compared the development in the village. Pratima also insisted the researchers to talk to Ranjit Mandal, who was associated with this activity, while he was working with VARRAT. Ranjit is presently working with National Health Mission (NHM), a Government of India flagship programme. The researchers spoke to Ranjit, but as it was 10 years ago, there are no documents available. As it was a time bound project, the report was completed by mid-February 2019 and submitted to the Mahatma Gandhi National Council of Rural Education (formerly known as National Council of Rural Institute), Hyderabad by end of February 2019.

Limitation of the Study

Batighar is a revenue village having 3 hamlets. Even, Batighar village excluding the hamlets is having 3 wards in the GP. However, the study is limited to the Ward Number 10, where there are 180 households. There are about 750 voters and the population of the village is approximately 2000.

Batighar: The Studied Village

Batighar is a village in the Batighar panchayat (Map 4) of Mahakalapada Community Development Block (Map 3) of Odisha's (Map 1) Kendrapara District (Map 2). There are seven habituated revenue villages having 16 wards in Batighar panchayat. Researchers selected Batighar (Ward Number 10) as the study village for various reasons – remoteness, demographic, historic and touristic.

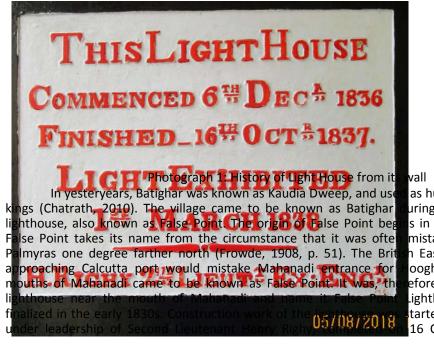
Geographically, Batighar is a large island created by the Mahanadi river delta. It is one of the remotest villages in Kendrapara district, which is about 22 kilometers from Jamboo, the Marine Block headquarters and 48 kilometres from Kendrapara city, the district headquarter. Though the nearest statutory town Paradip is 10 kilometers away from the village, the overflowing estuary of Mahanadi river is the hindrance to commute.

According to the Census 2011, total geographical area of the village is 406 hectares. Out of it, 214.7 hectare is forest area, 1.76 hectare is non-agricultural use land area, 28.82 hectare is barren and uncultivable land area, 66.08 hectare is permanent pastures and other grazing land area, and 94.63 hectare is net area sown that is non-irrigational land area.

As demography of the village according to the Census 2011 is concerned, there are 688 households with a population of 3569 in Batighar village. As far as the sex ratio is concerned, 52.7 percent are male (1881 in number) and 47.3 percent are female (1688 in number). Scheduled caste (SC) constitutes 2.82 percent of total population (101 in number) in Batighar village. Literacy rate of the village is 66 percent, out of which male and female literacy rates are 59.8 and 40.2 percent respectively.

If we look at the livelihood, 1710 persons are workers and 1859 persons are non-workers. Out of 1710 workers, 909 persons are main workers and 801 persons are marginal workers. As people do not hold patta, they mostly depend up on daily wage. Few people are cultivators (only 15 persons, 0.42 percent of the total population), according to the Census 2011 (Directorate of Census Operations, Odisha, 2011). Haren Jena said that most of the people depend on catching fishes and crabs to maintain their life and livelihood.

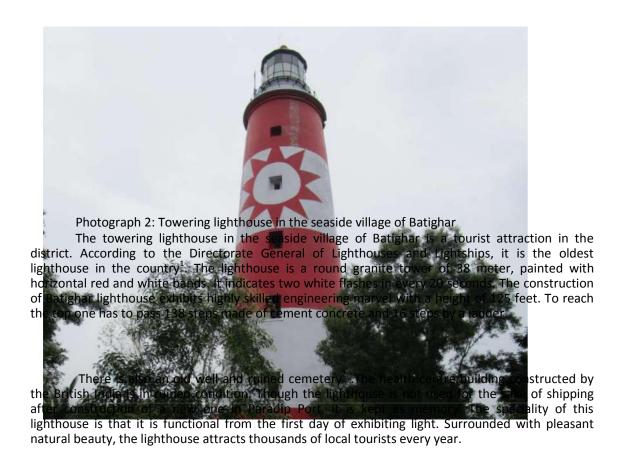
Historicity of the Village



as hunting ground of Kujang uring the Raj, which means s in the early 19th century. mistaken by ships for Point n East India Company ships ooghly. So, the point near efore, decided to provide a lighthouse. The plans were tarted on 6 December 1836 16 October 1837 and light

exhibited on 1 March 1838. Presently, the lighthouse is managed by the Calcutta Light House.

Touristic Village Batighar



See Directorate General of Lighthouses and Lightships, Ministry of Shipping Website

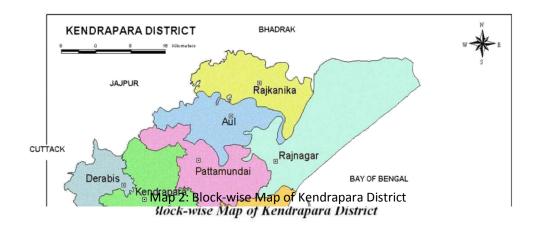
http://www.dgll.nic.in/content/325 0 FAQ.aspx (Last browsed on 5 March 2019)

Kar, M. February 8, 2012. Ruin Threat to Old Victorian Cemetery. The Telegraph. Retrieved on March 5, 2019 from https://www.telegraphindia.com/1120208/jsp/odisha/story 15107680.jsp, Outlook. February 22, 2012. Decaying British Cemetery in Mahanadi Delta to Be Restored. Retrieved on March 5, 2019 from https://www.outlookindia.com/newswire/story/decaying-british-cemetery-in-mahanadi-delta-to-be-restored/752372.

² The Times of India. February 17, 2011. Cemetery lies in grave neglect. Retrieved on March 5, 2019 from http://timesofindia.indiatimes.com/city/bhubaneswar/Cemetery-lies-in-grave-neglect/articleshow/7511728.cms,

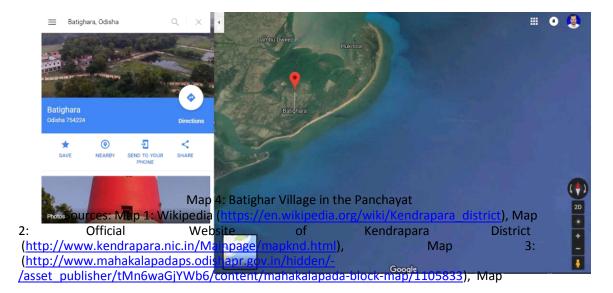
Map 1: Kendrapara Odisha Map

Highlighted District in





anchayat is circled in Mahakalapada Block Map



4: Google Map

Origin of the Village

Though the lighthouse was established in 1837, people settled in the village only after independence of India. The area was under the Kujanga Estate earlier and then, the estate of King Burdwan (Bardhaman) during the independence. Raja Mahatab Chand had purchased the Kujanga Estate in a Court sale. Due to Abolition of Zamindari System in India in 1948, the king of Bardhaman started selling the acquired land in the Kujanga estate. Hence, most of the Bengali people from Bardhaman and nearby area fled to the coastal part of Odisha.

Photograph 3: The researcher is with Mr Sarat Chandra Das

Das, 61 from the brought Mr Das's had come work as a the False Das father

1947 and after According only 5 -7 village



Sarat Chandra year old social worker village was born and up in Batighar village. father Ratnakar Das from Paradip Garh to class four employee in Point Lighthouse. Mr recalled and that his had joined this profession during who retired in 1980, serving 33 years. to Mr Das there were households in the when he was a 12 year old in the year 1969.

During our first visit, we observed that one person was returning from the field with a steel jug in his wet hand. We guessed that the person must be returning from the field after completing open defecation. We invited him for a chat and he joined us without any hesitation. After chatting for a few minutes, he told us to go to the nearby chaupal where around 7-8 people sat gossiping and relaxing on a Saturday afternoon. We proceeded there, sat and discussed about the origin of the village. Though, there were 3-4 septuagenarians in the group, they could not clearly tell about the origin of the village. They traced the oral history up to the 1971 flood. After the chat, we walked on the defined paths of the village and saw a school which was established in 1954. We again explored the oral history of the village from a 61 year old social worker from the village.

Local Institutions in the Village

During the rural engagement, the researchers found that there were a few local institutions in the village such as Batighar Gram Panchayat Office (Office of the Local Government), Batighar Gram Panchayat Mahila Sangha (Panchayat Level Women Federation), Bharat Nirman Rajiv Gandhi Seva Kendra (a local NGO), Batighar Nodal Upgraded Upper Primary School, The Lighthouse, Ama Anganwadi Kendra (Creche Centre), and so on. Apart from these available institutions in Ward No 10 of Batighar, there are a few nearby local institutions such as High School in Khola village, this is the school for the people of Ward No 10.



There is an NGO in the village as well. Sarat Chandra Das has started the organisation named Child Creativeness and Vocational Education Undertaking (CCVEU). Mr Das said that the organization is inactive nowadays due to petty politics in the village. He is the president of CCVEU.

There is a government school named Batighar Project Nodal UP School. Mr Das said that the school which was established in 1954. It was meant for the children of the staff of the Lighthouse at that time. There was also a health centre for the staff, which is dysfunctional nowadays. There is a new health centre working for the last 7-8 years for the whole village and panchayat in a PPP mode.



Photograph 5: School of the village

Caste Community in the Village

The village is divided into two major communities, i.e. Bengali and Odia. Though Odia is less in number, still they are dominant as they think they are original inhabitants whereas Bengalis are from either East Bengal (Bangladesh, then Pakistan) or West Bengal (India). Bengalis are mostly Gauda (Milkman), Chasha (Farmer) and Namasudra (Dalit) whereas Odias are Khandayats (Warrior) and Chasha (Farmer).

Sanitation System in the Village

Researchers studied the condition of sanitation, especially toilets in individual households and existing local institutions in Batighar village.

Individual Sanitation Facilities

Very few households in the village have latrines in their house. When we met Debabrata Maity³, Sarpanch of Batighar Gram Panchayat, he confessed that Batighar village has the least number of toilets in the Panchayat.



³ In a personal interview on 5 August 2018 in Barkolikhala. 24

home visits have had a positive effect among the people.

44

She shares interesting facts about toilets in the village. She said that even though a few households have toilets but they do not use them. The village is open and sandy. Hence, it does not seem dirty. There are no poisonous snakes so, most of the villagers go for open defecation. Though it creates health problem such as urinal infection and worms, people do not care take these seriously as it does not create problems like diarrhea, Children are not taught to wash their hands properly. Though there are women self-help groups (WSHGs) in the village, they are limited to monetary transaction and not promoting sanitation messages. Pratima says that if she is invited, she will definitely go to the meetings of WSHGs and inform women about benefit of using toilets. She suggests that focus group discussions will be effective and beneficial.

Haren Jena, a local political activist said that people have not got toilets under the scheme as most of the villagers do not having land patta or SCC patta. Few villagers do not even have their name in the census data. People in the sanitation office at block level ask money for drinking wine. 50 people have constructed latrine out of which only 20-30 people have got their money under the scheme. Haren Jena says sometimes, he has to visit the block sanitation office3-4 times to request to pass the toilet bills. He says they even prepare food for the officers when they visit the village for inspection; even then they don't work! He said all this is due to lack of leadership at the at Panchayat level; besides there are 4-5 groups within ruling party, so, the government officers are not responding to them!

Researchers met Akshay Mohanty, 64 year old villager on August 19, 2018 and discussed about status of toilets in the village. Akshay was a teacher, who took voluntary retirement. Nowadays, he writes drama of religious, historic and fantasy genre. He spoke about stories from the epic - Ramayan. He said he has written a few fantasies from the Ramayan like Chha Dafaa (Six Cases), Sunara Harini (Golden Dear), etc. He joked about writing a fantasy on Toilet Stories by drawing a plot that Sita, the heroine of Ramayan was kidnapped by Ravana, the villain when Sita had gone to the field for open defecation. A few school students and women who were present in the meetingfound the story line very funny indeed!



Photograph 8: Akshay Mohanty's half-constructed toilet

Akshay Mohanty has constructed a toilet by spending 11000 rupees, though he has not received any payment under the scheme. As his name is in the BPL list, he expects that he will get support from the government. He has saved 1000 rupees to give as bribe to get the scheme. He says everyone is corrupt, whether you are a Bengali or an Odia.

Though Sarat Chandra Das is a social worker and runs an NGO, he does not have a toilet. He says that wild boar and crocodiles are creating problem as the Kansardia forest block (Wild Life 1972) is closeby. He has no intention to stay hereSo, no toilets. Das has a pacca house and says that more than 30 percent people have pucca houses and water is not an issue as the villagers get good quality groundwater.

Institutional Sanitation Facilities



After discussing with the institutional heads of the various village level institutions, it was found that sanitation condition of the institutions is in pretty poor conditions. Sapan Kumar Pramanik, who is in-charge and is the head master of the Batighar Nodal Upgraded Upper Primary School told the researchers that there are five classrooms for eight classes. There is a multi-purpose building nearby, which was constructed under Corporate Social Responsibility (CSR) head of Rourkela Steel Plant (RSP). A few of the rooms of the multi-purpose building are also used for the school activities especially taking classes. Though the building was a well-constructed and useful for the school, there are no toilets attached to the building.



A villager and member of the school committee said that while there are no adequate classrooms to at, asking about the toilet in the school is irrelevant. However, there is a toilet in the school, which was constructed from the head of the school improvement grant. But, there is no urinal. There are more than 150 students in eight classes in the school. They go outside the school to urinate. Hence, a few of them have urinary infection regularly. It is observed from the school cabinet (Photograph 9) that sanitation is a subject of least concern to the villagers.



There are two mobile toilets in the campus of the Light House. The toilets are constructed by Elefo Biotech Private Limited and sponsored by the Defence R & D Organization.

Conclusions

Due to implementation of the scheme, there is awareness among the villagers. However, it is lacking as right message is not delivered properly through appropriate media to the villagers at local level. Low family income, and week state mechanism is also a hindrance for proper implementation of the schemes. It is observed that there is no gap between possession of toilet and use of it. Coming out of conventional mindset for doing open defecation is another challenge for sanitation in the village. It was found that the key people in the village have well-furnished toilets. It was also observed that power structure, corruption, religious practices influence whether a person can have or not have a toilet and use it. Toilet stories of the village also reveal the power structure of the village as well. It also affects health of the people; especially those that are in the poorest of the poor strata in the village. A few of the villagers are frustrated looking at the petty politics around rural sanitation system, especially distribution of toilets in the village. There is also social change from the lens of the villagers, though it is slow. There is hardly any IEC materials found in the houses of the village. Though there are a few wall paintings in the village for promotion of various government schemes, there is hardly any wall painting of the toilet scheme. Local governance, especially the Gram Panchayat is pretty inactive in governing sanitation programme properly. Livelihood and level of education also affect the implementation of the toilet scheme in the village. The poor implementation of the schemeis affecting the health of the villagers. As the village is divided among language groups such as Odia and Bengali, caste system does not play a prominent role. However, voice of women is negligible in the patriarchal family structure. The women's silence may be one of the reasons for poor implementation of the scheme. The scheme is sure to be successful If the local government promotes and implements the central scheme properly by creating awareness among the villagers. Nevertheless, social construction of reality is affecting physical construction of the toilets. And we cannot dream a civilised society without proper sanitation.

References

- Agoramoorthy, G. & Hsu, M. J. 2009. India Needs Sanitation Policy Reform to Enhance Public Health.

 Journal of Economic Policy Reform, 12(4), 333-342.
- Arulchelvan, S. & Maheswari, U. 2013. Integrated Communication Strategy for Creating Awareness on Sanitation and Hygiene Behavior Change. International Journal of Communication and Health, 14(1), 53-59.
- Chambers, R. 1994. The Origins and Practice of Participatory Rural Appraisal. World Development, 22(7), 953-969.
- Chambers, R. & Medeazza, G. V. 2013. Sanitation and Stunting in India. Economic & Political Weekly, 48(25), 15-18.
- Chatrath, K. J. S. 2010. True Story of False Point. The Tribune, May 9. Retrieved from http://www.tribuneindia.com/2010/20100509/spectrum/main6.htm
- Dickinson, K. L., Patil, S. R., Pattanayak, S. K., Poulos, C. & Yang, J. H. 2015. Nature's Call: Impact of Sanitation Choices in Orissa, India. Economic Development and Cultural Change, 64(1), 1-29.

 Directorate of Census Operations, Odisha. 2011. Census of India 2011: Odisha: District Census Handbook Kendrapara.
- Frowde, H. 1908. The Imperial Gazetteer of India, Volume XII. Oxford: The Clarendon Press.
- Ghosh, G. (1995). Water Supply in Rural India: Policy and Programme. New Delhi: Ashish Publishing House.

Harisson, M. 1998. Public Health and Medicine in British India: An Assessment of the British Contribution. Retrieved from

https://pdfs.semanticscholar.org/bc7b/49774183d5b55e9dcfeac690d9417955f112.pdf

Kumar, A. 2017. Beyond Toilets and Targets: Sanitation Mission in India. Development in Practice, 27(3), 408-413.

- Mosse, D. 1994. Authority, Gender and Knowledge: Theoretical Reflections on the Practice of Participatory Rural Appraisal. Development and Change, 25(3), 497-526.
- Narayanasamy, N. 2009. Participatory Rural Appraisal: Principles, Methods and Application. Sage Publications India Pvt. Ltd.
- O'Reilly, K., Dhanju, R. & Goel, A. 2017. Exploring "The Remote" and "The Rural": Open Defecation and Latrine Use in Uttarakhand, India. World Development, 93, 193-205.
- Pathak, B. 1995. History of Toilets: Exploring History of Sanitation and Hygiene. Paper presented at the International Symposium on Public Toilets held in Hong Kong on 25-27 May 1995. Retrieved from http://www.sulabhtoiletmuseum.org/history-of-toilets
- Ramasubban, R. 1982. Public Health and Medical Research in India: their Origins and Development under the Impact of British Colonial Policy. Sarec Report R4, Stockholm: Swedish Agency for Research Cooperation with Developing Countries.
- Richardson, L. (1988). The Collective Story: Postmodernism and the Writing of Sociology. Sociological Focus, 21(3), 199-208.
- Roy, D. 2012. Rapid Appraisal of Rural Water and Sanitation Sector in Orissa. Retrieved at http://www.nrhmorissa.gov.in/writereaddata/Upload/Documents/27.%20Rapid% 20Appraisal%20ODISHA%20WASH%20Sector%20(Final) Dipak-.pdf
- Roy, S. N. & Jhingta, S. 2018. School Sanitation in Odisha. Centre for Policy Research.Retrieved http://www.indiaenvironmentportal.org.in/files/file/School%20Sanitation%20in% 20Odisha.pdf Stopnitzky, Y. 2017. No Toilet No Bride? Intrahousehold Bargaining in Male-Sewed Marriage

at

Markets in India. Journal of Development Economics, 127, 269-282.

UNICEF (2002). Learning from Experience. Water and Environmental Sanitation in India. New York: UNICEF. Retreived from https://www.unicef.org/publications/files/pub_wes_en.pdf

Annexure - I

Name of People for Exclusive Interview

1.		Kaberi Jena, Ward-member, Ward Number 10
2.		Pratima Pani, ASHA Worker, Batighar Village
3.		Nirmala Behera, Anganwadi Worker, Batighar Village
4.		Sarat Chandra Das, Social Worker, Batighar Village
5.		Haren Jena (Age 40), Social Worker
б. 7.	School	Sapan Kumar Pramanik, Head Master I/C, Batighar Nodal Upgraded Upper Primary School Health and Sanitation Minister, School Cabinet, Batighar Nodal Upgraded Upper Primary
3.	3011001	Pabitra Kumar Sahoo, Pharmacist, Primary Health Centre (N), Batighar
9.		Panchayat Secretary, Batighar Panchayat
10.		Debabrata Maity, Sarpanch, Batighar Gram Panchayat
11.		Block Development Officer (BDO), Mahakalapara Block, Kendrapara
12.		Project Director, District Rural Development Agencies (DRDA), Kendrapara

About the Authors



Bhusan Dash, PhD is a scholar of Media and Studies in developing India. He understood media rural South Asia from the perspectives of caste, minority,

and power. His academic training, grassroots engagement well as teaching and research experiences from Tata Institute of Sciences, Indian Institute of Management Kashipur, Phule Pune University, and ActionAid India helped him

to understand strategic use of media and communication for resource management and development in South Asian society. He has done extensive in the fieldworks in backward regions of Odisha, Madhya Pradesh, Uttar Pradesh, Uttarakhand and Maharashtra in India, Chittagong region in Bangladesh, and London in United Kingdom during various research assignments. He is CRY National Child Rights Research Fellow for the year 2013-14 and Charles Wallace India Trust Visiting Fellow at School of Oriental and African Studies (SOAS), University of London for the year 2015-16. He has written a number of research articles in the Asia Pacific Media Educator, Journal of Development Communication and so on. He is also a regular contributor in the CR News. He has presented research papers in about 40 international and national platforms like International Institute of Social Studies (The Hague, The Netherlands), The University of Warwick (United Kingdom), University of Kelaniya (Colombo, Sri Lanka), International Association for Media and Communication Research, Indian Institute of Science (Bangalore), Indian Institute of Management Calcutta, University of Hyderabad and so on. He has also participated in the workshops and schools in Indira Gandhi Institute of Development Research (Mumbai), Indian Institute of Advanced Study (Shimla), Praxis and so on. He was the editor of in-house magazine of Utkal University during his postgraduate days. He is a life member of International Indecency Prevention Movement and Indian Sociological Society. His current research concerns ranges from Development Communications to Communications Management and Media in Everyday Life. His particular research interests are use of ICT, Community Radio, Social Media, etc. for social change, development and empowerment of the marginalized communities in developing world. Presently, Dr Dash is working as Assistant Professor and Course Coordinator in the School of Mass Communication, KIIT Deemed to be University, Bhubaneswar.



Satpathy, PhD did PhD from the School of Rural Development in Tata Institute of Social Sciences in Mumbai. Her doctoral research is on livelihood and conservation issues in rural areas, especially in protected areas in Odisha. She has been continously working on social change and rural issues, since a decade. In her masters in Rural Development, she has worked on 'Sanitation and safe drinking water: A comparative study of

two villages in Puri district'. She has worked in regional and national level non-profit organisations in various capacities. She has presented her research works in several national and international conferences. She has also worked in various projects in different capacities during her doctoral research tenure. In her MPhil she has analysed the Forest Rights Act implementation in Mayurbhanj district of Odisha and later this work has been published in International peer-reviewed journals i.e. International Journal of Rural Management (IRMA journal published by Sage) and South Asia Research (SOAS journal published by Sage). Her research interests encompass rural local governance, natural resource management, rural livelihood and sustainable development. Presently Dr Satpathy is working as an Assistant Professor in the Department of Humanities and Social Sciences in GITAM School of Gandhian Studies in GITAM Deemed to be University, Visakhapatnam.

Awareness of Life Skills Among Rural Primary School Students:

A Study In The Kangra District Of Himachal Pradesh

Abstract

India as a nation is multi cultural and a complex society. In any nation, the young people embrace the promise of the future and our demographic force. These young people come with a lot of inner conflicts and emotions. It is here that life skills play a crucial role. Pre adolescence and adolescence is the right age to start imparting these skills as this is a distinguishing developmental phase of life in terms of intellectual, social, emotional and physical development. Children need to learn how to cope with instantaneous change and Life Skills enable them to take on the challenges of life with confidence and courage.

A skill is a learned ability to do something well. Life Skills are the abilities that individuals can develop to live a productive life. Life Skills are psychosocial abilities that enable individuals to translate knowledge, attitudes and values regarding their concerns into well informed and healthy behaviours. After empowering with the life skill students are able to take decisions on "what to do, why to do, how to do and when to do"

The National Curriculum Framework (NCF) 2005 has emphasised on constructive learning experiences, and on the development of an inquiry-based approach, work-related knowledge and broader life skills. However, there are certain difficulties in successfully integrating life skills in Indian school education without systemic reform. To be effective, life skills ultimately need to be age-aligned, and inculcated in schools that are inclusive, with trained and motivated teachers who can employ participatory and experiential teaching practices.

Dr Anu G S has undertaken this research in the Kangra district of Himachal Pradesh to explore the awareness of the concept of life skill among the rural primary school in the state. This study aims to help and suggest various measures for its effective functioning and imparting of Life Skills in primary schools.

Keywords: Life Skills, Adolescence, Primary Education, Cognitive Life Skills, Psycho-Social Life Skills Emotional Life Skills

Introduction

Background of the Study

Himachal Pradesh is an Indian state located in the extreme northern part of the Asian sub-continent. The state is bounded by Jammu and Kashmir to the north, Uttarakhand to the south-east, Haryana to the south, the Tibet autonomous region of China to the east and Punjab to the west. The population of the Himachal Pradesh is composed of a variety of distinct ethno linguistic groups and social castes. The most prominent communities are Gaddi, Gujari, Kinnauri, Lahuli and Pangwali. Since the late 20th century Himachal Pradesh has made great efforts to expand its education and consequently there has been a remarkable rise in the number of primary, secondary and post secondary institutions and a corresponding increase in enrollment at all level.

Kangra district is situated on the southern escarpment of the Himalayas. It is encapsulated in the north by the districts of Chamba and Lahul and Spiti, in the south by Hamirpur and Una, in the east by Mandi and in the west by Gurdaspur districts of Punjab. An official census 2011 revealed that average literacy rate of Kangra was 85.67 out of which male literacy rate is 91.49 and female literacy rate is 80.02.

According to Mahatma Gandhi by education I mean an all-round drawing out of the best in child and man-body, mind and spirit. Literacy is not the end of education or even the beginning."M. K. Gandhi [Harijan: July 31, 1937]. Swami Vivekananda also quoted that Education is the manifestation of perfection already in man. In the educational psychology the definition of education was the all-round development of the personality. This all shows that education is not knowledge seeking/ applying knowledge but a process of crafting as a good human to adapt to the challenges and demands of the society. In order to achieve this broad goal or vision the role of life skill education, training and development becomes significant. In any nation, the young people embrace the promise of the future and our demographic force. As our students are living in a multicultural and complex society, most of them come to the educational institutions with lot of inner conflicts and unbalanced emotions. Hence, in order to empower our young people to live in a healthy and balanced way and to mould them as good human beings, life skill education is very important. The life skills approach promises to contribute to the well-being of our young and empower them to meet the many challenges of life. Primary school ranges from class I to Class VII and it is just before the period of adolescence. It is a distinguishing developmental phase of life in terms of intellectual, social, emotional and physical development. As the life situation becoming more complex and challenging in every day there is a great need for the next generation to learn how to cope with instantaneous change. Life Skills enable our children to take on the challenges of life with confidence and courage. Acquisition of Life Skills by students enables them to deal effectively with life's challenges and stressful moments with a sense of calm.

Conceptual Overview of the Study

A skill is a learned ability to do something well. Life Skills are the abilities that individuals can develop to live a productive life. Life Skills are psychosocial abilities that enable individuals to translate knowledge, attitudes and values regarding their concerns into well informed and healthy behaviours. After empowering with the life skill students are able to take decisions on "what to do, why to do, how to do and when to do" (CBSE, 2013, p.4). World Health Organisation (WHO) defines Life Skills as "the abilities for adaptive and positive behaviour that enable the individuals to deal effectively with the demands and challenges of everyday life". In this definition 'adaptive' means that a person is flexible in approach and is able to adjust in different circumstances and 'positive behaviour' implies that a person is forward looking and even in challenging situations, can find a ray of hope. UNICEF defines life skill as a behaviour change or behaviour development approach designed to address a balance of three areas: knowledge, attitudes and skills.

WHO has identified ten core Life Skills. They are described below

(A). Cognitive Life Skills

Cognitive Life Skills proposed by WHO Included Creative Thinking, Critical Thinking, Decision Making and Problem Solving.

(1). Creative Thinking

It is a novel way of seeing or doing things that is characteristic of four components such as fluency (generating new ideas), flexibility (shifting perspective easily), originality (conceiving of something new), and elaboration (building on others' ideas).

(2). Critical Thinking

It is an ability to analyze information and experiences in an objective manner. Critical Thinking can contribute to a well-balanced way of life by helping us to recognize and assess the factors that influence attitudes and behaviour, such as values, peer pressure and the media.

(3). Decision Making

Decision Making helps us to deal constructively with decisions about our lives. It can teach people how to actively make decisions about their actions in relation to a healthy assessment of different options and, what effects these different decisions are likely to have.

(4). Problem Solving

Problem Solving helps us to deal constructively with problems in our lives. Significant problems that are left unresolved can cause mental stress and give rise to accompanying physical strain.

(B). Psycho-Social Life Skills

Psycho Social Life Skills proposed by WHO Included Self awareness, Empathy, Interpersonal Skills and Effective communication skills.

(5). Self Awareness

Self awareness includes the recognition of 'self', our character, our strengths and weaknesses, desires and dislikes. Developing self awareness can help us recognize when we are stressed or under pressure. It is often a prerequisite to effective communication and interpersonal relations, as well as for developing empathy.

(6). Empathy

Empathy is required to develop a successful relationship with our loved ones and society at large. It is the ability to imagine what life is like for another person. Without empathy, our communication with others will amount to a one-way traffic. It can help us to accept others, who may be very different from ourselves. This can improve social interactions, especially, in situations of ethnic or cultural diversities.

(7). Interpersonal skills

Interpersonal Skills help us to relate in positive ways with people we interact. This may mean being able

to make and keep friendly relationships, which can be of great importance to our mental and social wellbeing. It may mean maintaining good relations with family members who are the most important source of social support. It may also mean an ability to end relationships constructively.

(8). Effective Communication

Effective Communication means that we are able to express ourselves, both verbally and non-verbally, in ways that are appropriate to our cultures and situations. This means being able to express opinions and desires, and also needs and fears. And, it would also mean being able to ask for advice and help in the time of need.

(C) Emotional Life Skills

Emotional Life Skill proposed by WHO includes Coping with stress and Managing Emotions.

(1) Coping with Stress

Coping with stress means recognizing the sources of stress in our lives, recognizing how they affect us, and how we act in a way that helps us control our levels of stress by changing our environment and reinforce each other. Together, they are responsible for our psychosocial competence; build our self-esteem and self efficacy and nurture holistic development (CBSE, 2013, pp.6-7).

Need and Significance of This Study

Education is the most essential vehicle towards prosperity which supports betterment of the life. Government of India has taken various procedures to empower the quality and quantity of primary schools for education of rural and unprivileged sectors. The National Curriculum Framework (NCF) 2005 has emphasised on constructive learning experiences, and on the development of an inquiry-based approach, work-related knowledge and broader life skills. Central Board of Secondary Education (CBSE), in 2005, introduced life skills education as an integral part of the curriculum through Continuous and Comprehensive Evaluation (CCE) for classes 6 to 10 and developed life skills manuals for teachers teaching classes 6, 7 and 8. These manuals provide teachers broad guidelines for each of the ten core life skills identified by WHO. Sarva Shiksha Abhiyan (SSA) also has, under its agenda, life skills training for girls in on upper primary classes. While there have been dispersed efforts around life skills, focus on curriculum integration and teacher development remains poor. Many of these efforts take a general approach to 'life skills information delivery' (sometimes more as moral/values education) without a particular context.

There are certain difficulties in successfully integrating life skills in Indian school education without systemic reform: Some of them are moving life skills from the margins to the centre of schooling and creating multiple learning opportunities or reinforcement within schools, introducing a learner-centric pedagogy, not solely reliant on rote learning or exam-based assessment, building a school culture toward life-skills based education, improving the capacity and motivation of teachers to develop and integrate such life skills into their classroom practice.

Life skills education in schools clearly needs to take place in the context of broader education system reforms. To be effective, life skills ultimately need to be age-aligned, and inculcated in schools that are inclusive, with trained and motivated teachers who can employ participatory and experiential teaching practices (CSE, 2015 pp.8-9).

As most of the Indian students are coming from the rural location of the different parts of our country the focus on rural education and an enquiry up on the awareness of the newly emerged concepts like life skill is the need of the hour. Himachal Pradesh is an Indian state having high literacy like in Kerala. In Himachal Pradesh government school are working very effectively which is not visible other Indian state. In this context the research is interested to explore the awareness of the concept of life skill among the rural primary school in the state and which could help them to suggest various measures for its effective functioning.

Statement of the Problem

Based on the rationale and need and significance of the study the research problem under enquiry has been entitled as

"Awareness of life skill among rural primary school students: A study in the Kangra district of Himachal Pradesh"

Objective of the Study

- 1. To explore the cognitive life skill among the rural primary school students in the Kangra district of Himachal Pradesh.
- 2. To explore the psychosocial life skill among the rural primary school students in the Kangra district of Himachal Pradesh.
- 3. To explore the emotional life skill among the rural primary school students in the Kangra district of Himachal Pradesh.

Delimitations of the Study

This study was a small research project (SRP) with a duration of two months. Hence, the study was limited to only the biggest district of the state Himachal Pradesh. In the Kangra district itself the study was limited to five tehsils for the collection of data. From these five tehsils 100 primary school students studying in ten rural primary schools were selected.

Scope of the Study

As life skill is a newly emerging area and recommended by WHO for implementation in the curriculum of developing countries like India an inquiry into the awareness of the same will help the researcher to generate the existing status and propose valid findings and suggestions for its successful implementation in future.

Review of Related Literature and Studies

Life skill has been an important area of interest for many researchers, curriculum planners, theorists, and practitioners in education and social science. There are abundant researches that have been conducted to highlight the importance & effectiveness of life skills education for the progress of students' cognitive, social and emotional development.

Life Skill: Development and its Implications in Life

Life skill development is a lifelong process which helps the individual to grow and mature; build confidence in one's decisions taken on the basis of adequate information and thought, and discover sources of strength within and outside. It is noteworthy that from times immemorial, every culture and society has invested in educating and empowering its younger generation to lead fulfilling and responsible lives. School education plays an important role in Life Skills Development among individuals, especially in current time when traditional mechanisms for passing on life skill are no longer adequate, considering the influences that shape a young individual's development. Therefore, school education has an abundant potential to provide them with varied experiences in their formative years. While transacting life skill education, students should be actively involved in a dynamic teaching and learning process. Life skills cannot be learned in abstract and theoretical way; rather they are better learnt when experienced by the learner themselves. The techniques used for teaching life skill are discussions, debate, role-play, brain storm, storytelling, songs and dances, drama, case study, miming, poetry and recitals, question and answer, games, working in small groups, simulation and demonstration (CBSE, 2013, pp. 8-11).

Life skill empowerment will help the individual to lead a successful and meaningful life. The following points show the traits which could be reflected through an empowered life skill.

- Creativity: Ability to think and create something new and different.
- Curiosity: state of being curious to learn more about something.
- Strong Relationships: Showing respect and kindness towards each other.
- High sense of Humour: The quality of being comic and the ability to bring smiles on others faces.
- Positive Attitude towards Life: State of being optimistic in life.
- Public Speaking: Speaking in influential and convincing manner to convey ideas to audience.
- Effective Communication: Ability to express effectively both verbally and non-verbally.
- Time Management: Ability to separate important from unimportant.
- Stress Management: Ability to cope with stress.
- Concentration: Directing one's mental powers and efforts towards a particular acitivity or problem. It enhances memory.
- Imagination: To think in new ways and coming up with fresh ideas.
- Reasoning: Ability to make sense of things and establishing facts.
- Listening Power: Being attentive to what others are speaking.
- Self Discipline: Ability to focus and act according to what is right rather than how you feel at that moment.
- Critical Thinking: Ability to analyze information in an objective manner.
- Decision Making: Dealing constructively with decision in our daily lives.
- Problem Solving: Dealing constructively with problems in our daily lives.
- Kindness: Doing good deeds for others.
- Leadership: Ability to influence other people.
- Open Mindedness: Being respective to new and different ideas and opinions of others (CBSE, 2013, pp. 15-1).

For the enhancement of life skill the classroom environment should be supportive. Some of the important aspects for these supportive elements are reflections of real life situations and contexts, collaboration among teachers, disciplines and students, encouragement of curiosity, exploration and investigation, responsibility for learning opportunities, acknowledgement of effort, not just performance and focus more on process than product or final presentation.

The role of teachers and facilitators in developing life skills differs from traditional instruction. They have to be a guide and friend to facilitate this learning. The following aspects promote life skills education development:

- · Requiring justification for ideas and probing for reasoning strategies,
- Confronting learners with alternatives and thought provoking questions,
- Asking open ended questions,
- Serving as a master of apprentices rather than a teacher of students as in vocational education,
- Using Socratic discussion techniques, enquiry and debate to stimulate critical thinking,
- Assigning simple assignments and projects based of life skills,

as an

independent subject as well as integrating it with other disciplines, providing opportunities for developing life skills, allowing students to practice the skills in different situations, as actual practice of skills is a vital component of life skills education. It is also important to seek the and participation of parents in developing right attitudes towards life among the students, as family is also one of the basic institutions that lay the foundation of life skills and acting as positive role models, as life skills are better caught than taught.

The Expected outcomes of life skills education which we can assess qualitatively and quantitatively after life skill education are enhanced self-esteem, self confidence, assertiveness, social sensitivity, effective listening and communication skills, ability to establish relationships, ability to plan and set clear, practical goals, making informed choices to serve the interests of self and others, negotiations skills for personal and social interests and becoming more responsible citizens (CBSE, 2013, pp. 10-11).

Studies Related to the Life Skills

Thote (2015) has conducted a study on the analysis of attitude of secondary school teachers towards inservice training programme of Life skills education in Central India. It is inferred that there is no critical distinction between Rural and Urban, Male and Female educators' mentality towards life skill education.

Deshmukh (2014) has determined the role of life skills training on emotional, educational and social adjustment among school children. The finding of the study revealed that a significant difference on the mean scores of the emotional, educational and social adjustment on before and after the intervention programme.

Jayachandran (2014) has studied on the Life Skill Awareness among Physically Challenged Adolescents of Thiruvananthapuram District. The study showed that among the physically challenged adolescents most of them have only average level of awareness on life skills and also in the awareness of life skill there is no significant difference between male and female adolescents.

Susan & Suprabha (2014) determined the importance of imparting life skills to children with special needs. This study focused on the children with developmental abilities and suggested that children need to be given special attention to equip them with the mainstream education.

A study conducted by **Khera and Khosla (2012)** found that there is a positive relation between core life skills and self idea of young people through yuva school life skills programme

Bindu & Shiny (2011) conducted a study on life skills and attitude towards vocation among the vocational higher secondary and higher secondary school students. The study is an attempt to find the Life Skills and Attitude towards Vocation and their relationship. The study showed that Life Skills and Attitude towards Vocation among the Vocational Higher Secondary and Higher Secondary School Student demonstrates an emphatically weaker relationship.

Rao et al. (2010) explored the significance of life skill education for the modification of behaviour among the juvenile delinquents. The findings of the study shows that Life skill education has changed the behavioural pattern of juvenile and found a significant improvement in the personality and life style.

In the article 'Life Skills for Enhancing Excellence in Education and Life Long Learning' **Singh (2010)** analyzed the initiative taken by the National Institute of Open Schooling (NIOS) for the integration of life skills training along with the curricula of adolescent students and found that the strategy was very effective for their future.

Yadav and **Iqbal** (2009) studied the impact of life skills training on self esteem, adjustment and empathy among adolescents. The findings revealed that the life skill training was found effective in improving the status of the sample in self esteem, emotional adjustment, total adjustment and empathy. No significant difference was found on social adjustment.

Niendorf (2007) studied college women athletes and the life skill they learned from competition. Researcher investigated the life skills which were used by the athletes and used by them in other areas of their life. Total thirteen life skills were identified which included academic and athletic implications. These can be used by the mentors to enlist the participation of the athletes.

Sallee (2007) examined perceived effectiveness of youth-adult partnerships on enhancing life skill development. Results revealed that the program proved helpful in enhancing life skills, youth perceive themselves as equal participant, having not much time was the most perceived obstacle that keeps youth from engaging in youth-adult partnerships and the program should be more interesting.

Gulati (2006) posted an article named Empowering Teachers and Children through Life Skills Training. It was a report of a life skills training for teachers which was organized by UNICEFF India in 2006 in collaboration with the Education Department of the Gujarat government. It was a four days interactive training program which covered ten life skills suggested by WHO. Results revealed that student- teacher relationships have become stronger and students have become more participative, creative and interactive.

Sharma (2003) conducted a study on measuring life skills of adolescents in a secondary school of Kathmandu. She concluded that most of the teachers were not aware of the concept of life skills. The paper further insists on life skill education to young people and will also help in their mental and physical development.

Powney, Lowden and Hall (2000) did an effort to see that which life skills are considered important by Scottish and English young people how they believe they can develop them, and how necessary they see them to their future life? It was found that communication and interpersonal skills are considered more important by the sample.

Garland (1999) investigated the perceived effectiveness of a life skills education program for youth. Results revealed the improvement in most of the skills by youth, parents and class teachers. It was reported by the class teachers that the children showed better performance many skill areas.

Brown (1989) implemented a Learning Program based on life skills to train mothers to live independently. This learning program has eight training sessions, which cover life skills were obtaining services, money management, employment, transportation, housing, meal preparation, home maintenance, leisure time activities. Results showed the improved life skills status and self image of mothers.

Reflections Based on the Review

Review of literature helps the researcher to identify the research gaps. Through the review of literature and studies the investigator felt a need for conducting a study on the awareness of life skill in the early periods of life that's why she has selected the primary schools in the rural areas of the state Himachal Pradesh. The researcher strongly believes that the study will open new avenues for empowering the status of rural primary school students of the state.

Research Design

Introduction

The research design used for the study was survey method. Survey research aims to provide a comprehensive, representative summary of specific characteristics, beliefs, attitudes, opinions, or behaviour patterns of a population. There are different methods of collecting survey information, such as in-person, phone, and e-mail questionnaires and interviews. Surveys are not simply exhaustive collections of statistics about specific traits of a population. Surveys are always conducted in response to particular research questions, generally qualitative in nature, and thus aim to collect only information that might be relevant to the study at hand. In educational research, surveys have been used to gather information on test scores in order to identify patterns of low achievement, to form impressions of new teachers' attitudes toward teaching, and to identify trends in student interests.

Research Design: An Overview

The method used for the study was descriptive in nature. Survey was the technique used for collection of data.

The population of the study covered all rural primary schools located in the different areas of the Kangra district of Himachal Pradesh. The Kangra district consists of twenty one Tehils. Using the lottery method of simple random samples five Tehils were identified and from each Tehils two primary schools were selected by the same simple random techniques. From each selected school ten students were selected and there by the total sample of the study consisted of hundred rural primary school students. The five tehsils selected for the study were Nagrota Bagwan, Jawali, Nurpur, Shahpur and Palampur.

The list of rural primary school students covering the five Tehils of Kangra district of Himachal Pradesh from where the hundred students were selected is given below:

- 1. Government Primary school Tharu, Nagrota Bagwan
- 2. Government Primary school Hatwas, Nagrota Bagwan
- 3. Government Primary school Kuther, Jawali
- 4. Government Primary school Bhali, Jawali
- 5. Government Primary school Jaunta, Nurpur
- 6. Government Primary school Mao, Nurpur
- 7. Government Primary school Siholpuri, Shahpur
- 8. Government Primary school Sihwan, Shahpur
- 9. Government Primary school Darang, Palampur
- 10. Government Primary school Paraur, Palampur

The photographs of the above school from where data was collected is shown in **Appendix A.** The principle investigator has prepared a life skill awareness test and which was validated with the help of experts. The awareness test was prepared based on the reference taken from the assessment criteria given by central board of secondary education (CBSE) and also by referring other scholarly articles in journals and thesis. Likert method of item preparation, validation and standardization of research tool has been followed. Both validity and reliability of test items were calculated and ensured high validity and reliability.

The items used for finding the life skill awareness are shown in the **Appendix B.**

Analysis of the Data

The collected data were sorted into three domains of the life skill such as cognitive, psycho-social and emotional. Under the cognitive domain; four life skills such as creative thinking, critical thinking, decision making and problem solving life skill were analyzed separately for boys and girls. In psychosocial domain the analysis was made for both boys and girls on the four life skill such as self awareness, empathy, interpersonal skill and communication skill. In the domain of emotional life skills; the life skill such as coping with stress and managing emotions were analyzed for boys and girls among the rural primary schools of the Kangra district of Himachal Pradesh. The findings, conclusions and suggestions were derived based on the collected data.

Field Work Diary: An Overview

A one month field work report was prepared based on three phases. The collection of data from 100 rural primary school students covering the 10 rural primary schools from 05 tehsils of the Kangra district of Himachal Pradesh has been done in three phases.

Phase one- Planning Phase for the 10 schools
Phase two- Implementation phase for the 10 schools
Phase Three- Evaluation phase for the 10 schools
The duration of this period was from January 15th 2019 to February 15th 2019.

Phase one – Planning for data collection from 10 Schools using simple random sampling (Day 1 to Day 10)

- Day 1- Government Primary school Tharu, Nagrota Bagwan
- Day 2- Government Primary school Hatwas, Nagrota Bagwan
- Day 3- Government Primary school Kuther, Jawali
- Day 4- Government Primary school Bhali, Jawali
- Day 5- Government Primary school Jaunta, Nurpur
- Day 6- Government Primary school Mao, Nurpur
- Day 7- Government Primary school Siholpuri, Shahpur
- Day 8- Government Primary school Sihwan, Shahpur
- Day 9- Government Primary school Darang, Palampur
- Day 10- Government Primary school Paraur, Palampur

Phase two - Data Collection from 10 Schools (Day 11 to Day 20)

- Day 11- Government Primary school Tharu, Nagrota Bagwan
- Day 12- Government Primary school Hatwas, Nagrota Bagwan
- Day 13- Government Primary school Kuther, Jawali
- Day 14- Government Primary school Bhali, Jawali
- Day 15- Government Primary school Jaunta, Nurpur
- Day 16- Government Primary school Mao, Nurpur
- Day 17- Government Primary school Siholpuri, Shahpur
- Day 18- Government Primary school Sihwan, Shahpur
- Day 19- Government Primary school Darang, Palampur
- Day 20- Government Primary school Paraur, Palampur

Phase two -Evaluation of the collected data from 10 Schools (Day 21 to Day 30)

- Day 21- Government Primary school Tharu, Nagrota Bagwan
- Day 22- Government Primary school Hatwas, Nagrota Bagwan
- Day 23- Government Primary school Kuther, Jawali
- Day 24- Government Primary school Bhali, Jawali
- Day 25- Government Primary school Jaunta, Nurpur
- Day 26- Government Primary school Mao, Nurpur
- Day 27- Government Primary school Siholpuri, Shahpur
- Day 28- Government Primary school Sihwan, Shahpur
- Day 29- Government Primary school Darang, Palampur

Conclusion

The method used for the study, the population defined and the sample selected for the collection of the data, the description about the tools used and the procedures adopted for analyzing the data and the overview of the one month field work including the planning, implementation and evaluations sounds a comprehensive and empirical way of the design of the study. In every steps and phase the investigator has taken proper care to maintain the quality of the data.

Analysis and Interpretation of Data

Introduction

This chapter describes the analysis and interpretation of the collected data. Analysis of data means studying the tabulated material in order to determine inherent facts or meanings. It involves breakdown existing complex factors into simpler parts and putting the parts together in new arrangements for the purpose of interpretation. Good (1963) suggests four helpful modes to analyze the gathered data. They are; to think in terms of significant tables that data permit, to examine carefully the statement of the problem and the earlier analysis and to study the original record of the data, to get away from the data and to think about the problem in layman's terms or discuss the problem with others and to attack the data by making various simple statistical calculations.

For the clarity of derivation of the findings based on the stipulated objectives of the research, the entire analysis and interpretation of the collected data has been divided into three sections namely:

- The analysis of the data based on the various *Cognitive life skills* such as Creative thinking, Critical thinking, Decision making and Problem solving
- The analysis of the data based on the various **Psycho Social life skills** such as Empathy, Interpersonal Skill, Self awareness and Effective Communication Skills
- The analysis of the data based on the various *Emotional life skills* such as Coping with Stress and Managing Emotions

The analysis of the data based on the various *Cognitive life skills* such as Creative thinking, Critical thinking, Decision making and Problem solving are described below

This section describes the analysis of the data based on the four cognitive life skills. Each of the cognitive life skills has been separately analyzed for finding the level of life skill awareness on both boys and girls of various rural primary schools located in and around the Kangra district of the Himachal Pradesh.

Analysis of data based on the Creative Thinking Life Skill

Table (1): Data and Result showing the Creative Thinking among
Rural Primary School students

	LIFE SKILL AWARENESS							
CATEGORY	HIGH		MEDIUM		LOV	V	CATEGORY	
	COUNT	%	COUNT	%	COUNT	%	COUNT	

Boys (N=44)	42	95.45	2	4.55	0	0.00	44
Girls (N=56)	55	98.21	1	1.79	0	0.00	56
TOTAL	97	-	3	-	0	-	100

Table (1) shows the data and result showing the creative thinking life skill among the rural primary school students in the Kangra district of Himachal Pradesh. The study shows that out of 44 boys 95.45% of boys and out of 56 girls 98.21% of girls have high awareness about creative thinking life skill. It also shows that both boys and girls have medium /low level awareness of the creative thinking life skillThe analysis of the study revealed that among the rural primary school students in the Kangra district of Himachal Pradesh the creative thinking life skill is high and which could help them in their academic and personal life.

The Graph showing the result of the analysis of data on creative thinking life skill among the boys and girls from the different schools of the Kangra district of Himachal Pradesh is shown below

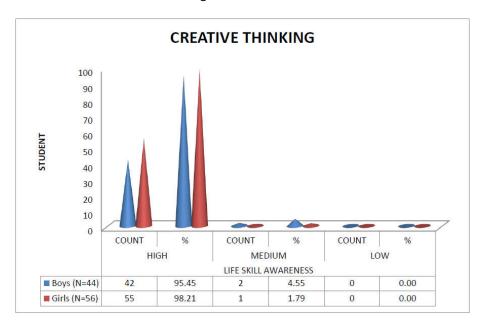


Figure 1: The Graph showing the result on creative thinking life skill among rural students

4.1.2. Analysis of data based on the Critical Thinking Life Skill

Table (2) Data and Result showing the Critical Thinking among Rural Primary School students

		TOTAL					
CATEGORY	HIGH		MEDIU	М	LOW		CATEGORY
	COUNT	%	COUNT	%	COUNT	%	COUNT
Boys (N=44)	36	81.82	8	18.18	0	0.00	44
Girls (N=56)	43	76.79	13	23.21	0	0.00	56
TOTAL	79		21		0		100

Table (2) shows the data and result showing the critical thinking life skill among the rural primary school students in the Kangra district of Himachal Pradesh. The study shows that out of 44 boys 81.82% of boys and out of 56 girls 76.79% of girls have high awareness of critical thinking life skill. It also shows that in the critical thinking life skill very few percentage of students (both boys and girls) have medium /low level awareness in this skill. The analysis of the study revealed that among the rural primary school students in the Kangra district of Himachal Pradesh the critical thinking life skill is high and which could also help them in their academic and personal life.

The Graph showing the result of the analysis of data on critical thinking life skill among the boys and girls from the different schools of the Kangra district of Himachal Pradesh is shown below:

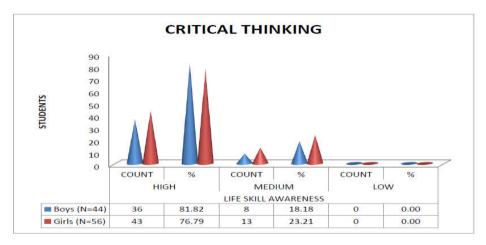


Figure 2: The Graph showing the results of critical thinking life skill among rural students

Analysis of the data based on the Decision Making Life Skill

Table (3): Data and Result showing the Decision Making among Rural Primary School students

	LIFE SKILL AWARENESS						TOTAL	
CATEGORY	HIGH		MEDIUM		LOW		CATEGORY	
	COUNT	%	COUNT	%	COUNT	%	COUNT	
Boys (N=44)	38	86.36	4	9.09	2	4.55	44	
Girls (N=56)	49	87.50	5	8.93	2	3.57	56	
TOTAL	87		9		4		100	

Table (3) shows the data and result showing the decision making life skill among the rural primary school students in the Kangra district of Himachal Pradesh. The study shows that out of 44 boys 86.36% of boys and out of 56 girls 87.50% of girls have high awareness on decision making life skill. It also shows that in the decision making life skill very few percentages of students on both boys and girls have medium /low level awareness in this skill. The analysis of the study revealed that among the rural primary school students in the Kangra district of Himachal Pradesh the decision making life skill is high and which could help them to take effective decision in their academic and personal life.

The Graph showing the result of the findings on decision making life skill among the boys and girls from the different schools of the Kangra district of Himachal Pradesh is shown below:

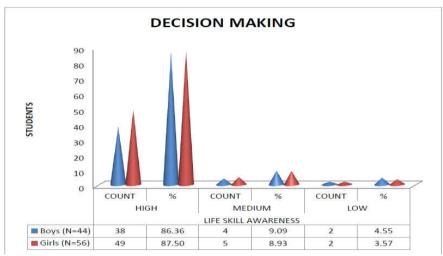


Figure 3: The Graph showing the result of decision making life skill among rural students

Analysis of data based on the Problem Solving Life Skill Table (4): Data and Result showing the Problem Solving among Rural Primary School students

4): Data and Result snowing the Problem Solving among Rural Primary School students									
		LIF	E SKILL AWA	TOTAL					
CATEGORY	HIG	Н	MEDIU	M	LOW		CATEGORY		
	COUNT	%	COUNT	%	COUNT	%	COUNT		
Boys (N=44)	41	93.18	3	6.82	0	0.00	44		
Girls (N=56)	53	94.64	3	5.36	0	0.00	56		
TOTAL	94		6		0		100		

Table (4) shows the data and result showing the problem solving life skill among the rural primary school students in the Kangra district of Himachal Pradesh. The study shows that out of 44 boys 93.18% of boys and out of 56 girls 94.64% of girls have high awareness of problem solving life skill. It also shows that in the problem solving life skill very few percentages of students (both boys and girls) have medium /low level awareness in this skill. The analysis of the study revealed that among the rural primary school students in the Kangra district of Himachal Pradesh the problem solving life skill is high and which could help them in solving their problems coming in the academic and personal life.

The Graph showing the result of the analysis on problem solving life skill among the boys and girls from the different schools of the Kangra district of Himachal Pradesh is shown below

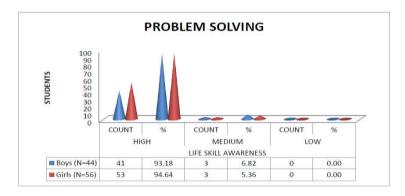


Figure 4: The Graph showing the result of problem solving life skill among rural students

4.2. The findings of the study based on the various *Psycho Social life skills* such as Empathy, Interpersonal Skill, Self awareness and Effective Communication Skills are described below.

This section describes the analysis of the data based on the four psycho social life skills. Each of the psycho social life skills has been separately analyzed for findings the level of life skill awareness on both boys and girls of various rural primary schools located in and around the Kangra district of the Himachal Pradesh.

Analysis of data based on the Empathy Life Skill

Table (5): Data and Result showing the Empathy among Rural Primary School students

CATEGOR	LIFE SKILL AWARENESS CATEGOR							
Υ	HIGH		MEDIUI	MEDIUM			CATEGOR	
	COUNT	%	COUNT	%	COUNT	%	Y COUNT	
Boys (N=44)	23	52.27	19	43.18	2	4.55	44	
Girls (N=56)	38	67.86	16	28.57	2	3.57	56	
TOTAL	61		35		4		100	

Table (5) shows the data and result showing the empathy life skill among the rural primary school students in the Kangra district of Himachal Pradesh. The study shows that out of 44 boys 52.27% of boys and out of 56 girls 67.86% of girls have high awareness of empathy life skill. It also shows that girls have more empathy than boys. It is also found that 43.18 % of boys and 28.57 % of girls have medium level awareness in empathy. The analysis of the study revealed that among the rural primary school students in the Kangra district of Himachal Pradesh the empathy life skill is high for girls compared to the boys.

The Graph showing the result of the analysis on empathy life skill among the boys and girls from the different schools of the Kangra district of Himachal Pradesh is shown below:

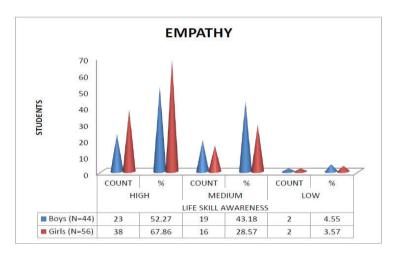


Figure 5: The Graph showing the result of empathy life skill among rural students

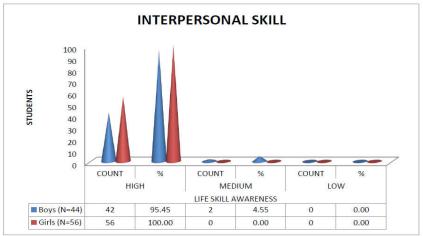
Analysis of data based on the Interpersonal Life Skill

Table (6): Data and Result showing the Interpersonal Skill among Rural Primary students

CATEGORY	HIG		MEDIUM		LOW		TOTAL CATEGORY
	COUNT	%	COUNT	%	COUNT	%	COUNT
Boys (N=44)	42	95.45	2	4.55	0	0.00	44
Girls (N=56)	56	100.00	0	0.00	0	0.00	56
TOTAL	98		2		0		100

Table (6) shows the data and result showing the interpersonal life skill among the rural primary school students in the Kangra district of Himachal Pradesh. The study shows that out of 44 boys 95.45% of boys and out of 56 girls all the them have high awareness on interpersonal life skill. It also shows that for the interpersonal life skill very few percentage of students (both boys and girls) have medium /low level awareness of this skill. The analysis of the study revealed that among the rural primary school students in the Kangra district of Himachal Pradesh the interpersonal life skill is high and which could help them in their personal and social life.

The of the life girls of the



Graph showing the result findings on interpersonal skill among the boys and from the different schools Kangra district of Himachal Pradesh is shown below:

Figure 6: The Graph showing the result of interpersonal life skill among rural students

Analysis of data based on the Self Awareness Life Skill

Table (7): Data and Result showing the Self Awareness among Rural Primary students

LIFE SKILL AWARENESS							TOTAL
CATEGORY	HIGH		MEDIUM		LOW		CATEGORY
	COUNT	%	COUNT	%	COUNT	%	COUNT
Boys (N=44)	31	70.45	11	25.00	2	4.55	44
Girls (N=56)	45	80.36	10	17.86	1	1.79	56
TOTAL	76		21		3		100

Table (7) shows the data and result showing the self-awareness life skill among the rural primary school students in the Kangra district of Himachal Pradesh. The study shows that out of 44 boys 70.45% of boys and out of 56 girls all the 80.36% of girls have high awareness of the self-awareness life skill. It also shows that in the some of the student's both boys and girls have medium /low level awareness of this skill. The analysis of the study revealed that among the rural primary school students in the Kangra district of Himachal Pradesh the self awareness is high and is more for girls than the boys

The Graph showing the result of the analysis on Self-awareness life skill among the boys and girls from the different schools of the Kangra district of Himachal Pradesh is shown below:

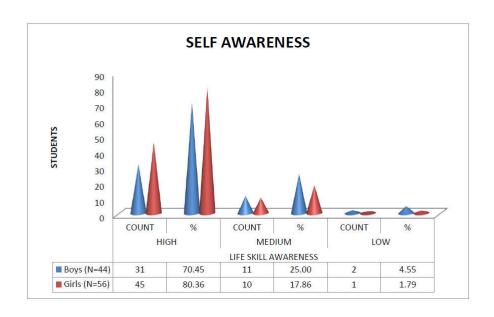


Figure 7: The Graph showing the result of Self-awareness life skill among rural students

Analysis of data based on the Effective Communication Life Skill

Table (8): Data and Result showing the Communication Skill among Rural students

		LIFE SKILL AWARENESS					TOTAL
CATEGORY	HIGH		MEDIU	M	LOW		CATEGORY
	COUNT	%	COUNT	%	COUNT	%	COUNT
Boys (N=44)	39	88.64	5	11.36	0	0.00	44
Girls (N=56)	50	89.29	6	10.71	0	0.00	56
TOTAL	89		11		0		100

Table (8) shows the data and result showing the Effective communication life skill among the rural primary school students in the Kangra district of Himachal Pradesh. The study shows that out of 44 boys 88.64% of boys and out of 56 girls all the 89.29% of girls have high awareness of effective communication life skill. It also shows that in the some of the student's; both boys and girls have medium /low level awareness of this skill. The analysis of the study revealed that among the rural primary school students in the Kangra district of Himachal Pradesh the effective communication life skill is high for both boys and girls.

The Graph showing the result of the findings on Effective Communication life skill among the boys and girls from the different schools of the Kangra district of Himachal Pradesh is shown below

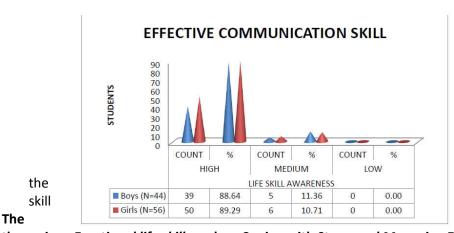


Figure 8: The Graph showing result of Communication life among rural students findings of the study based on

the various *Emotional life skills* such as Coping with Stress and Managing Emotions are described below This section describes the analysis of the data based on the two emotional life skills. Each of the emotional life skills has been separately analyzed for findings the level of life skill awareness for both boys and girls of various rural primary schools located in and around the Kangra district of the Himachal Pradesh.

Analysis of data based on the Managing Emotions Life Skill

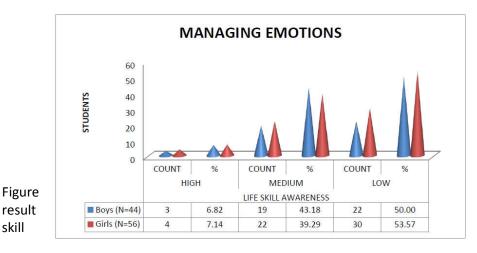
Table (9): Data and Result showing the Managing Emotions among Rural Primary students

LIFE SKILL AWARENESS	TOTAL

CATEGORY	HIGH		MEDIUM		LOW		CATEGORY
	COUNT	%	COUNT	%	COUNT	%	COUNT
Boys (N=44)	3	6.82	19	43.18	22	50.00	44
Girls (N=56)	4	7.14	22	39.29	30	53.57	56
TOTAL	7		41		52		100

Table (9) shows the data and result showing the managing emotions life skill among the rural primary school students in the Kangra district of Himachal Pradesh. The study shows that out of 44 boys 50% of boys and out of 56 girls all the 53.57% of girls have low awareness on managing emotions life skill. It also shows that 43.14% of boys and 39.29% of girls have medium level of awareness in managing emotions and very few students have high level of emotional management. The analysis of the study revealed that among the rural primary school students in the Kangra district of Himachal Pradesh both for boys and girls have poor life skill in the management of emotions.

The Graph showing the result of the analysis on managing emotion life skill among the boys and girls from the different schools of the Kangra district of Himachal Pradesh is shown below:



9: The Graph showing the of managing emotion life among rural students Analysis of data based on

the Coping with Stress Life Skill

skill

Table (10): Data and Result showing the Coping with Stress among Rural Primary School students

LIFE SKILL AWARENESS						TOTAL	
CATEGORY	HIGH		MEDIU	М	LOW		CATEGORY
	COUNT	%	COUNT	%	COUNT	%	COUNT
Boys (N=44)	16	36.36	25	56.82	3	6.82	44
Girls (N=56)	23	41.07	30	53.57	3	5.36	56
TOTAL	39		55		6		100

Table (10) shows the data and result showing the coping with stress life skill among the rural primary school students in the Kangra district of Himachal Pradesh. The study shows that out of 44 boys 56.82% of boys and out of 56 girls all the 53.57% of girls have medium awareness on coping with stress life skill. It also shows that 36.36% of boys and 41.07% of girls have high level of awareness in coping with stress and very few students have low level of coping with stress. The analysis of the study revealed that among the rural primary school students in the Kangra district of Himachal Pradesh both boys and girls have medium/high level of life skill in the management of emotions.

The Graph showing the result of coping with stress life skill among the boys and girls from the different schools of the Kangra district of Himachal Pradesh is shown below

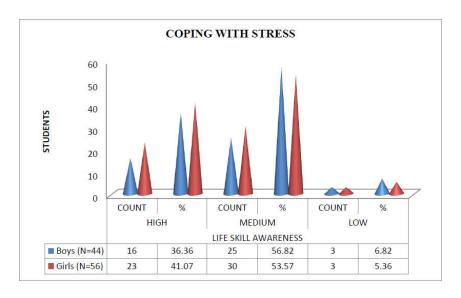


Figure 10: The Graph showing the result of coping with stress life skill among rural students

Conclusion

The analysis of the data collected from various rural primary school students in the Kangra district of the state Himachal Pradesh revealed that for both the cognitive and psycho-social life skill, rural primary school

students have high level of awareness in life skill. But for the emotional life skill they have medium/ poor life skill awareness. This needs special attention and training for empowering these life skills because the newly emerged socio- emotional learning theory suggest that social and emotional skills are more important along with cognitive life skill in order to achieve the highest aim of education called the all-round development of personality among the students.

Findings, Conclusions and Suggestions

Introduction

This is the brief summary of the study, followed by the major findings and conclusions arrived at and the suggestions derived. The purpose of the present study was to find the awareness among rural primary school students in the Kangra district of the Himachal Pradesh on various life skills proposed by World Health Organisation (WHO) for the developing countries including India. In this study Life Skills is defined as "the abilities for adaptive and positive behaviour that enable the individuals to deal effectively with the demands and challenges of everyday life" which was the definition given by WHO.

The Study in Retrospect

The different aspects of the present study are summarised below under the following heads:

(a) Restatement of the Problem

"Awareness of life skill among rural primary school students: A study in the Kangra district of Himachal Pradesh"

(b) Restatement of Objectives

- 1. To explore the cognitive life skill among the rural primary school students in the Kangra district of Himachal Pradesh.
- 2. To explore the psycosocial life skill among the rural primary school students in the Kangra district of Himachal Pradesh.
- 3. To explore the emotional life skill among the rural primary school students in the Kangra district of Himachal Pradesh.

Design of the Study in Brief

The method used for the study was descriptive in nature. Survey was the technique used for collection of data. The population of the study covered all rural primary schools located in the different areas of the Kangra district of Himachal Pradesh. The Kangra district consists of twenty one Tehils. Using the lottery method of simple random samples five Tehils are identified and from each Tehils two primary schools are selected by the same simple random techniques. From each selected school ten students were selected and there by the total sample of the study consists of hundred rural primary school students. The five tehsils selected for the study are Nagrota Bagwan, Jawali, Nurpur, Shahpur and Palampur. The principle investigator had prepared a life skill awareness test which was validated with the help of experts. The awareness test was prepared based on the reference taken from the assessment criteria given by central board of secondary education (CBSE) and also by referring other scholarly articles in journals and thesis. Likert method of item preparation, validation and standardization of research tool has been followed. Both validity and reliability of test items are calculated and ensured high validity and reliability.

Conclusions Based on the Findings of the Study

The conclusions that emerged from the results of the analysis of data according to the objectives formulated for the study are given under three sections.

- 1. The findings and conclusions based on the various *Cognitive life skills* such as Creative thinking, Critical thinking, Decision making and Problem solving
- 2. The findings and conclusions data based on the various *Psycho Social life skills* such as Empathy, Interpersonal Skill, Self awareness and Effective Communication Skills
- 3. The findings and conclusions data based on the various *Emotional life skills* such as Coping with Stress and Managing Emotions

The findings and conclusions based on the various cognitive life skills such as creative thinking, critical thinking, decision making and problem solving

This section described about the findings based on the four cognitive life skills. Each of the cognitive life skills has been separately analyzed for findings the level of life skill awareness in both boys and girls of various rural primary schools located in and around the Kangra district of the Himachal Pradesh.

- The findings of the study revealed that among the rural primary school students in the Kangra district of Himachal Pradesh the creative thinking life skill is high and which could help them in generating and exploring new ideas, new thoughts and innovations.
- The findings of the study revealed that among the rural primary school students in the Kangra district of Himachal Pradesh the critical thinking life skill is high and which could also help them in objectively analyzing the situation which they have to face in their
- The findings of the study revealed that among the rural primary school students in the Kangra district of Himachal Pradesh the decision making life skill is high and which could help them to take effective decision in their academic and personal life.
- The findings of the study revealed that among the rural primary school students in the Kangra district of Himachal Pradesh the problem solving life skill is high and which could help them in solving their problems coming in the academic and personal life.

The findings and conclusions data based on the various *psycho social life skills* such as empathy, interpersonal skill, self awareness and effective communication skills

This section describes the findings based on the four psycho social life skills. Each of the psycho social life skills has been separately analyzed for findings the level of life skill awareness in both boys and girls of various rural primary schools located in and around the Kangra district of the Himachal Pradesh.

- The findings of the study revealed that among the rural primary school students in the Kangra district of Himachal Pradesh the empathy life skill is high for girls compared to boys. This will help them to understand and develop others according to their needs and requirements.
- The findings of the study revealed that among the rural primary school students in the Kangra district of Himachal Pradesh the interpersonal life skill is high and which could help them in collaborative and cooperative work which is highly in tune with the constructivist philosophy and the concept of emerging inclusive education.
- The findings of the study revealed that among the rural primary school students in the Kangra district of Himachal Pradesh the self awareness is high and is more for girls than the boys. This could help them in understanding their strength and weakness objectively and will get a room for self empowerment and self esteem.
- The findings of the study revealed that among the rural primary school students in the Kangra district of Himachal Pradesh the effective communication life skill is high for both boys and girls which will help them in meaningful transmission of their ideas and views.

The findings and conclusions data based on the various *emotional life skills* such as coping with stress and managing emotions

This section describes the findings of the data based on the two emotional life skills. Each of the emotional life skills has been separately analyzed for findings the level of life skill awareness in both boys and girls of various rural primary schools located in and around the Kangra district of the Himachal Pradesh.

- The findings of the study revealed that among the rural primary school students in the Kangra district of Himachal Pradesh both boys and girls have poor life skill in the management of emotions.
- The findings of the study revealed that among the rural primary school students in the Kangra district of Himachal Pradesh both boys and girls have medium/high level of life skill in the management of emotions.

All the findings in general shows that for rural primary school students in the Kangra district of the state Himachal Pradesh both the cognitive and psycho- social life skill, there is high level of awareness But for the emotional life skill the awareness is medium to poor level life skill awareness.

Suggestions of the Study

Based on the findings and conclusions of the study the following suggestions were arrived upon:

- The creative thinking life skill is essential for the primary school students for generating new and innovative ideas based on the constructivist learning theory. So a creative environment has to be fashioned for nurturing the creative life skill among the rural primary schools students of the country.
- The critical thinking life skill is necessary for objective and assertive behaviour of students which is based on the theoretical perspective of critical pedagogy. So a platform of critical thinking generative methodology including discussion and debate should be included in the rural primary classrooms all over the country.
- The decision making life skill is needed for the students to take effective and independent decision based on prioritizing the work. This will help them in developing their confidence and feel proud about

- their own talents and skills. So appropriate steps for briefing the techniques to take effective decisions should be trained in the rural primary schools.
- The problem solving life skill is necessary to systematically and logically analyze the different issues which the boys and girls have to face in their everyday life situation. This will help them to solve the different issues and challenges which they face in everyday life.
- The life skill empathy is very important for understanding and developing others and to create a service oriented mindset. It is important as without this the idea of the new pedagogical approach like collaborative and cooperative work and the concept of knowledge sharing and transmission of ideas for the welfare of poor and average students will not be achieved.
- > The interpersonal life skill will help our students to work with students coming from different caste, culture and custom. The democratic and secularist beauty of our constitution can be achieved only if our students have high level of interpersonal skills.
- The self awareness life skill will help our students to understand their strengths and limitations. With the help of this skill they can analysie and introspect about themselves, thus increasing their self esteem. So appropriate lessons for its empowerment have to be given in the rural schools of India.
- The communication life skill will help our students to develop their verbal and non verbal communication and to improve their skills such as attention and listening. Effective communication is important for excellence in both academic and personal life.
- ➤ The life skill managing emotion is necessary to control and manage the emotions. The theory of emotional intelligence says that EQ is more important than IQ. For the development of integrated personality, IQ can contribute only 25 % in determining the overall personality of the individual and the balance 75 % is predicted by the EQ.
- > The life skill coping with stress will help the boys and girls to face the stress emerging in everyday life situation.
- > A curriculum which will help the students in nurturing the cognitive, psycho social and emotional life skill is the need of the hour.
- > The teachers should give first hand training for enhancing the life skill among the rural primary school students.
- Experiential learning and journal writing is essential for developing the life skills. So students should be given maximum opportunity and exposure to practice these skills.
- Include different strategies which will enhance the life skill of primary school student's along with their day to day teaching.
- ➤ Give maximum opportunity for the extra-curricular and co-curricular activity for the primary school students for developing their life skill along with their curricular activities.

Conclusion

The research study based on the small survey which covered among the ten rural primary schools in one of the biggest district of the state Himachal Pradesh has showed that in the rural region of the Kangra the life skill awareness among the students is high where the cognitive life skills are concerned but awareness for the psycho social life skill is average or medium level; and the awareness for the emotional life skill is very poor. As educating the heart is more important than educating the brain, the areas of affective skills have to be given more weightage along with the cognitive life skills.

BIBLIOGRAPHY

- Best, J. W. (2007). Research in Education. *International Review of Psychiatry, 19(6) 607–615*Bindhu, D., and Shiny, J. (2011). Life Skills and Attitude towards Vocation among the Vocational Higher Secondary and Higher Secondary School Students. *EduTracks*, 8 (10), 16-18.
- Brown, Kathie (1989). *Implementation of a Learning Program to train Adolescent Mothers to live independently.* Retrieved from www.eric.ed.gov
- Central Square Foundation (2015) Life Skills Education in India *An Overview of Evidence and Current*Practices cognitive theory. Englewood Cliffs, NJ: Prentice-Hall.
- Cohen, Louis; Manion, Lawrence and Morrison, Keith. Research Methods in Education (7th Ed.). London: Routledge.

- Deshmukh, K. (2014). Impact of Life skills training on emotional, educational and social adjustment of the secondary school children. In A. R. Nair & R. J. Solomon (Eds.). *Life Skills and Maximizing potentials of youth. Proceedings of the5th International Conference on Life Skills Education* (p.122-126). New Delhi: Excel India Publishers.
- Dixon, F. (2001). The memorable link: designing critical thinking activities that stimulate synthesis and evaluation among verbally gifted adolescents. *Journal of AdvancedAcademics*, 13(2),73-84
- <u>Dixon</u>, F., Cassady, J., Cross, <u>T., & Williams</u>, D. (2005). Effects of technology on critical thinking and essay writing among gifted adolescents. *Journal of Advanced Academics*, *16*(4), *180-189*
- Fertman, C.I., & Ross, <u>J.</u> L. (2003). Differences in the use of a school mental health program in secondary schools. *American Journal of Health Behaviour*, 27(2),146-55.
- Garland, Teresa (1999). Life Skills Education: Perceived Effectiveness of a 4-H Out-of-School Program.

 Retrieved from www.eric.ed.gov
- Garrette, Henry E., (1966) Statistics in Psychology and Education. Bombay: Vakils, Feffer and Simons Ltd.
- George, Darren and Mallery, Paul, SPSS for Windows: Step by Step. New Delhi:Pearson. Gupta, S. P. Statistical Methods.: New Delhi: Sultan Chand and Sons
- Guilford, J P (1965) Fundamental Statistics in Psychology and Education, New York: McGraw Hill Book Co.
- Gulati, Gurinder (2006). *Empowering Teachers and Children through Life Skills Training*. Retrieved from http://www.unicef.org/india/education_1878.htm
- Heinla, E. (2006). Creative thinking of adolescents in Estonian society. Young , 14 (3), 235-255
- Jayachandran, M. (2014). A study on life skills awareness among physically challenged adolescents of Thiruvananthapuram District.In A. R. Nair & R J Solomon(Eds.). *Life Skills and Maximizing potentials of youth. Proceedings of the 5th International Conference on Life Skills Education* (p.39-43). New Delhi: Excel India Publishers.
- King Jr, S.,&Holosko, M. J. (2012). The development and initial validation of the empathy scale for social workers. Research on Social Work Practice, 22 (2), 174-185
- Koul, Lokesh, Methodology of Educational Research (4th Edition, 2013). New Delhi: Vikas Publishing House Pvt. Ltd.
- Koumoundourou, G., Kounenou, K., & Siavara, E. (2012 June). Core self-evaluations, career decision, self-efficacy, and vocational identity among Greek adolescents. *Journal of Career Development,* 39(3), 269-286.
- Mangrulkar, L., Whitman, C., & Posner, M. (2001). Life skills approach to child and adolescent healthy human development. Washington, DC: Pan American Health Organization.
- Markstrom, C., <u>Huey,</u> E.,&Stiles, B.M. (2009). Frameworks of caring and helping in adolescence: are empathy, religiosity, and spirituality related constructs? *Youth Society*, *42*(1)59-8

- Nair, R. (2010). Life skills education: Origin and development education. In A.R. Nair. *Life skills training for positive behaviour*. Sriperumbudur: Rajiv Gandhi National Institute of Youth Development, p. 91-103
- Nair. *Life skills training for positive behaviour*. Sriperumbudur: Rajiv Gandhi National Institute of Youth Development, p. 230-241
- National Council of Educational Research and Training. (2005). National Curriculum Framework 2005. New Delhi: NCERT
- Niendorf, Kristine M. (2007). *College women athletes and the life skills they learn from competition*. In Dissertation Abstract International of Humanities and Social Sciences, 68(4), October 2007
- Powney, Janet; Lowden, Kevin; Hall, Stuart (2000). *Young People's Life Skills and the Future*. Retrieved from www.eric.ed.gov
- Sallee, Jaffrey Alan (2007). Perceived effectiveness of Youth-adult partnership on enhancing life skill development through 4-H. In Dissertation Abstract International of Humanities and Social Sciences, 68(4), October 2007
- Siegal, Sidney. (1956). Non-Parametric Statistics for the Behavioural Sciences, New York: McGraw Hill.
- Singh, A. (2010). Life Skills for Enhancing Excellence in Education and Life Long Learning. *Indian Journal of Life Skills Education*, 1(2),165-186.
- Terry, A.(2000). An early glimpse: service learning from an adolescent perspective. *Journal of Advanced Academics*, 11(3), 115-135.
- Thote, P. (2015). An Analysis of Attitude of Secondary School Teachers towards In- service Training Programme of Life Skill Education in Central India. Stream Research Journal, International Recognized Multidisciplinary Research Journal, 6 (4), 2230-7850.
- Thurston, L.P.(2002). Practical partnerships: analysis and results of a Cooperative Life Skills Program for At Risk rural youth. *Journal of Education for students placed at risk*, 7, 13-26.
- UNICEF. (2006). Empowering teachers and children through life skill education accessed at www.unicef.org.
- Varghese, G.(2010), "Citizenship Training and Life Skills: A Conceptual Analysis in the Indian Context. In A.R. Nair. Life skills training for positive behaviour. Sriperumbudur: Rajiv Gandhi National Institute of Youth Development, p. 283-300
- Varghese, S., & Jayan, C. (2010). Emotional labour: asignificant interpersonal stressor among professionals. In A.R. Nair. *Life skills training for positive behaviour*. Sriperumbudur: Rajiv Gandhi National Institute of Youth Development, p. 242-272
- Vranda, M.N.,& Rao, C. (2011). Life Skills Education for young adolescents- Indian experience. *Journal of the Indian Academy of Applied Psychology*, *37*, 9-15
- Wichroski, M., Zunz, S.J., & Forshay, E. (2000). Facilitating self-esteem and social supports in a family Life-Skills Program. *Affilia*, 15 (2), 277-293.

- Wong, A. (2007 June). Prospective study on the development of critical thinking skills for student prosthetists and orthotists in Hong Kong. *ProsthetOrthot International*, 31(2), 138-146
- World Health Organisation.(1997). Life skills education for children and adolescents in schools: introductionand guidelines to facilitate the development andimplementation of life skills programmes. Geneva:WHO accessed at www.who.org
- Wurdinger, S. & Enloe, W. (2011). Cultivating life skills at a project-based charter school. *Improving Schools,* 14(1), 84-96
- Yadav, P.& Iqbal, N. (2009).Impact of Life Skill Training on self esteem, adjustment and empathy among adolescents. *Journal of the Indian Academy of AppliedPsychology*, 35, 61-70.
- Yadav, Pooja and Iqbal, Naved (2009). *Impact of Life Skill Training on Self Esteem, Adjustment and Empathy among Adolescents. In* Journal of the Indian Academy of Applied Psychology, 35, 61-70

Contributor

Dr. Anu G S
(Principal Investigator, SRP, NCRI)
Assistant Professor
Department of Teacher Education
School of Education
Central University of Himachal Pradesh
Dharamsala, Himachal Pradesh

Political Participation of Tribal Women in Panchayati Raj Institutions: A Case Study of Jharkhand

Dr Anju Helen Bara

Abstract

Local governance is usually understood as political decentralization where local communities are participating in the political process through voting or contesting elections in the local bodies such as panchayats. In India the 73rd amendment of 1993 institutionalized three tiers of local government at district, block and village levels. The lowest tier is the gram panchayat which has been bestowed with the responsibility of preparing plans for the management and development of natural resources within their borders.73rd amendment gives reservation to the most backward and depressed people, i.e. Scheduled Castes (SC), Scheduled Tribes (ST), Other Backward Castes (OBC) and women. Due to the reservation policy they are getting equal opportunity to participate in the political process and they are contesting elections in the local panchayati elections. However, it is important to assess how inclusive is the local governance, what is the nature of representation and participation of ST women in Jharkhand. The study aims to examine the nature of participation of women and scheduled tribe in the PRIs, to study the political inclusion and political empowerment of ST women and to analyze the social and economic empowerment of STs and women. This study is based on the primary data collection conducted in two districts of Jharkhand.

Keywords: Local Governance, Focused Group Discussion (FDG), Jharkhand Panchayati Raj Act (JPRA), Provisions of the Panchayats (Extension to the Scheduled Areas) PESA, Panchayati Raj Institutions PRI

Introduction

Local governance is usually understood as political decentralization where local communities are participating in the political process through voting or contesting elections in the local bodies such as panchayats. In India the 73rd amendment of 1993 institutionalized three tiers of local government at district, block and village levels. The lowest tier is the gram panchayat which has been bestowed with the responsibility of preparing plans for the management and development of natural resources within their borders.73rd amendment gives reservation to the most backward and depressed people, i.e. Scheduled Castes (SC), Scheduled Tribes (ST), Other Backward Castes (OBC) and women. Due to the reservation policy they are getting equal opportunity to participate in the political process and they are contesting elections in the local panchayati elections.

Gender quotas have been considered as essential to ensure women's participation in political institutions. However, it is important to assess how inclusive is the local governance, what is the nature of representation and participation of ST women in Jharkhand. Women's participation was quite high in the panchayat elections and they won the elections. Despite the government efforts to bring development in the region, the tribals are vulnerable and they are undergoing tremendous crises in terms of livelihood, economic growth, education etc. Due to lack of education, literacy, customary beliefs and practices, patriarchal society and dominance of bureaucracy, there are many women who face difficulties to participate in the local governance process. Hence it is pertinent to study the role and challenges faced by ST women representatives in PRIs.

Objective of the Study

- 4. To examine the nature of participation of women and scheduled tribe in the PRIs
- 5. To study the political inclusion and political empowerment of ST women
- 6. To analyze the social and economic empowerment of STs and women

Research Design and Methodology

The study is based mainly on primary data. The study has followed qualitative methodology. The primary data has been collected by administering a schedule to the respondents, by having formal and informal interviews and focus group discussions (FDGs). Focus Group Discussions of elected PRIs representatives shall be conducted. Interviews of PRIs representatives, ST women representatives, villagers, key informants and government officials shall be conducted. Case study method shall be adopted to understand the STs and women's role and to what extent STs have empowered due to PRIs.

The Universe of the present study will be the elected women representatives of all the three tiers in Jharkhand, i.e. gram panchayats; panchayat samities and zila parishads.

Purposive random sampling used to select the respondents.

Sampling Size: As per the constitutional provision 33% are reserved for women. Therefore, from the total heads of panchayati samiti and zila parishad 33% women representatives selected as sample. The women sarpanchs of selected village panchayat from Jharkhand has been selected.

All together there are 24 districts in Jharkhand and out of which I have selected two districts, Gumla and Dumka for the purpose of empirical work. The field study shall be done in two district: Gumla and Dumka district. The major reasons for selecting this district is the high population of STs in the region, poverty ratio, economy and familiarity (Due to time limit I am restricting only to two districts). For empirical study blocks will be selected on the basis of governing rules of Panchayat provisions, poverty ratio, population, literacy rate and socio-economic structure. Two blocks will be that one where PESA is governed and other one will be that where PESA is not governed. The criteria for the selection on gram panchayats are ST population, economy, politically active/ non active and presence of elected women representatives.

- Household survey from each gram panchayat, 20 households to be selected randomly
- Interviews of key informants, government officials and other stakeholders
- Focus Group Discussions separately for ST representatives, ST women representatives and random villagers

Limitation of the study: Since this was a short study, the sample size is small. The study attempted to do collect data from two districts. The field work was difficult since most of the areas were interior which took time to travel.

Literature Review

Decentralization means a transfer of power away from a central authority to lower levels in a territorial hierarchy (Crook and Manor: 1998). It has different dimensions such as *deconcentration* which means the transfer of powers and responsibilities to local units. It tends to extend the scope or reach of central government and to strengthen its authority by moving executive agencies controlled by the centre down to lower levels in the political system (Crook and Manor: 1998) *Devolution* is the transfer of power and responsibilities to local government. *Delegation* is transfer of power to semi-autonomous groups.

Decentralization is usually understood as political decentralization where local communities are participating in the political process through voting or contesting elections in the local bodies such as panchayats. In India the 73rd amendment of 1993 institutionalized three tiers of local government at district, block and village levels. The lowest tier is the *gram panchayat* which has been bestowed with the responsibility of preparing plans for the management and development of natural resources within their borders.

Decentralization model through participation in Gram Sabha enhances local governance and build in development (Crook and Manor, 1998; Johnson, 2001). Though there are many studies which shows dissatisfactory performance of panchayat institutions in India (Baviskar and Mathew, 2009; Vaddiraju and Mehrotra, 2004).

The World Development report of 1997 supported both political and administrative measures for decentralization as a crucial measure for creating flexible institutional arrangements that will enhance efficiency, transparency and accountability in development. Both political and administrative decentralization are necessary for building capacity of local government and of user groups (Baumann, Ramakrishnan, Dubey, Raman and Farrington: 2003)

Decentralisation is being understood as important solution for poverty eradication and rural livelihood (Johnson, 2001). Crook and Manor (1998) have argued that democratic decentralization produces effective system of governance. Studies of decentralization have shown that devolution can enhance rural livelihoods. In this system the local knowledge of people can be used, who possess information and incentive to manage and conserve the resources on which they and their families depend (Johnson 2001). Democratization empowers local community to participate in the decision making process particularly those who have been traditionally marginalized by local political processes. The institutional framework of democratic decentralization provides the conditions to enhance resource sustainability.

There are many reasons which led to the introduction (or reintroduction in the Indian case where this model existed in the ancient times) of decentralization model:

- Failure of centralized planning;
- Decline of development theories that provided analytical support for centralized planning; Some argue that decentralization has got support not due to its success but due to the ideological convictions related to the importance of local involvement and self-determination in the development process.

73rd amendment of Indian constitutions has given 33 percent reservation for political seats to women, SC and ST representatives. Dahlerup (2006) defines gender quotas as a regulation to ensure certain number of percentage of a specific group getting participated. Dahlerup (2007, 2002) argues that quotas for women is not discriminatory, rather it is compensating women and increasing their representation in political forum.

Sekhon's (2006) in her study on women's participation in panchayats argues that reservation are not adequate enough for women empowerment because a woman has to face multiple constrains imposed by social, economic, cultural and political factors. She further argues that in a patriarchal society like India, women are dependent on their husbands and they are not able to freely participate in the decision making process. Most of the women are not educated or less educated and hence are not able to assert their rights.

Kaul and Sahni (2009) in their study found that reservations for women have not empowered them. Their findings revealed that the reservation for women in panchayats have not uplifted the village women. From their study it was found that elected women representatives are not given due respect and their opinions or suggestions are not taken seriously. The elected women representatives complained that they were not even consulted in the decision making. Thus the women felt neglected and ignored. This study illustrated that women representatives were compelled to take the approval of their husbands and family and were not able to make any decisions on their own.

Chathukulam and John (2000) in their study of 27 women elected members of panchayats in Kerela found that women representatives are not able to function independently and are not taking any decisions. They argue that quotas have failed to give political power and visibility to women representatives.

There are other studies which reveal that gender quotas have benefitted women and made them more independent in decision making process, but they still face difficulties. For instance, Kudva (2003) argues that gender quotas in election increases the women participation and it is an important strategy to empower women. She argues that engineering elections have given numerical visibility to women but she questions the effectiveness of women's political power. She suggests training modules, gender sensitization and legal knowledge for women representatives.

Chibber (2001) in his study has illustrated that lower levels of participation of women in political life is due to their role in the household. According to Chibber, political participation is about public sphere which is dominated by men. He argues that political participation of women will be lower as long as they remain confined within the boundaries of home.

Kabeer (2004) suggests that men and women do not have same socio economic resources. Since these resources influences political participation, women are less politically active than men. Similarly, Mohanty (1995) argues that for women empowerment social, economic and political conditions should be created and they should be encouraged to participate. He further argues that women are not able to exercise political power due to the lack of social and economic power.

There are few studies which reflect the positive aspect of women reservation. For instance, the work of Ramesh and Ali (2001) suggests that women are more enthusiastic and less corrupt. In this study Ramesh and Ali argues that most of the women who are contesting elections are coming from powerful families and are picked by the elites.

Education is crucial for political participation. Chattopadhyaya and Duflo's (2004) work ay panchayats in West Bengal and Rajastahn found that women in reserved constituencies were less educated than the men.

These were some of the important works on women reservation and PRIs in India. Next chapter discusses about the Panchayati Raj System in Jharkhand.

Panchayati Raj and its Implementation in Jharkhand: An Overview

Jharkhand is one of the resource rich states and has a large number of scheduled tribe population. Around 78% of Jharkhand stays in rural area. Agriculture is the main occupation. Around 77.8 percent of total population are engaged in agriculture in Jharkhand. Poverty is higher among the marginalized communities- SCs, STs, OBCs etc.

The 61st round of NSSO data shows that 57.5 percent of STs are below poverty level, 54.1 percent of SC and 40 percent of OBC. STs are socially and educationally backward.

Jharkhand got a separate statehood in 2000 and in 2001 Jharkhand Panchayati Raj Act (hereafter JPRA) was enacted. Jharkhand comes under Fifth Schedule which is governed by Provisions of the Panchayats (Extension to the Scheduled Areas)(hereafter PESA). There are around 4118 gram panchayats, 212 panchayat samitis and 22 zilla parishads.

Under the JPRA, gram sabha has been given the power to identify and formulate economic development schemes for the village. Gram sabha has the power to approve schemes for social and economic development and to recommend annual budget of the Gram Panchayat. Gram Sabha also has the power to manage natural resources and to do afforestation and conservation activities. It also takes up maintenance work related to public wells, ponds, sanitation, bridges and roads etc.

The panchayat raj act provides the provision to establish various committee for the discharging the functions of the Gram Sabha. The committees are such as village development committee, government estate committee, agriculture committee, health committee, village defence committee, education committee and social justice committee and vigilance committee. As per the JPRA it is the responsibility of the village development committee to prepare a development scheme of the village and to get it approved by the Gram Sabha.

PESA was instituted in the year 1996 as recommended by Bhuria committee. PESA explains that a state legislation on the panchayats that may be made shall be in consonance with the customary law, social religious practices and traditional management practices of community resources. Sub clause b (4(b)) mentions that every 'gram sabha' shall be competent to safeguard and preserve the traditions and customs of the people, their cultural identity, community resources and the customary mode of dispute resolution.

PESA set out parameters for establishing village and district level panchayats in the scheduled areas to undertake developmental and legal responsibilities. The JPRA has been criticized for de-recognizing the traditional role of indigenous justice in governance and administration, henceforth affecting the traditional system. According to some indigenous leaders the JPRA has continued the imposition of top-down and mainstream structures of governance upon indigenous territories without their consent and participation.

The JPRA is not in accordance to the spirit of traditional customary law and it violates the principles of PESA. Bineet Mundu (2002) in his analysis of JPRA identifies few clauses which are in violation to PESA. For instance as per the central act the gram sabha shall approve the plans, programs and projects for social and economic developments before they are taken up for implementation. The state act has ignored this provision. In JPRA Gram sabha are deprived from certain powers like the power of gram sabha to obtain to issue certificate of utilization of funds for the planners and programs and to consult them before making the acquisition of the land in the scheduled areas for development projects and before resettling and rehabilitating persons affected by such projects. Central act provides that the gram sabha shall prevent the alienation of adivasi land by outsiders and repossession of the alienated land. The state law has also ignored this provision.

There were great expectations from the Panchayats (Extension to the Scheduled Areas) Act (PESA) in 1996. But it proved to be yet another law to restrict the rights of women. Section 3, subsection (a) of PESA lays great stress on consistency with tribal tradition and custom. This section notes that, "A State legislation on the Panchayat that may be made shall be in consonance with the customary law, social and traditional management practices of community resources." While PESA affirms the traditional customs and practices (which is good for the adivasis), it is silent on the role of the women. In the 73 rd Constitutional Amendment Act, 1/3 of the total seats are supposed to be reserved for women in every panchayat. In PESA there is reservation for the Scheduled Tribes (Section 4, subsection (g)), but no reservation for women. There is a fear that on the basis of customs and traditions male dominated society can further exclude them.

In 2011 panchayat elections were held in Jharkhand. It was a historical event and in true sense, it was a moment where people were getting engaged with democratic system. Jharkhand has given 50 percent reservation to women. In 2010 election quite a lot of women turned out to contest. The table 1 below gives a picture of the proportion of elected SC, ST and women representatives in Panchayats in 2010 election.

Table 1: Representation of Women, SC and ST in Panchayats, 2010 election, Jharkhand

Wor	nen	n SC		ST	
Number	Percent	Number	Percent	Number	Percent
31157	58.6	5870	11.0	18136	34.1

Source: Strengthening of Panchayats in India: Comparing Devolution across States, Empirical Assessment 2012-13, IIPA and Ministry of Panchayati Raj

In 2015, second panchayati election was held. Total number of members contested at the zila parishad was 545, at the panchayat samiti level it was 5423 and at the gram panchayat level, the total members contested were 54330. Table 2 shows the women representation and ST representation at the three levels in 2015 election.

Table 2: No of women and ST in Zila Parishad, Panchayati Samiti and Gram Panchayat in 2015 elections

Level	Reserved for women	Reserved for ST
Zila Parishad Member	281	179
Panchayat Samiti Member	2823	1818
Gram Panchayat Member	28631	18417

Source: Jharkhand Economic Survey, 2015-16, Government of Jharkhand

In 2015 election, a high number of women contested the election at the three levels and they were elected in all the posts. For the post of Mukhiya and all the levels: Zila Parishad, Panchayat Samiti and Gram Panchayat women have outperformed men. One explanation for such performance by women is the fifty percentage reservation being given to women. Hence we can argue that the gender quotas have worked in favour of women and this has been proven by the numerical strength of women in PRIs.

Gender quotas have increased the women representation and visibility of women candidates in the political platform. Table 3 reveals the no of women being elected in different levels and it reflects the numerical strength gained by the women.

Table 3: Representation of Men and Women in Three Levels of PRIs

Level		SC	ST	General
Zila Parishad	Male	20	68	80
	Female	35	80	90
Panchayat Samiti	Male	200	715	763

	Female	311	840	884
Gram Panchayat	Male	1534	6209	8002
	Female	3349	7597	10194
MukhiyaofGram	Male	182	1071	2058
Panchayat	Female	238	1190	2353
	Total	5869	17770	21271

Source: Panchayati Raj, Government of Jharkhand*

(*https://www.jharkhandpanchayats.gov.in/documents/6183151/0/Total%20Elected%20Member .pdf accessed on 7 November 2018)

The real concern is whether women elected at different level for different posts are able to function independently. I argue that numerical strength is in itself does not guarantee women empowerment and does not reflect the freedom of women to take political decisions.

In March 2018 a new provision was announced by the Government of Jharkhand which pronounced the constitution of the Adivasi Vikas/ Village Vikas Committee. According to this regulation, in every village there shall be a vikas committee which will be the primary body to take up all the development related works. This committee has to be constituted by the gram sabha. The committee shall comprise of female members and the secretary of the committee shall be chosen by the committee members within the age group of 18 to 35. Thus it is reiterating the idea that young woman are more dynamic to take up responsibilities. Though it is a positive step towards women empowerment, however it has not been well received by the male dominated society. This was revealed through interviews of male members, which I will discuss in detail in chapter six.

Jharkhand has successfully conducted two panchayat elections and has effectively mounted the panchayati raj institutions. However the local governance system in Jharkhand has been criticized for two reasons. First, as the study by Bijoy (2012) reveals that there is a contradiction in the modern panchayati system and it is in clash with PESA. Secondly, Satyam's (2013) study on panchayati raj system in Jharkhand points to the still existing sytem of traditional Parda system, which gives no space to women and in such a situation what should be the status of women reservation in PRIs.

Description of Field

Total population of Jharkhand is 8,645,042, rural population is 7,868,150 and urban population is 776,892. Around 26 percent of the population belong to Scheduled Tribe, out of which 31.4 are in rural areas and 9.79 stays in urban areas.

Fig 1: Map of Jharkhand



Since the pistrict Headquarter of scheduled tribe women in rural and urban areas of Jharkhand. As shown below, in rural areas female comprise around 32.087 percentage of total population.

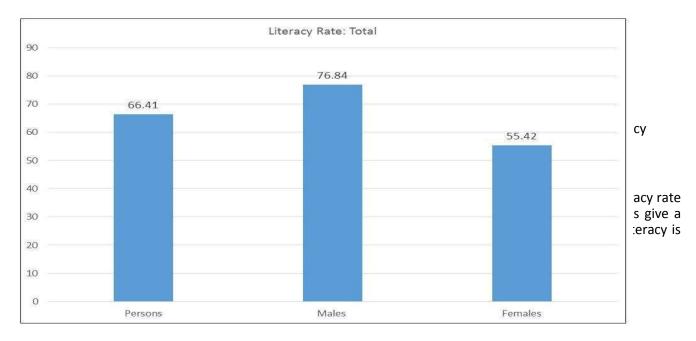
Table 5: Percentage of STs to total population

	Persons	Male	Female
Total	26.207	25.489	26.963
Rural	31.403	30.747	32.087
Urban	9.793	9.319	10.314

Source: Census 2011

In comparison to the national average, the literacy rate is low in Jharkhand. As shown below in Figure 2, the total literacy rate is 66.41, out of which male literacy rate is 76.84 and female literacy rate is 55.42.

Fig 2: Literacy Rate of Total Population



rig 3. Literaty rate iii Orban areas oi Jilarkilanu

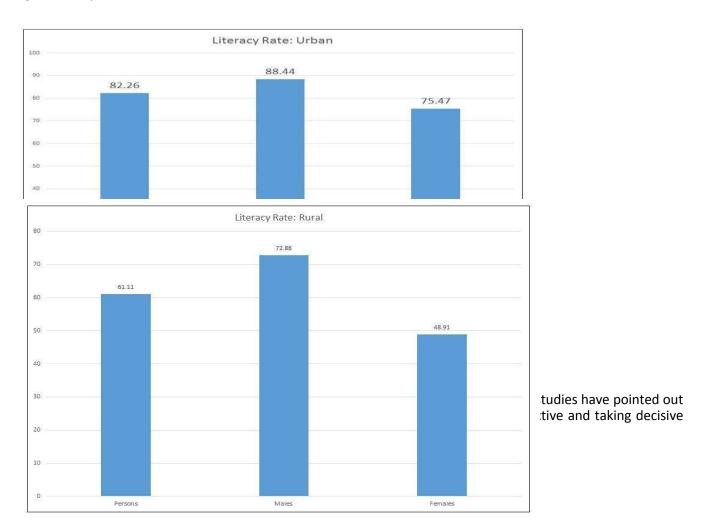


Table 6: District wise details of population, sex ratio and literacy rate of Jharkhand

Gumla	1,025,213	993	65.73%
Ramgarh	949,443	921	73.18%
Pakur	900,422	989	48.82%
Jamtara	791,042	954	64.59%
Latehar	726,978	967	59.51%
Koderma	716,259	950	66.84%
Simdega	599,578	997	67.99%
Khunti	531,885	997	63.86%
Lohardaga	461,790	985	67.61%

Source: Census 2011

The field study was conducted in two districts, Gumla and Dumka. From each district 2 gram panchayats from 2 blocks were selected for in-depth study. The rationale for the selection of Gumla district is that it has a significant presence of scheduled tribes, consisting of 68.94 percent of the total population of the district. Another significant reason for the selection of Gumla district is that it has the presence of Oraon tribe which is the second largest tribe in Jharkhand comprising of 19.09 percent of the total tribal population is Jharkhand. The second district selected for the empirical study is Dumka district which is a Santhal tribe populated district and this tribe is the largest tribal group in Jharkhand. Santhals are 31.9 percent population of the total tribal population in Jharkhand.

In Gumla district, the no of blocks are 12, out of which I selected two blocks, Bishunpur and Gumla. Out of 10 blocks of Dumka district, I selected two blocks namely Dumka and Gopikandar. The criteria for selection are ST population and literacy rate.

Gumla	Panchayat		Population	No of	STMale	ST Female	Literacy rate
Block	Samity	Gram		households	population	population	
Gumla	25	108	116844	213620	28299	27753	60. 5 %
Sadar							Highest in
							the district
Bishunpur	10	68	62319	11262	52127	62252	47.1%

			Lowest	in
			the district	

Dumka	Panchayat		Population	No of	STMale	ST Female	Literacy rate
Block	Samity	Gram		households	population	population	
Dumka	1	25	210785	28967	282125	288952	74.73 %
							Highest in
							the district
Gopikandar	1	7	42063	9272	22284	23122	50.1 %
							Lowest in
							the district

Women's Role in Political Decision Making: Nature and Effectiveness

The status of women can be examined by the level of their political participation, their representation and share in decision-making (Kurane: 2012). The political empowerment of women is one of the most important aspects in the overall empowerment of women. Bidyut Mohanty (1995) argues that in a family women's active participation is not recognized and their work is undervalued.

Social Profile

The social profile of the respondents was studied through the variables such as age, marital status, number of children and educational qualification.

Table 7: Age wise Distribution of women elected representatives

Age group	Gumla (20)	Dumka (10)
18-29	5	3
30-45	25	7

More than half of the respondents belonged in the age group of the 30-45. This age group is highest since by this age most of the women are free from the domestic responsibilities of child bearing and they are relatively free to take the responsibilities outside the domain of their households. This is also considered as young and matured, in comparison to the younger age group of 20s or elder age group of above 50s. A study conducted in West Bengal revealed that around 85 present of the total representatives belonged to this category (Kumar: 2006).

Table 8: Educational Status of women elected representatives:

Education Level	Gumla (20)	Dumka (10)
Illiterate	0	2
Primary	0	1
Secondary	3	4
Higher Secondary	14	3
Graduation and above	3	1

In this sample the proportion of illiterate members was lowest (negligible) in Gumla district and was about this percent in Dumka district. Out of the total 20 elected representatives respondents in Gumla district, only 3 were graduates, 3 had completed secondary education and 14 had passed higher secondary level. In Dumka district out of the total 10 elected representatives respondents 2 were illiterate, 1 was primary level, 4 had received education upto eighth standard, 3 had completed higher secondary level and only had got educated till graduation.

Marital Status: Majority of the elected representative respondents were married. Of the total respondents only 1 was unmarried and 2 were widow.

Economic Profile: Indicators such as occupation of the respondents, annual income and family landholding has been taken to determine the economic profile of the respondents. Most of the respondents came from agriculture family and they had less than an acre land. Some factors like kind of house were taken into consideration (kuccha/ pucca house). Around 90 percent of the women had kuccha house and only 10 percent had pucca house.

*Occupational Status: Around 98 percent of the woman said that they are housewives and help their husbands in farming. Only two women said that they have grocery shops.

*Annual Income: Almost all the women said that the annual income was around fifty thousand per annum. A lot of income generation depended on the harvest, climatic condition, and the sale value of the crop.

Political profile: Various variables such as membership in political party, political awareness, and involvement in village activities were taken to understand the political profile of the respondents. The political awareness was assessed by identifying various factors such as the awareness about political parties working in the region, knowledge about the Panchayati Raj Act and awareness about women's quota.

Participation of Women elected representatives in political decision making process: This aspect was assessed by identifying certain determinants such as attending the meetings, nature of issues discussed and handled, time invested for the work related to village and kind of work taken by them.

Functioning of panchayati raj system: It was assessed by attending 2 meetings. The things that were observed were, the way meetings are held, issues being discussed, punctuality of the members attending the meetings and attendance of the members.

To have larger view about the functioning, interviews were conducted of the members and villagers to know about the performance, expectations and advantages of women's participation in the panchayati raj system.

Findings: 1. Political awareness and political knowledge: It was assessed that whether the women elected representatives have political awareness or not. Here by political knowledge it means having information about the local social and political relations. Some scholars have argued that women have less knowledge about politics (Mondok and Anderson, 2004) but study by Ban and Rao (2006) revealed that women elected representatives have knowledge about political activities.

Table 9: Political participation of women elected representatives

Indicators	Gumla	Dumka
Awareness about political parties working in	Yes (little bit)	No
the region		
Knowledge about the Panchayati Raj Act	Yes*	Yes*
Awareness about women's quota.	Yes*	Yes*
Member of a political party**	None	None

^{*}Only those who were elected and got training. Others had no knowledge.

While discussing with the women, they said that they gathered some knowledge after getting elected, while some of the educated women had knowledge through newspapers etc. One women respondent said, "I know about political parties and the kind of work they are doing. I get all the information from the newspaper. It's a good general knowledge for me." While some other women said that they got the information from their husbands. For instance, one women Mukhiya in Gumla district told that, "I knew nothing about politics. I am illiterate and I was earning my living by working in a mess. When I met my husband I learned many things from him and he told me about politics and he pushed me for contesting this post."

Most of the women had no knowledge about political parties or had any kind of political awareness. When I asked them, whom do they vote and what is the criteria for the selection of a leader, most of them said that they vote for those whom they are asked. One woman in a village in Dumka said, "Party people come and they give us money and tell us to vote for a certain people".

It was found that people (men and women) do not know about Panchayati Raj Act. They have heard about PESA but do not know anything about it. Only those women who were elected and had received some training at the block and district level had some knowledge about Panchayati Raj Act. Thus the knowledge about Panchayati Raj Act was gained only after coming to power and not before that. Most of the women said that they do not know anything.

The Mahila Mandals and SHGs group members also did not have any knowledge about Panchayati Raj Act and

^{**}Husbands are members of political party

PESA. When I asked them why do they vote and attend meeting, one woman said that, "they call us for meeting hence we come. They ask us to save money and have told us that we will get more money. We do not know what to do next. We come to meeting with this hope that something will be given to us."

Similar kind of responses came up for the knowledge about women's reservation. Only those women who are politically active (by being member of panchayat samiti, zilla parishad) and have someone in the family who is politically active (husband/ father in law/ father) were aware about women's reservation. Others had no knowledge about it.

In Gumla district women do attend gram sabha meetings and they have formed SHGs, mahila mandals which meet every week in the panchayat building to save money and to discuss their problems. In Dumka it was found that women are not allowed to attend any meetings. Meetings are attended only by men. Politics is gendered. As Chibber (2001) has argued it is within the domain of public space where women find no recognition and are ignored. There is a clear division of public and private space and it is also divided on gender lines, where public is dominated and occupied by men and private is the space meant for women.

None of the women were member of any political party or member of any NGO.

2. <u>Level of participation of the elected women</u>: Four criteria's were chosen to determine the level of participation. (a) attending meeting; (b) nature of issues discussed and handled; (c) time invested for the work related to village and (d) kind of work taken by them.

Most of the women elected representatives said that they attend meeting. The Mukhiyas said that they convene meeting and they keep a record of all the meetings. One woman Mukhiya said that, "I am determined to change my village hence I give my 100 percent. I conduct regular meetings and if necessary I also call urgent meetings. I do not take any decisions on my own; I put it in front of the gram sabha. I am elected by the people; hence people should have the power to take decision. Under my area naxal villages also comes and I go to those villages also."

I attended few meetings and saw the proceedings being conducted by women Mukhiyas and the way they were engaged in taking decisions. Another woman Mukhiya said, "I never leave my duty. Since I have children sometimes I get late, but I go to the meeting. I even take my small child to the meeting. From my side I try my best to help everyone and sign all documents such as old age pension, so that people do not have any problem."

Yet there were few examples, where women Mukhiyas said that they do not attend meeting and everything is done by their husbands. I went to interview a woman Mukhiya and she hesitated to answer any question. She is a graduate and had knowledge about political system. She said that her husband knows everything and he only handles her work. After a week I met her in the panchayat bhawan and she welcomes me to her cabin. When I asked her, how come she is in the office, her answer was, "I do not want to come but these people (her subordinates) compel me to come. They are making me sign so many papers. I do not like coming here. My husband had some work in the panchayat bhavan, so I came along with him. He has seen the papers; I will just sign and will go now."

When asked about the kind of work being taken up by them, the women Mukhiyas mentioned that mostly they take up issues like construction of well, pond, water tank under MGNREGA work, Pradhanmantri Aawas, Toilet construction, tubewell road, widow pendion, old age pension, ration card etc. Some of them raised few concerns. For instance one Mukhiya from Dumka said, "It is very difficult to get work done. We got less money and within that limited money I had to get all the work done. I selected work on the basic of importance. Some people became happy whose work was done but others became angry whose work was not done. In this position I cannot make everyone happy. Five years is a short time to complete all work, it will be better if government thinks of giving 10 years tenure so that a single person can get chance to complete work. I feel I could not finish work and I could have done better work if I was given another five years."

Similar tone was shared by a Mukhiya from Gumla district. She said that, "We feel helpless. We do not have any power. We just have the power to recommend but do not have any power to take decisions. Gram panchayat also do not have any power. For installing a tubewell we are depended on PHED department and without their permission we cannot even place any tubewell. Though the government says that gram sabha has power, but here we do not have any power."

From the above narratives it is clear that women are actively participating, but there is a strong tone of dissent. The feeling that they do not have any power was present among all the women representatives.

3. <u>Factors that led them to contest the election</u>: When asked that what prompted them to contest election, most of them said that it was their family decision. All the women elected representatives were coming from the families where male members were actively engaged in political activities. Either the husbands or father in law or their father were members of panchayat samiti, or were Mukhiyas or Sarpanch.

The lady Mukhiya in Dumka told that, "My in laws were socially very active and they used to help people in the village. I am educated till graduation. When in 2010 the first election was held, the post of Mukhiya was reserved for women. Everyone in the village said that let her contest election. She is educated and she is coming from a good family. Like her in laws she is also helpful in nature. Hence due to villager's insistence and my family support I decided to contest."

Prabha, a graduate from Gumla sadar got elected as Mukhiya in 2015 panchayat election. She comes from a modest background where education was considered as a primary goal of children. At the age of 21 she got married to a politically influential family. Her father in law was Mukhiya, then her husband was Mukhiya. So when the seat got reserved for women, she was made to contest. She feels that it is to keep the tradition of her family. She also feels happy and confident that her husband will take care of everything and she does not want to get anywhere close to politics. She is proud of the fact that her in laws are well connected with political leaders.

Lali is a middle aged tribal woman, who instantly agreed to meet me. How do I reach your village I asked her over the phone? She said, ask anyone the name of the village and you will see a wide road which reaches our village. This road has been made by me. It's visible from far. So she gave me a landmark of "wide road made by her" to reach her village. Everyone knew about my village and village elderly people and panchayat samiti members had gathered in the panchayat bhavan. Lali told me her story of how she entered politics. "My husband contested for Mukhiya post but he was defeated. In the next election in 2015 the seat was reserved for women. So my husband encouraged me to contest. We both wanted to bring change and do something good for the society. The only way was contesting and getting power to bring change." Her husband was present there and he further told the reason for his support to his wife to contest election. Lali's husband, "For many years I worked outside the state and after my father's death when I came back to village, I saw my people were suffering. There was no development work. I wanted to bring change; hence I contested for the post of Mukhiya in the first panchayati election. However due to the local politics and rivalry, I lost the election. Both of us worked for next five years, and when the next election came I encouraged my wife to contest election. We believe that only through political power, we can bring development. And till now we have done quite a lot. The biggest achievement has been the construction of the village road. It was difficult in this area due to naxals but we stood against naxals and are bringing development." This narrative does reflect the encouragement of husband, but it also reflects the key role of husband being played in everyday life of Mukhiya and her functioning. There are many such instances where husbands are in reality controlling the power and taking decisions. Thus we do see the presence of "Mukhuiya pati".

The above instances show that husbands and family are the primry factor for contesting the election. Many a times they contest to keep the continuity of Mukhiya;s post within the family and in some other cases they contest to keep the dream and aspirations of their husband.

There are other reasons also for contesting election. The personal interest and the chance of personal growth is another significant reason for contesting elections. For instance, Sukhiya, from Bishunpur block got elected as a panchayat samiti after the demise of her husband. Her husband was a Mukhiya and he was killed in a political rivalry. When I asked her the reason to contest election, she said, "I do not know much about politics. But in village meeting whenever anything was discussed I used to listen and sometimes I raised question. Till the time my husband was alive I was completely engaged in family chores. I never thought of contesting. After the death of my husband, I was thrown out from my house and my brother in law took away our property. I had no money and I took shelter in my mother's house. My children are staying with my mother. I decided to get back my property; hence I came back to my village and stayed in my broken house. When the election came, the seat was reserved for woman. I got support from the villagers. Even though I am uneducated, yet they supported me because I raise questions. They thought I can take their queries and concerns to the higher authorities and I can stand for them. This post has given me power and now I am able to look after my children."

Nemha is a woman in her mid-thirties but she looks like a forty year old woman. She is a widow and stays alone with her 8 year old son. She has a small piece of land (less than an acre) and that is the only source of her livelihood. She is a member of panchayat samiti and she is a member of women's group. She is 'Jal Sahiya' which means that it is her responsibility to take care of water cleanliness in the village. She distributes bleaching powder etc which she gets from the panchayat samiti and she gives information to the villagers related to sanitation and cleanliness. Nehma is a graduate in history from the state University and she got second division. Her parents were poor and could not support her further studies. They got her married at the age of 24. She lost her husband within 4 years and since then has been staying alone. When the panchayat election happened, villagers asked her to contest since she is one of those women in the village who are educated. "Educated women can read and speak well with sarkari babus", she gave a reason with a smile. Now she gets meagre amount from panchayat samiti and it gives her some support. Being member of panchayat samiti has given social status and she gets respect in the village. This has given her confidence. She feels that her being educated has given her few benefits in this way.

When I asked her if she will contest again, she said, "Yes, I will.. I will contest for the post of Mukhiya..now I am learning everything and by the time next reserved posts comes I will be ready and prepared."

There are many such women who have become member of panchayat because it was reserved post and there was no women representation. Rumpi, is an active woman and she is readily available to all for any kind of help. Her father in law was Mukhiya. Her husband is not working and he has no interest in the politics. When the panchayat samiti and ward members were being elected, Rumpi's name was suggested. She is not educated but she is quite popular. The reserved post for woman has to be given to woman and to fulfill the criteria Rumpi was elected.

The above narratives shows that woman on her own has no consensus and interest to contest election. Majority of the cases revealed that they are dummies and are contesting to fulfill someone else's aspirations (husband or father in law). There are only few trifling cases which give us the hope that leadership is building up among woman and they are getting empowered.

4. <u>Will you re contest again?</u> When asked that whether they will re contest again, majority of them said "No". For many elected woman representatives, this is an additional burden along with the household work. They have to attend weekly meeting at the block office, have to conduct gram sabha meetings regularly, have to look after rozgar activities under MGNREGA and other development work. Though in all the cases, husbands are doing all the work, including conducting the meetings, but still they feel burdened. Mukhiya of Helta Panchayat, Bishunpur said, "Every Thursday I have to come to the block office for meeting. I have to leave so many household chores. My husband looks after the entire work and he meets with all the people, but I have to come here to sign the papers. I do not like. I will never again contest."

- 5. <u>Education and Women's Election:</u> There was usual trend prevalent among the elected representatives and villagers that education is important. Most of the villagers said, that they vote for those who are educated. One villager said, "we select those woman who can read and write…those who are illiterate what kind of work they will do..they themselves do not know anything, so how they can help us." From the women respondents, it was revealed those educated women are conscious of the power which they get through PRIs. Thus education is important linkage to women empowerment.
- 6. <u>Social Status and Confidence</u>: Almost all the women respondents said that they have drastically changed after acquiring different positions in PRIs. They have gained confidence and they are able to speak. One lady mukhiya said, "Earlier I used to feel shy and I hardly said anything. The training gave me quite a lot of confidence and now I also ask questions." Another respondent said, "I had never stepped outside my house without any male accomplice. Now I go to interior villages, in the jungles and naxal areas without any fear. I do not fear now. It is my duty and I have to do it. If I fear then how can I work for my people?"
 - 7. Power of the gram sabha and panchayat: The elected women representations said that they are not given any power. They are just abiding the instructions given from the bureaucracy. I interviewed few male Mukhiyas and they also echoed the same thing. As per new regulation passed by Government of Jharkhand in 2018, in every panchayat there shall be the constitution of vikas samiti which shall comprise of women members. There was resentment among Mukhiyas and panchayat samiti members that they are being sidelined and the power are being given to the vikas samiti. Infact some of them saw it as the move of the government to create an alternative parallel power bloc against the gram panchayat. In the village, women folks are not clear about the functioning and power of vikas samiti. Hence, there is a fear that this will fail again unless the woman are being trained and given the knowledge.

This chapter discussed on the women's role and their participation in the PRIs. The political participation and political awareness low among the women. Only those women had some level of awareness that were elected and got training. The study also revealed that unlike men, women do not have any political affiliation and they do not have membership of any political party or NGO.

Most of the women elected representatives were in their mid-30s or early 40s and this proves the point that women get engaged in political activities only after they are relatively free from household chores. The study also found that even when they are elected and actively conducting the responsibilities, they are expected to look after the children and domestic affairs. There were two woman Mukhiyas who came to the meeting with their small children. In most cases it was found that woman merely remains a rubber stamp and entire work is being done by husband.

The women feel that their social status has increased and they have got respect. There were few who felt that these are additional burden and they will be happy when they are relieved. Thus it brings question to the women empowerment. Are they really empowered or they are empowering their husbands by making them mukhiya patis.

Gender Quotas and People's Perception

Fifty percent woman reservation is being given in Jharkhand. As discussed in the previous chapter, despite reservation woman are not really empowered because they are being overshadowed by their "Mukhiya Patis", who are the real power holders and decision makers. This chapter brings forth the question of "how gender quotas have empowered woman?", "was it possible to bring empowerment without reservation?", "how society sees the woman reservation?" and "how the woman themselves sees the woman reservation?"

There is a general belief that the tribal society is an egalitarian society and men and woman share equal status. The reality is that the tribal society is an unequal society. Villagers were asked questions related to their perception about women representatives. Separate focused group discussions of men and women were conducted to know their opinions about women reservation and in general about the status of women in the tribal society.

Narratives from Men's FDG held in Gumla and Dumka district:

"If there is no reservation for women, there will be no woman elected to the post of Mukhiya. Its only because of reservation that we see few woman faces in the panchayat meeting": Villagers in Bishunpur panchayat

"Women do not know politics. It is our compulsion due to the woman reservation that we have to elect them, else they are better at home.": Villagers of Helta panchayat

"Give them rice flaks and ask them to vote, they will vote. They cannot think beyond rice flaks":

Men folks in Dumka district

There is a general perception among men that women even though not capable enough are getting advantage due to reservation. Some of the men mukhiyas said again and again that during their tenure there was more development work undertaken. In gram sabha meetings and elsewhere woman do not speak. In Dumka, I was told those women are not allowed to attend such meetings. They belong inside the house and they do the household work.

When I asked women group, they said they do whatever their husbands or elders tell them. They just follow them. In the women FDGs conducted it was found that they do not know about their power, about the political and social activities happening in their vicinity and they didn't know any officials or politicians. They said, "Men know everything, ask them."

There is an understanding among women that if there was no reservation, they would never have got chance to step in the political platform. "Without reservation, we would not stand today", they said strongly. Many women do not want to talk about politics and when asked that how women reservation has brought change, they said, we do not know.

Thus there is ignorance among woman. As argued by Chibber (2001) women participation is low due to lack of economic and social power. The patriarchal society has restrained the women's space.

The study found those women are not encouraged to participate in political activities unless there is a reserved post for woman which do not give them any alternative. Thus woman are being used by men of their families to gain political leverage at their cost. The perception towards woman as a household property is strongly prevalent among men and it is also visible within the women, when they refuse to express anything and say, "Ask our men". Thus, I argue that gender quota is yet another tool of men to gather power and it is not bringing any empowerment to women.

Conclusion

The aim of the study was to understand the political participation of tribal women in Jharkhand. The political participation and political awareness of elected women representatives was measured by their knowledge of panchayati raj act, awareness about gender quotas. The data of the present study reveals that only those women were politically aware whose husband or any male member of the family was politically connected or was politically active. Women were not affiliated to any political group or ideology and they did not showed any interest for having any affiliation in future.

The present study found that gender quotas have brought positive impact in women. It was widely acknowledged by both men and women that it is only due to gender quotas that woman are participating in political process. Women reservation is positive in the sense it has given a platform to the women to come out of the shadow of house and interact with social and political entities.. The gender quotas have triggered a ray of hope of bringing women leadership at the forefront. The women have gained confidence and social status, yet there are many who do not want to contest again. This attitude is located in the positioning of women as defined by the patriarchal society. Thus, political space is gendered.

It was found that women who decided to contest elections are those women who got the support from their male relatives/ husbands/ father/ father in law etc. Thus we can infer that women alone cannot even think of contesting and taking part in political activities.

The study revealed the existence of "Mukhiyas patis". This is where gender quotas fails in its purpose of harnessing women empowerment. Though women are elected in those reserved seats, it is ultimately the men who have the power, who decide and who govern. The position of women representatives reduced to rubber stamp. Kabeer (2004) has argued that women empowerment can be brought through control over resources, which comprise of social and economic power and these resources increases the ability of choices. The findings of this study is reiterating to the existing argument that unless women have economic and social power, they can never gain political power.

Recommendations:

This study recommends three things which are crucial for enhancing women participation in political arena.

(1) Training Module and Exposure Visit: During the course of interview it was told by women representatives that training has helped them a lot. All women should be given training on PRIs, its functioning, power and the advantages of political participation. I am suggesting training for all women above the age of 18, so that the aspirants can be identified early and they can be groomed.

Exposure visit to other states: interaction with other women leaders are necessary to know how women representatives are functioning in other parts of the country, what kind of obstacles they are facing and how they are handing those challenges. Interaction with bureaucrats and politicians is also necessary to boost up their energy.

- (2) Increasing the literacy rate of women: Education is a significant factor in political participation. The literacy rate of women is quite low in Jharkhand. It has to be increased. The school dropout rates have to be decreased.
- (3) Creating Political Awareness among women: Our social structure has conditioned such that women remain isolated in the private space. This hampers their ability to participate in the political forum.

References

Ban, R and V. Rao. 2008. Tokenism or Agency? The Impact of Women's Reservations in Village Democracies

- in South India. Economic Development and Cultural Change, Vol. 56, No. 3., pp. 501-530.
- Baviskar, B.S and George Mathew (eds). 2009. Inclusion and Exclusion in Local Governance: Field Studies from Rural India. New Delhi, Thousand Oaks
- Baumann, P, Ramakrishnan, R, Dubey, M, Raman, K.R and Farrington, J. 2003. *Institutional Alternatives and Options for Decentralized Natural Resources Management in India.* (accessed on 17th of June 2018) http://www.odi.org.uk/publications/workingpapers/wp230.pdf
- Bijoy, C. R. (2012). *Policy brief on Panchayat Raj (Extension to Scheduled Areas) Act of 1996*, UNDP Burns, N, K. L. Scholzman and S. Verba. 2001. *The Private Roots of Public Action: Gender, Equality and Political Participation*. Cambridge: Harvard University Press.
- Chathukulam and M.S.John. (2000). Empowerment of women panchayat members: Learning from Kerela (India). *Asian Journal of Women's Studies*, Vol. 6, 2000. Issue 4. Pages 66 101.
- Chattopadhyay, R and E. Duflo. 2004. The Impact of Reservation in the Panchayati Raj: Evidence from a Nationwide Randomized Experiment. *Economic & Political Weekly*, Vol. 39, No. 9, pp. 979-86.
- Chibber, P. 2002. Why some women are politically active: The Household, public space and political participation in India. *International Journal of Comparative Sociology*, 43, no. 3-5, pp. 409-429.
- Crook, C.R and Manor, J. 1998. *Democracy and Decentralization in South Asia and West Africa*. Cambridge: Cambridge University Press.
- Dahlerup D. 2006. (ed). *Women, quotas and politics*. London: Routledge Ghosh D.K. 1995. Women *panchayat* members as heads of offices: a study in West-Bengal. *Journal of Rural Development*, 14(4), pp. 357-66.
- Government of Jharkhand. 2016. Jharkhand Economic Survey, 2015-16.
- Hust, E. 2004. Women's Political Representation and Empowerment in India: A Million Indiras Now, New Delhi: Manohar Publications.
- IIPA and Ministry of Panchayati Raj. 2013. Strengthening of Panchayats in India: Comparing Devolution across States, Empirical Assessment 2012-13
- Johnson, C. 2001. Local Democracy, Democratic Decentralization and Rural Development:

Theories, Challenges and Options for Policy', *Development Policy Review*,19(4)521 532 (accessed on 23rd of September 2018) http://www.worldbank.org/participation/article.pdf

- Kabeer, N. 2004. Gender equality and women's empowerment: A critical analysis of the third millennium development goal 1. *Gender and Development*, 13:1, pp. 13-24.
- Kaul Shashi and Sahni, Shradha. 2009. Study on the participation of women in *panchayat*i raj institution. *Stud Home Comm Sci,* 3(1), pp. 29-38.
- Kudva, N. 2003. Engineering Elections: The Expereinces of Women in Panchayati Raj in Karnataka, India.

- International Journal of Politics, Culture and Society, Vol. 16, No. 3, pp. 445-463.
- Kurane, An. 2012. Issues in Women's Development. Jaipur: Rawat Publications.
- Mohanty, B. 1995. Panchayati Raj, 73rd Constitutional Amendment and Women, *Economic & Political Weekly*, Vol. 30, No. 52, pp. 3346-3350.
- Mondak, J. J and A. Mary. 2004. The knowledge gap: A re-examination of gender based difference in political knowledge. *Journal of Politics*. 66, pp. 492-512.
- Mundu, B. 2002. *Challenges to the Traditional Customary Rights of the Adivasis: The Jharkhand Experience.* (accessed on 16th of January, 2019)
 - http://www.cpsu.org.uk/doenloads/Bineet_M.pdf

Panchayati Raj, Jharkhand.

- https://www.jharkhandpanchayats.gov.in/documents/6183151/0/Total%20Elected%20Member. df accessed on 7 November 2018
- Ramesh, A and B. Alo. 2001. 33 1/3: Reservation towards political empowerment. Bangalore: Books for Change
- Satyam, K, 2013. Study of elected tribal women representatives in panchayati raj institution in India: A case of Jharkhand. *Asian Journal of Multidisciplinary Studies*, Vol. 1. No. 4
- Sekon, J. 2006. Engendering Grassroots Democracy: Research, Training and Networking for Women in Local Self-Governance in India. *NWSA Journal*, Vol. 18, No. 2, pp. 101-122.
- Singla, P. 2011. *Women's Participation in Panchayati Raj: Nature and Effectiveness*. Jaipur: Rawat Publications.
- Vaddiraju, A.K and S. Mehrotra. 2004. Making Panchayats Accountable. *Economic and Political Weekly*. Vol. 39, Issue No. 37, pp. 11-17.
- World Bank. 1997. *World Development Report: The State in a Changing World*. New York: Oxford University Press.

Annexure 1:

Glimpses from the Field.: Gumla district

Picture 1: [Panchayat samity members names displayed at the panchayat bhawan, Dumberdih]



Picture 5: [NREGA work going on, Bishunpur]



Picture 3: Santhali Woman Mukhiya, Dumka



name of the member:

- 1. Profile of the elected women representatives in the gram panchayat:
- 1.1 Age of the respondent:

1.2 Marital Status
1.3 Caste
1.4 Education
1.5 Occupation
1. 6 Family members (and their details)
1.7 Type of family: Joint/ Nuclear
2. Level of participation of the elected women representations in social or political activities before becoming a gram samity member
2.1. What are the factors that led them to contest the election?
2.2. Whether actively engaged/ member of any organization or group Yes/ No
2.3 If Yes, then what kind of organization or group (a) Member of SHG; (b) Member of Mahila Mandal; (c) Member of NGO; (d) Any other specify
3. What is the role of the family/ father/ mother/ husband/ relatives in motivating women to contest in the panchayat election?
4. State the reasons for contesting pnachayati election.
5. Is there any member from your family who is a panchayat member? If Yes, who and how it has influenced her decision to contest election
 Do you know anything about gram panchayat and its functioning? Yes 2. No
7. Do you know the powers and responsibilities of the elected representatives?
8. Do you feel self-confident after being elected?
9. Do you face any difficulties after being elected? (In work place and home). Describe the challenges.
10. If yes, how are you able to cope up with those difficulties?

11. Are your views are accepted/ considered in the gram panchayat meeting?

- 12. Do you think that your status have increased after having elected as panchayati samity member.
- 13. Has it brought any change in your status in the family? (social/economic status)
- 14. Is there any gender discrimination in the gram panchayat?
- 15. If yes, what kind of discrimination. Describe.
- 16. Are you able to exercise the power given to you? Yes/ No
- 17. Do you get advise and guidance from the panchayati officials? Yes/No
- 18. Do you conduct regular gram sabha meetings?
- 19. Do you attend meetings regularly?
- 20. What are the activities which you have done till now?
- 21. What are the development work/ activities which you want to do in future?
- 22. How often do you visit your ward?
- 23. Do you feel that 33% reservation is essential for women? If yes, why?
- 24. Do you want to contest election next time?
- 25. Do you think that political reservation has empowered woman? If yes, how.

Contributor

Dr. Anju Helen Bara

Assistant Professor
Department of Development Studies
Central University of South Bihar, Panchanpur, Gaya

Abstract

Safe sanitation means promotion of safe disposal of human excreta, right use of toilet and avoiding open defecation as well as management of solid and liquid waste. Swachh Bharat Abhiyan – Shauchalaya Nirman Yojana was officially launched by Prime-Minister of India on 02nd October 2014 on the eve of 145th Birthday of father of the nation Sh. Mahatma Gandhi. This scheme is started under the Swachh Bharat Mission (SBM) to provide financial aid to the families below poverty line (BPL) and other eligible families for making first toilet at their home. The Swachh Bharat Abhiyan in rural areas shall mean improving the levels of cleanliness in rural areas through Solid and Liquid Waste Management activities and making Gram Panchayats Open Defecation Free (ODF), clean and sanitised.

Dr Anup Soni undertook the research with the Baiga tribe Particularly Vulnerable Tribal Group (PVTG) of Central India which mainly inhabits the states of Madhya Pradesh and Chhattisgarh. The Baiga call themselves the first human on earth or the – Mati-Putra (children of the mother earth) known for their tattoo, traditional method of treatment and shifting cultivation. Baigas are not habitual of using toilets. They follow the customary practice of open defecation and don't follow the proper hygienic practices related to sanitation. Their cultural background contradicts with the basic idea of toilet. Moreover, Baiga settlements in hamlets are quite dispersed, which also creates a geographical barrier for proper and clean water supply to the Baiga houses. In this scenario, it becomes significant to study the implementation of Shauchalaya Nirman Yojana in the Baiga villages.

The outcome of the study will be of immense value for planning commission, government administrative bodies, research organizations and teachers / scholars / students of Anthropology, Sociology, Economics, Ethnology, Folklore studies, Tribal Studies, Regional studies, etc. as well as administrators, social workers, development practitioners, policy makers and many more people having interest in relevant area. This research work will play significant role in generating awareness and dissemination of knowledge regarding Baiga tribal culture and hygiene practices.

Keywords: Sanitation, Soild Waste, Liquid Waste, Swachh Bharat Abhiyan - Shauchalaya Nirman Yojana, Swachh Bharat Mission (SBM), Baiga Tribe, Swachh Bharat Mission — Gramin (SBM-G), individual household latrine (IHHL)

Introduction

Safe sanitation means promotion of safe disposal of human excreta, right use of toilet and avoiding open defecation as well as management of solid and liquid waste. Poor sanitation is a primary cause for many deadly diseases, deaths among children under age five, contamination of ground water sources, loss of family income on account of increased health costs, and compromised human dignity. Exposure to contaminated drinking water sources and food with pathogen-laden human waste is a major cause of diarrhoea, and can be affected by cholera, trachoma, intestinal worms, malaria, ascariasis, etc. WHO observed that one gram of feces can contain 10,000,000 viruses, 1,000,000 bacteria, 1,000 parasite cysts and 100 parasite eggs. Open and untreated human excreta can interact with food through soil, water and crops unless this fecal-oral route is broken through adopting safe sanitation and hygiene practices. It is crucial for all stakeholders (household, community, and governments) to understand the impacts of poor sanitation at each level and come together for the implementation of safe sanitation processes.

Need and Background of the Study

Swachh Bharat Abhiyan – Shauchalaya Nirman Yojana was officially launched by Prime-Minister of India on 02nd October 2014 on the eve of 145th Birthday of father of the nation Sh. Mahatma Gandhi. This scheme is started under the Swachh Bharat Mission (SBM) to provide financial aid to the families below poverty line (BPL) and other eligible families for making first toilet at their home. Swachh Bharat Mission (Rural) is actively working in the field of rural cleanliness and sanitation in rural areas and running this scheme in rural areas. Under this scheme, eligible families get the grant of Rs. 12000/- for building a concrete toilet at home.

Baiga tribe is a Particularly Vulnerable Tribal Group (PVTG) of Central India and mainly inhabits in the states of Madhya Pradesh and Chhattisgarh (Ministry of Tribal Affairs). A minor population is also found in the adjoining states of Uttar Pradesh, West Bengal, Jharkhand, Maharashtra, Odisha and Bihar. According to 2011 census, the total population of the Baiga tribe in India is 5,52,495. Sex Ratio among the Baigas is 993. The population of the Baiga tribe is 4,14,526 (Census 2011) in Madhya Pradesh. Their major concentration of Baigas in Madhya Pradesh is in the Shahdol, Jabalpur and Rewa Divisions. They mainly live in Shahdol, Umaria, Anuppur, Dindori, Balaghat, Jabalpur, Singrauli and Sidhi districts of Madhya Pradesh. The total population of the Baiga tribe. in Anuppur district is 30,211. The area of study under this project is Pushprajgarh block of Anuppur district.

The Baiga call themselves the first human on earth or the – Mati-Putra (children of the mother earth) known for their tattoo, traditional method of treatment and shifting cultivation. They have their own dialect which is known as Baigani. By nature they are simple in living, close to environment and free from much worry about future. The Baiga tribe of central highlands of India still holds their ancient ways and exhibit primitiveness in the anthropological sense. They are still living in very primitive state in forest and hilly tracts and yet to entirely come up with the mainstream. But, their culture, the association with the forest and close association with nature makes them a special people. The distinguishing characteristics of the Baigas are namely the long wavy hairs with bun, full body tattoo marks of Baigin (specially tattoo on forehead), cult of magic, ancient customs of medicine, healing practices, bewar (shifting cultivation), their exquisite hunting skills, etc. Their appearance, hair, dress and tattoo differentiate them from other tribal groups in the area.

Baiga community is sub-divided into endogamous sub-group (Jat), and further into exogamous territorial Garh, and Goti. The Baiga are strong believer of magic and good medicine-men. They have sound knowledge of numerous forest herbs and medicinal plants that they use to cure diseases. The Baigas have very limited resources for livelihood and most of them, if existing are often at the subsistence level. In the name of handicraft they do little basketry, broom making and wood carving. Both women and men love to adorn themselves with handmade and market made ornaments.

They have the customary practice of open defecation. Moreover, they use stone or leaf for cleaning after defecation. Use of water for cleaning after defecation is a taboo among them according to a myth related to their origin. With the changing world they are getting aware and taking benefit of various government schemes

and programs. A vast cultural change is witnessed among them.

Under the Swachh Bharat Mission (Rural) government is trying to promote the village cleanliness program in Baiga villages. Janpad Panchayats and Gram Panchayats are also promoting the constructing of personal and public toilets in the Baiga villages. Baigas are not habitual of using toilets. They follow the customary practice of open defecation and don't follow proper hygienic practices related to sanitation. Their cultural background contradicts with the basic idea of toilet. Moreover, Baiga settlements in hamlets are quite dispersed, which also creates a geographical barrier for proper and clean water supply to the Baiga houses. In this scenario, it becomes significant to study the implementation of Shauchalaya Nirman Yojana in the Baiga villages. Along with the study of the status of this scheme in Baiga villages, its utility, acceptability and effectiveness needs to be studied also with the belief system and changing socio-cultural aspects.

Objectives of the Research

- i. To study the status of effective implementation of Shauchalaya Nirman Yojana among Baiga tribe in rural area.
- ii. To understand the Level of acceptability of toilet in the Baiga society and cultural change.
- iii. To assess the Problems in the proper and effective implementation of Shauchalaya NirmanYojana.

Significance of Current Research

In the changing scenario of Baiga society and culture, it is quite relevant to study about the effective implementation and impact of Souchalaya Nirman Yojana among the Baigas. Along with the study of the status of this scheme in Baiga villages, its utility, acceptability and effectiveness needs to be studied also with the belief system and changing socio-cultural aspects.

The outcome of the study will be of immense value for planning commission, government administrative bodies, research organizations and teachers / scholars / students of Anthropology, Sociology, Economics, Ethnology, Folklore studies, Tribal Studies, Regional studies, etc. as well as administrators, social workers, development practitioners, policy makers and many more people having interest in relevant area. This research work will play significant role in generating awareness and dissemination of knowledge regarding Baiga tribal culture and hygiene practices.

Research Methodology

Area of Study:

The study had been conducted in the Baiga villages of Anuppur districts of Madhya Pradesh. The field work was mainly done in Umargohan village of Pondki Gram Panchayat and Pharrisemer village of Harratola Gram Panchayat. Both the villages come under the Pushparajgarh Tehsil of Anuppur District of Madhya Pradesh. The quantitative data was collected through household survey by using structured schedule. The qualitative data was collected through observation, interview and focused group discussion. The villages were selected purposely depending on the availability of good number of Baiga households and the location of the villages from the exposure and developmental point of view.

Sample Size:

Intensive Survey was carried out in 100 percent available Baiga households of Umargohan village (Pondki Panchayat of Pushparajgarh Tehsil, Anuppur District, Madhya Pradesh) and Pharrisemer village (Harratola Panchayat of Pushparajgarh Tehsil, Anuppur District, Madhya Pradesh) as samples to be away from any sort of biasness. Altogether, quantitative data was collected from the 60 households from both the major villages of fieldwork.

Research Design: Descriptive and Exploratory Research

Research Tools: The scientific research tools and techniques will be applied for collection and analysis of data, which are as follows:

i. Observation

ii. Interview <mark>using</mark>

iii. Schedule (household)iv. Focused Group Discussion

v. Case Study (only for significant cases of cultural change, important people, impact of development)

vi. Still Photography Vii Statistical data analysis

Secondary Data Collection will be done from:

i. Census Reports of Census of India

ii. Records of relevant government organizations

iii. Government Annual Reports

iv. Baiga Development Authority

v. Research Institutes

vi. Journals

vii. Books

viii. Magazines

ix. Newspapers

x. Archive

xi. Thesis / Dissertation

Time Frame:

i.		Duration of Fieldwork	One month in different intervals.
ii		Data Analysis	Fifteen days
ii	i.	Thesis Writing	Fifteen days

Swachh Bharat Mission (SBM) and Shouchlaya Nirman Yojana (IHHL)

Governmental Initiatives for Rural Sanitation in India

The rural sanitation programme in India was introduced in the year 1954 as a part of the First Five Year Plan of the Government of India. The 1981 Census revealed rural sanitation coverage was only 1%. The International Decade for Drinking water and Sanitation during 1981-90, began giving emphasis on rural sanitation. Government of India introduced the Central Rural Sanitation Programme (CRSP) in 1986 primarily with the objective of improving the quality of life of the rural people and also to provide privacy and dignity to women. From 1999, a "demand driven" approach under the "Total Sanitation Campaign" (TSC) emphasized more on Information, Education and Communication (IEC), Human Resource Development (HRD), Capacity Development activities to increase awareness among the rural people and generation of demand for sanitary facilities. This enhanced people's capacity to choose appropriate options through alternate delivery mechanisms as per their economic condition. Financial incentives were provided to Below Poverty Line (BPL) households for construction and usage of individual household latrines (IHHL) in recognition of their achievements. To generate awareness on sanitation, the first *Nirmal Gram Puraskars* (NGP) were awarded to recognise the achievements and efforts made at the *Gram Panchayat* (GP) level in ensuring full sanitation coverage and achieving other indicators of open defecation free GPs. While the award gained popularity in bringing about a desire in

the community for attaining *Nirmal* Status, there have been issues of sustainability in some awardee GPs. (Ministry of Drinking Water and Sanitation, 2017)

The 'Nirmal Bharat Abhiyan' (NBA), the successor programme of the 'Total Sanitation Campaign' (TSC), was launched from 1st April 2012. The objective was to accelerate the sanitation coverage in the rural areas so as to comprehensively cover the rural community through renewed strategies and saturation approach. Nirmal Bharat Abhiyan (NBA) envisaged covering the entire community for saturated outcomes with a view to create Nirmal Gram Panchayats. Under NBA, the Incentives for IHHLs were enhanced and further focussed support was obtained from MGNREGS. However, there were implementation difficulties in convergence of NBA with MGNREGS as funding from different sources created delays.

Swachh Bharat Mission (SBM)

To accelerate the efforts to achieve universal sanitation coverage and to put focus on safe sanitation, the Prime Minister of India launched the Swachh Bharat Mission (SBM) on 2nd October, 2014 on the eve of 145th Birthday of father of the nation Sh. Mahatma Gandhi. The Mission Coordinator shall be Secretary, Ministry of Drinking Water and Sanitation (MDWS) with two Sub-Missions, the Swachh Bharat Mission (Gramin) and the Swachh Bharat Mission (Urban), which aims to achieve Swachh Bharat by 2019, as a fitting tribute to the 150th Birth Anniversary of Mahatma Gandhi, which in rural areas shall mean improving the levels of cleanliness in rural areas through Solid and Liquid Waste Management activities and making *Gram Panchayats* Open Defecation Free (ODF), clean and sanitised. ODF would mean the termination of faecal-oral transmission, which is defined as follows —

- No visible faeces found in the environment/village and,
- Every household as well as public/community institution(s) using safe technology option for disposal of faeces, as defined by the Ministry.

The Mission shall strive for this by removing the bottlenecks that were hindering the progress, including partial funding for Individual Household Latrines (IHHLs) from Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS), and focusing on critical issues affecting outcomes. The Guidelines of *Swachh Bharat Mission* — Gramin (SBM-G) and its provisions are applicable with effect from 02nd October 2014. The main objective of SBM(G) are as follows (Ministry of Drinking Water and Sanitation, 2017):

- Bring about an improvement in the general quality of life in the rural areas, by promoting cleanliness, hygiene and eliminating open defecation.
- Accelerating sanitation coverage in rural areas to achieve the vision of Swachh Bharat by 2nd October 2019.
- Motivate communities and *Panchayati Raj* Institutions to adopt sustainable sanitation practices and facilities through awareness creation and health education.
- Encourage cost effective and appropriate technologies for ecologically safe and sustainable sanitation.
- Develop, wherever required, community managed sanitation systems focusing on scientific Solid & Liquid Waste Management systems for overall cleanliness in the rural areas.
- Create significant positive impact on gender and promote social inclusion by improving sanitation especially in marginalized communities.

Works done under Swachh Bharat Mission (Gramin):

- 1. Construction of individual household latrine (IHHL) to make the villages free from open defecation (ODF).
- 2. Construction of Community Sanitary Complex.
- 3. Construction works related with the management of solid and liquid waste material.

4. To generate awareness and educate people regarding cleanliness and hygiene in rural areas to bring behavioural changes among the masses through information, education and communication (IEC) activities.

Construction of Individual Household Latrine (IHHL)

Shauchalaya Nirman Yojana or scheme of construction of individual household latrine (IHHL) or toilet is a significant part of Swachh Bharat Mission - Gramin (SBM-G) to make villages open defecation frees (ODF). This scheme under the 'Swachh Bharat Abhiyan' or Swachh Bharat Mission (SBM) was officially launched, by Prime-Minister of India on 02nd October 2014, to provide financial aid to the poor families for making first toilet (individual household latrine) at their home. Under this scheme, eligible families get the grant of Rs. 12000/- for building up concrete toilet at home. Swachh Bharat Mission (Rural) is actively working in the field of rural cleanliness and sanitation in rural areas and running this scheme in rural areas.

A duly completed household sanitary latrine unit comprise of the following components under this scheme:

- 1. A sanitary substructure (that safely confines human faeces and eliminates the need for human handling before it is fully decomposed),
- 2. A super structure with water facility, and
- **3.** A hand wash unit for cleaning and hand washing.

The Mission aims to ensure that all rural families have access to safe toilets and therefore safe technology options are an important component of toilet choice. There are various safe sanitation technologies available like the Twin Pit, Septic Tank with soak pit, Eco-san, Bio-toilets amongst others. Sanitation is a State subject. The Ministry of Drinking Water and Sanitation, Government of India, encourages the promotion of Twin-Pit technology for most parts of the country, however States may look to develop other safe technologies as well, and States shall disseminate information about available technologies and their costs to the beneficiary to enable him/her to make an informed choice. It is desired that facility for water storage, hand washing and cleaning of toilets, if not already there, maybe created / strengthened along with construction of a toilet. Many households may already have provision for water within the house or nearby places, such as, hand pumps, water tanks, wells, etc. As sanitation is primarily a behavioural and demand driven issue, this includes behaviour for hygiene as well.

Eligible Households / Families or Beneficiaries under IHHL Scheme:

While selecting eligible households for providing incentive under SBM(G), following order of preference shall be ensured:

- 1. Below Poverty Line (BPL) Families
- 2. Above Poverty Line (APL) Families of following categories
 - SC/ST
 - Persons with disability
 - Widow/old age pensioners
 - Landless labourers with homestead
 - Small farmers
 - Marginal farmers

Women headed households While ensuring the above order of preference, priority may be accorded to cover the households (against each category as mentioned above) having:

1. Pregnant and lactating mothers covered by Maternal Health Programmes of Central and State Governments, including *Janani Suraksha Yojana* under National Rural Health Mission, and;

2. Girl children covered by any scheme benefiting the girl child

After the launch of Swachh Bharat Mission (Gramin), work of sanitation has accelerated in all the States. The incentive amount provided under *Shouchalya Nirman Yojana of SBM(G)* to Below Poverty Line (BPL) / identified APL households is up to Rs.12,000 for construction of one unit of IHHL (toilet) and to provide for water availability including storage for hand washing and cleaning of the toilet. The aim of the incentive is not to provide the full cost of the toilet but to facilitate a positive change in behaviour for people to undertake construction of toilet on their own.

Central Share of this incentive for IHHLs from Swachh Bharat Mission (Gramin) shall be Rs.7,200 (60%) and the State share will be Rs.4,800 (40%). For North Eastern States, Jammu & Kashmir and Special Category States, the Central share will be 10,800 (90%) and the State share Rs.1,200 (10%). Special category States are those States declared so by the Government of India from time to time, with the objective to bring these States on par with the development levels of other States. In addition to the North East States including Sikkim, currently Uttarakhand, J&K and Himachal Pradesh are also considered as Special Category States. In Madhya Pradesh Rs. 12000 is granted under the scheme for construction of IHHL.

States have the flexibility to decide on the implementation mechanism to be followed. The construction of household toilets may be undertaken by the individual beneficiaries themselves with support from/or through agencies in the village, which is ideal. States may also decide to give the incentive to the individuals or to communities where the model is adopted to trigger the demand in GPs/Blocks/Districts, or to the *Gram Panchayats* on the achievement of community objectives. States should also ensure that the quality of toilet is maintained through sample physical verification through its officers. Payment of incentives may be in cash or in the form of construction materials or credit vouchers for such materials. In case, cash incentive is provided to the individual, Direct Beneficiary Transfer (DBT) to the bank accounts may be ensured. Based on verification of quality of toilet on-site, assigned official supervisor takes a geo-tagged photograph and uploads it on the webportal of 'www.swachh.mp.gov.in' for processing payment of incentive in Madhya Pradesh.

Technology of Toilet (IHHL) Provided in Shouchlaya Nirman Yojana in the Area of Study:

According to the 'Handbook on Technical Options for On-Site Sanitation' published by Ministry of Drinking Water and Sanitation, Government of India (May 2012), in most of the areas in India, people use water for ablution and type of soil is normal. Under such conditions on-site sanitation, through pit toilet is most suited option. The area under study has normal soil with low water table. The technology used in the study area is 'Twin Liz-Pit Water Seal Toilet'.

The Twin Pit Water Seal Toilet is a complete on-site sanitation measure at household level which, on one hand fulfills all the sanitary requirements of a toilet and on the other hand provides continuous use with minimal maintenance. The main components of such a toilet are the two pits used alternately, a pan, water seal / trap, squatting platform, junction chamber and a superstructure (Fig. 1).



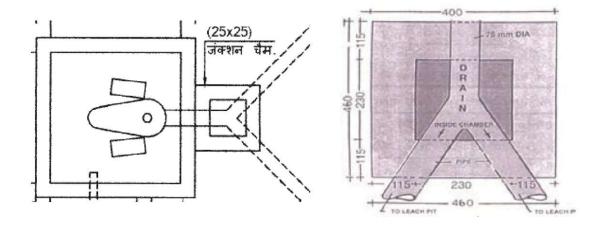


Fig. 1: Superstructure of model toilet (IHHL) with water tank and wash-basin

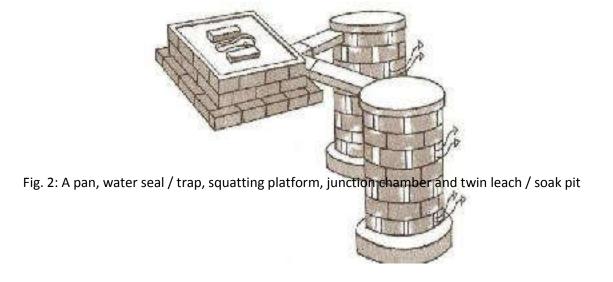


Fig. 3: Junction Chamber

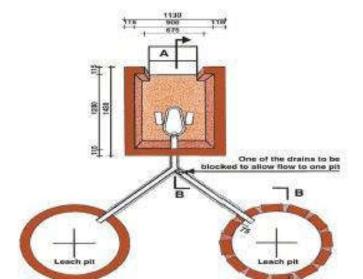


Fig. 4: Architecture of Individual Household Latrine

Under the system, there are two pits which are used alternately (Fig. 2). Both the pits are connected with a junction chamber at one end (Fig. 3). Pit walls have honeycombed structure. The bottom of the pit is not plastered and is earthen. Depending on the number of users of toilet, size of the pit varies. Capacity of each pit is normally kept for 3 years. First pit, after it gets filled up in about 3 year is blocked at the junction chamber and second pit is put in operation. Water part of excreta percolates in soil through honey combs. After 2 years of blocking of the first pit, its contents degrade completely and turn to split, odorless, pathogen free manure. It is dug out by beneficiaries and used for agriculture and horticulture purposes. After the second pit is filled, it is similarly blocked and the first pit is put in use again. Thus, alternate use of both the pits continues. A plan and section of two pit toilet is as below (fig. 4).

Pan and trap / water seal:

The pan used in the pit toilet has steep slope of 280 - 290. It may be of ceramic, mosaic or fiber. People normally do not accept mosaic pan as the surface of such pan is not smooth on which the excreta sticks. Therefore, it requires more water for cleansing. Fiber pan is cheaper, lighter and easy in handling. However it is not acceptable to many beneficiaries due to its color. After some years of operation, it develops yellowish color which is not aesthetically appealing to most of the beneficiaries. Ceramic pan is used in most of the cases where it is available (Fig. 5). Such rural pans are also easily available in the markets. It is aesthetically acceptable and requires less quantity of water (1.5 to 2 liters.). There are only few manufacturers of ceramic pans in India, resulting into higher cost in comparison to other pans due to high transportation cost.



Trap / water seal in rural pans is of 20 mm only. Therefore, such pans require only about 1.5 - 2 liters of water to flush out excreta with 20 mm water seal. Thus, the system is also suitable for areas where the water is scarce. Such water seal may be of ceramics, mosaic or made of fiber (Fig. 6 and 7).

Vent pipe not required:

A pit toilet does not require vent pipe. Gases produced in the pit are diffused in soil through honey combs. Such gases are mainly Carbon dioxide and Methane. Thus the system also helps in reducing air pollution, arising out of such Green House Gases.

Size of the pit:

The sizes of pits where ground water level is always below the bottom of the pit and infiltration rate of soil is 30 liters / m2 / day for a 3 years sludge storage volume works out as described below:

Table 1: Size of Pits in twin pit toilet

No. of daily users of toilet			Combined rectangular pit divided by partition wall in tow equal compartments. Size of each pit		
	Diameter mm	Depth mm	Length mm	Breadth mm	Depth mm
5	1050	1000	1000	1000	800
10	1200	1500	1250	1250	1050
15	1400	1630	1400	1400	1200

Shape of the pit:

A pit may be circular, square, rectangular or linear in shape depending on the availability of space for household toilets. However, effective volume of each pit should be as per the above table. Circular and square pits (separated completely) are better than the linear or rectangular pits (when separated by dividing wall only), as in the former case space for leaching out effluent is more than in the later case.

Advantages of Two Pits Pour Flush Toilets:

- 1. It is a permanent solution for on–site household human waste disposal.
- 2. It requires only 1.5 to 2 liters of water per use of toilet.
- **3.** Digested human wastes, when taken out of the pit after 2 years, is semi solid, free from odor and pathogens, that can be easily dug out by the beneficiaries.
- **4.** Degraded sludge has good percentage of plant nutrients and can be used for agriculture and horticulture purposes.
- 5. It does not require scavenger to clean the pits.
- **6.** It can be easily upgraded and connected to sewer when ever such facility is available in future.
- **7.** The maintenance is easy.

Limitations of Two Pits Pour Flush Toilet:

- Pit toilet (single or double pit) is not suitable for high water table and rocky areas. In high water table areas, there is chance of ground water contamination. In coastal areas also these toilets are not suitable at all. Further, due to high water table, adjoining soil of the pit becomes saturated and further percolation from pit reduces significantly causing frequent filling of the pits.
- In case of rocky areas, there is no chance of percolation of water from pits. Consequently, the pit gets filled in frequently. Due to unavailability of mechanical devices to clean the pits, it is not acceptable by the beneficiaries. Moreover, even after the pit is emptied, it is quite difficult to dispose the sludge safely.

Do's and Dont's to Maintain a Toilet:

Do's -

- 1. Level of slab on the pit should be 3-4 inches above the ground level, otherwise, rainwater may enter into the pit. Therefore, do not make pit with a cover slab below the ground level.
- 2. Both the pits should be used alternately.
- 3. Keep two liters of bucket with water ready in the toilet for flushing.
- 4. Pour little quantity of water on the pan before it is used. It helps excreta to slide down the trap and pit easily.

- 5. Use only 20 mm water seal / pit trap as it requires only 1.5 2 liters of water to flush out excreta.
- 6. Toilet should be regularly cleaned.
- 7. Desludging of pit should be done after 2 years, digested human waste in the pit becomes odourless and pathogen free by that time.
- 8. Manure from the pit should not be thrown, rather used in agriculture as it contains good percentage of plant nutrients.
- 9. Such digested human waste should be handled with care and direct hand contact should be avoided / minimized.

Don'ts -

- 1. Don't use supply water pipe inside the toilet. It results in more use of water for flushing, causing decrease in efficiency of pit and high hydraulic load may cause ground water pollution.
- **2.** Don't use both the pits simultaneously.
- **3.** Don't use any chemicals and detergent to clean the pan. It causes killing of microbes also, resulting in less degradation of washes.
- **4.** Don't allow kitchen water or bathing water to enter in toilet.
- **5.** Any solid material like plastic or small ball etc. should not be put into the pan, it blocks the pit trap making toilet non-functional.
- **6.** In case of blockage of pan due to such objects, it should be taken out manually from the pan; it may cause more problems, if stuck in the trap.
- 7. Don't throw lighted cigaratte butts in the pan.
- **8.** Don't desludge the pit before 2 years, after it is filled up and put out of use.

BAIGA TRIBE

Demography, Society and Culture Location and Distribution

The Baiga tribe mainly inhabits in the states of Madhya Pradesh and Chhattisgarh. A minor population also resides in the adjoining states of Uttar Pradesh, West Bengal, Jharkhand, Maharashtra, Odisha and Bihar. The locus of Baiga culture is an area formerly part of the Central Provinces of India and now mainly part of Madhya Pradesh and Chhattisgarh. It extends from about to 24° N and 80° to 82° E.

PAKISTAN

Chartigarishmin

Licknow

Patra

BHUTAN LICKNOW

BHAR

ARIANCHAL PRADESH

CHINA

ARIANCHAL PRADESH

LICKNOW

Patra

BHAR

ASSAM

MARIACHAL PRADESH

LICKNOW

BHAR

ASSAM

MARIACHAL PRADESH

LICKNOW

BHAR

ASSAM

MARIACHAL PRADESH

LICKNOW

BHAR

ARIANCHAL PRADESH

ARIANCHAL PRADESH

LICKNOW

BHAR

ARIANCHAL PRADESH

ARIANCHAL PRADESH

LICKNOW

BHAR

ARIANCHAL PRADESH

ARIANCHAL PRADESH

LICKNOW

BHAR

ARIANCHAL PRADESH

ARIANCHAL PRA

22°

Map 1: Baiga inhabited states in Central India

The Baiga population has been returned from all the divisions of the Madhya Pradesh excepting few districts. Their major concentration in Madhya Pradesh is in the Shahdol, Jabalpur and Rewa Divisions. They mainly live in Shahdol, Umaria, Anuppur, Dindori, Balaghat, Jabalpur, Singrauli and Sidhi districts of Madhya Pradesh. Similarly, the Baiga population is also found in all the divisions in Chhattisgarh except a few districts. Their major concentration in Chhattisgarh is in the districts of Kabir Dham and Rajnadgaon of Raipur Division, Bilaspur (Bilaspur Division) and Koria (Sarguja Division). The Baiga Chak, situated in the Dindori district of Madhya Pradesh, is considered to be the core region of the Baiga tribe. Its centre is Chada, a forest village. The Baiga Ciente Baiga Chak comes under two development blocks i.e. Karanjiya and Samanapur. It is surrounded that Makal hills in the east and Satpuda and Vindhyachal hill ranges in the south (Chathas Valaga). The Baigas are believed to be the autochthones of the area. They live with other tribes such as the Gond, Agaria and Pardhan and other astes such as the Ahir (Yadav) and Panka / Panika in the area. Baiga comes under PVTGs in both the states of Chhattisgarh and Madhya Pradesh.



Map 2: States having major concentration of the Baiga

Population

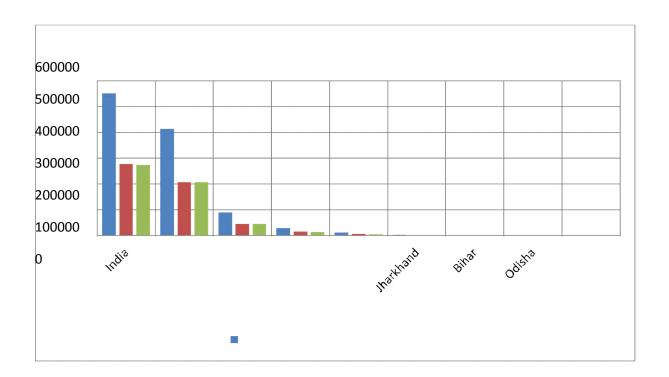
According to 2011 census, the total population of the Baiga tribe in India is 5,52,495 (see Table-2). Their major concentration is in the states of Madhya Pradesh (4,14,526) and Chhattisgarh (89,744). Sex Ratio among the Baigas is 993. Their total population in Anuppur district is 30,211. The area of study under this project is Pushprajgarh block of Anuppur district.

Table 2: State-wise Baiga population in India

Place	Total Population	Male	Female	Rural	Urban
India	552495	277245	275250	528802	23693
Madhya Pradesh	414526	207588	206938	394032	20494
Chhattisgarh	89744	44847	44897	88164	1580
Uttar Pradesh (Sonbhadra)	30006	15572	14434	29432	574
West Bengal	13423	6765	6658	12872	551
Jharkhand	3582	1829	1753	3439	143
Bihar	543	276	267	485	58
Odisha	338	173	165	266	72
Maharashtra	333	195	138	112	221

Source: Compiled by the researcher from the state wise data of census of India 2011

Gender and State-wise Baiga Population



A - 11 : मध्य प्रदेश की बैगा (विशेष <mark>विछड़ी</mark>) जनजाति का <mark>प्राथमम</mark>क जनगणना सार- २०११ A - 11 : MADHYA PRADESH STATE PRIMARY CENSUS ABSTRACT OF BAIGA (PVTG) TRIBE – 2011

क्र	मद	ल िंग	<mark>क</mark> जनसिंख्या	ग्रामीण	नगरिय <mark>जनसिंख्या</mark>
			Total	जनसिंख्या	Urban Population
Sl.No.	Item	Sex	Population	Rural	
			·	Population	
1.	<mark>कुधों की सिंख्या</mark>		100135	95162	4973
	Total number of households		100133	33102	4373
2.	<mark>कु जनसिंख्या</mark>	<mark>योग</mark> Total	414526	394032	20494
	Total population	<mark>परुष</mark> Male	207588	197173	10415
		स्त्री Female	206938	196859	10079
3.	0-6 आय ुसमहू मेंजनसिंख्या	योग Total	77881	74502	3379
	Population in the age group 0-6	<mark>परुष</mark> Male	39331	37571	1760
		स्त्री Female	38550	36931	1619
4.	साक्षि Literates	<mark>योग</mark> Total	158780	149941	8839
		<mark>परुष</mark> Male	94939	98661	5278
		स्त्री Female	63841	60280	3561
5.	क <mark>ुकमी</mark> Total workers	योग Total	213150	205114	8036
		<mark>परुष</mark> Male	113602	108350	5252
		स्त्री Female	99548	96764	2784
6.	दीघघकाल क कमी	<mark>योग</mark> Total	103897	99008	4889
	Main workers	<mark>परुष</mark> Male	63334	59833	3501
		स्त्री Female	40563	39175	1388
	<mark>काश्तका</mark> ि Cultivators	योग Total	29333		191
				29142	
	<mark>खेततहि मजदि</mark> ू	योग Total	54478	E26E2	826
	Agricultural labourers		54478	53652	820
	पारिवारिक उधोग कमी	योग Total	4440	1000	
	Household industry workers		1448	1399	49
	अन्य कमी	योग Total			
	Other workers		18638	14815	3823
	अल्पकाल क कमी	योग Total	109253	106106	3147
	Marginal workers	<mark>परुष</mark> Male	50268	48517	1751
	Warginal Workers	स्त्री Female	58985	57589	1396
		योग Total	22235		
	<mark>काश्तकाि</mark>		9835	9767	68
	Cultivators				
	खेततहि मजिंदू	योग Total	80314	79218	1096
	Agricultural labourers				
	पारिवारिक उधोग कमी	योग Total	2100	2011	89
	Household industry workers		2100	2011	0,5
	अन्य कमी	योग Total	17004	15110	1894
	L	1	I	l	l

	Other workers				
8	गैि कमी Non-workers	योग Total	201376	188916	12458
		<mark>परुष</mark> Male	93986	88823	5163
		स्त्री Female	107390	100095	7295

Source : Census of India 2011 Baiga Society and Culture

The Baiga is a patrilineal, patriarchal and patrilocal society. But, they equally respect women. The Baiga community is divided into various endogamous subgroups known as *Jat* and exogamous system of *Garh* and *Goti*. The Baiga practice polygyny in terms of marriage, but the frequency of such cases is less. They prefer nuclear families after marriage. They have also the provision of bride-price during marriage. Sororate marriage is practiced. They prefer cross-cousin marriage. They take the help of mediators or middlemen for fixation of marriage. The Baigas have a traditional community *panchayat*. The Baigas maintain their own identity and live peacefully with the limited resources available in the forest and profess agriculture as a means of their livelihood. (Soni, 2015)

The Jat system (sub-groups) found among the Baiga tribe is remarkable. The Jats are endogamous in nature. The six major known identified sub-groups are Bhumia, Binjhwar, Bharotiya, Nahar or Naroutia, Bhaina and Mudia or Muria apart from other Baiga sub-groups. Every Baiga, as we have seen, belongs to an endogamous sub-group (Jat), a territorial Garh, and a particular Goti. The division of the tribe into Garhs marks their geographical location and disallows them to marry within their own Garhs because it is considered that members of the Garh belong to the same lineage and own native village and thus, village exogamy is preferred. They seek wives from other Garhs, avoiding the nearness of the relations living in the same Garh, and selecting spouses from other Garhs whom they know less by living in distant places. Marriages outside the sub-groups (Jat) are uncommon, but there are occurrences in some of the areas. In cases of inter-caste or inter-subgroup marriages and incest in the form of marriage in the same Garh, penalties are imposed in the form of community dinner and drinks. Sometimes it also leads to excommunication.

The Baiga is a patrilineal society. The traditional *panchayat* is dominated by the males and they have formulated all the rules and regulations of the tribe. All the posts of the traditional panchayat are held by the male members of the community. Baiga Panchayat at local or village level consists of five members namely – *Mukaddam, Dewan, Samrath, Kotwar* and *Dewar*. The traditional *Panchayat* looks after maintaining the customary laws and social system. Generally, the cases of quarrel, property dispute, breaking incest taboo rule, inter-caste marriage, divorce, adultery, wife's elopement or running away with another person, etc. are dealt by the *Panchayat*. The guilty is punished with fine (cash, kind and liquor) and feast and excommunication in extreme cases, such as, breaking of taboos, such as, kin-incest, clan-incest, exogamy, etc. The extreme criminal cases, such as, murder, quarrel and fight with non-Baiga persons, etc. are reported to the local police.

Life Style of Baiga Tribe

The Baigas live a simple life. Their demand is less; hence they manage their living with the meagre articles or commodities. Their consumption is also less. Two meals a day, some drink (Mahua liquor) and some smoke with a few pieces of clothes are their total requirement to live a life in the remote areas of their settlements. Pej (rice gruel) is their main diet, if the other grains are not available. Pej is made out of maize, wheat, rice, kodo and kutaki. It is the gruel of the above-mentioned grains, cooked in the boiling water with a little salt to taste. When it is cooked then some more water is added and relished with Bhaji and Chatani. Baiga also eat the locally available leafy and other vegetables, fruits, roots and tubers (kand-mool). The Baigas are non-vegetarian. They fish and hunt for this purpose. Roasted rat is the much liked non-vegetarian food item for the Baigas. The rat is called moosa locally. The Baiga are avid smokers. They can be usually seen rolling a Sal Patta (leaf) and fill tobacco from their pouch and smoke. They are legendary drinkers of Mahua liquor. They have strong religious and cultural affinities with Mahua and it is necessary on every occasion. One langoti (loin cloth) and one blanket were their requirements in the past. The Baigas have very limited resources for livelihood and most of them, if existing are often at the subsistence level. They are work in the fields, collect forest produce and firewood, do labour work in the forest and in road construction, dance and sing in marriages and festivals,. They sell forest

produce in the weekly markets and purchase grocery items from there which marks almost their daily routine. In the name of handicraft they do little basketry, broom making and wood carving. Both women and men love to adorn themselves with handmade and market made ornaments. The elaborate tattoo designs can be found on the Baigin's body for ornamental purpose, which they feel, makes them look beautiful.

The Baiga are strong believer of magic and good medicine-men. They have sound knowledge of numerous forest herbs and medicinal plants that they use to cure diseases. They also practice sorcery for a number of occasions, such as, growth of crops, marriage, death, and injury from wild animals, venereal diseases and protection from bad omens. The *Guniya* or the medicine- man is one of the most respected person in the village. The Baiga area is highly prone and endemic to malaria and diseases arising from poor water quality.

The Baiga speak in Baigani and Chhattisgarhi dialects of Hindi. Baigani is recognized as a corrupt form of Chhattisgarhi. It is a dialect of Indo-Aryan Stock belonging to the Indo-European Phylum. Actually, it's a mix of Chhattisgarhi, Hindi and Gondi. It also assimilates the vocabulary of different neighbouring languages and dialects. (Grierson, 2005)

The Baiga young men are often strikingly handsome, slim, shapely bodies, strong, fine but gentle features, black glossy wavy hair and full with vitality (Elwin, 1939, p. 10). The Baigas are medium in height with strong legs. They travel a long distance in the forest. The Baiga do not trim their hair. The men tie their long hair on the left side on back of head into a knot or bun (*Jura*). Sometimes Bhumia Baiga males also shave the front part of the crown, cutting it back into a perfectly straight line. The hair is cut only by a fellow Baiga with the help of iron razor made by Agaria community. The women do not cut their hairs. The women have longer hair than the males. They generally do not wash their hair with soap. Now, the new generation of the Baiga boys has started hair-cut after coming into contact with the outside world and as an effect of modernization. The Baiga males usually keep a moustache. The chin is shaved or sometimes little goatee beards are kept. Baiga women tattooes all her exposed body parts except the soft and private parts of the body. Gradually the tradition of tattoo is declining among the Baiga women. They like the flesh of rats very much. They catch it and roast it in fire. They love to drink *Mahua* liquor.

Previously, the Baiga women used to wear *Moongi, Kaniyar, Bagara, Chadariya*, and *Chaukhana Sarees* woven by Panika weavers of 12 to 16 hands length. They did not wear blouses. Now, they purchase the mill-made sarees and colorful blouses from the local markets. The traditional clothes as described above are worn only on festive occasions like marriage, death, chokbarahon, festivals and during dance performance programmes. The Baiga women wear necklaces of glass beads (*Guriya Mala*) and *Bhauri Mala*, Silver necklet, *Hawal* of silver or gold coins, *Moonga baliyan* in upper lobs of ears and *Bari* in the lower lobes of ears. They also wear *Jhumaka* in ears, *Nagmori* on arms, bangles of gillet on wrists, waist chain, toe rings and finger rings.

The Baiga males wrap Langoti (loin cloth) on waist and wear bandi (vest-coat) above the waist. They wear pheta (turban) on the head. On the occasion of son's marriage, festivals, chaukbarho and dances, they wear dhoti, bandi, jacket and turban. The boys wear pant and shirt. They make a bun of their long hair; wear rings on the ear lobes and Guriyon ki Mala on the neck. There is a change in their dress pattern now. They are now wear pant, shirt, Jeans and T-shirts. School going children wear school uniforms.

Daily Routine Life

The life of a typical Baiga revolves around the forest. They live in more interior places than the Gonds. The Baigas awake early in the morning. They do not sleep for a long time because they have to attend to their daily routine work. They go outside their huts, a bit away from the hamlet, to their adjacent fields or nearby forest area for urinating and defecation. Traditionally, after defecation they use stone and leaves to clean themselves instead of water. Now, some of the young Baigas have started using water for this purpose. Washing of their face and teeth in the morning is known as *Mukhari* in the local language. They use water just outside their houses or at the time of taking bath or fetching water at nearby sources of water. They use *Datun* of *Sarai*, *Babool* and *Neem*, etc. to clean their teeth. Then they go for work after having little breakfast, which is usually

the remaining food of the last night. They prefer to complete their work in the agricultural fields and forest collection in the early morning before the sun-heat increases. Usually, women go for collection of roots, tubers and firewood in the nearby forest area. The women go with Tangiya (axe), Khanti (digging stick) and Tukni (basket) to the forest for collection. After coming back the women prepare food early in the day time. Sometimes, young children and old people also prepare food in the house. Usually, they take lunch between the morning and noon, which is known as *Murgal* in the local language. If they have a meal towards the evening they call it *Mariya* and dinner is known as *Biyari* which is had after evening drinks of Mahua liquor. Men and women both love to drink in *Chhaka* of Mehlon leaves and ceramic cups. They complete their other important works like labour works in the afternoon till evening. Before, dusk they come back to their huts. Then, they enjoy drink and dance around the fire. Later, they have dinner and go to sleep. Usually, they live in nuclear family, in a hut of one room divided into kitchen and living room.

The Baigas live in small hamlets, usual composed of members of a lineage. When they go for work they take their young kids with them. Young children stay with their elder siblings at home. Older people of the hamlet and lineage or family look after all the children of the family. Children play in and around the huts or hamlet. Now days, the children go to school and spend their day there. They get a mid-day meal at school. So, parents do not take the school going children to work as there will be loss in their studies. It has been found that the Baiga children are still not very interested in their studies and they quit their studies after class 5th or 8th class. Then they either play or look after the younger children in the house. Sometimes, especially from adolescence, they also help in household and agricultural works. School going children get a uniform from school and they can be found wearing that dress whole day in the Baiga villages. The Baigas are self-contented people and cultivate their own possessed land. The women collect *mahuwa*, *char*, *philawa*, *chironji*, etc. from the forest. They also collect Mohalain leaves and prepare leaf-plates. They also make brooms of Mowa grass. They sell these items locally and earn something for their living. The Baiga earn their living by collection and sale of forest produce, collection of *tendu* leaves, construction of embankments (labour work), agricultural works, labour work in agricultural fields and road construction, crusher, building construction, etc. Some youth also go to the cities for jobs and earn their living. Now, a few of them are also working in service sector and government jobs.

Identity Marks in Baiga Tribe Hair Bun of Baiga Man –

The Baigas do not cut their hair. Long hair tied up into a bun is the identity mark of a Baiga man. It is only shaved at the time of *Jhalar Utarai* (*mundane* - shaving of first head hair) of the child which is done at an early age just after birth and at the time of death in the family. The males have strong curly black hair. They make a plait of it and give it the shape of a crow. The men tie their long hair on the left side on back of head into a knot or bun (*Jura*). The Baiga women also keep their hair long. They have black, strong, curly hair. They do not use soap. They use mud for washing their hair. This mud is known as *Mood-Misani-Mati*. It is of yellow color. They do not comb their hair daily. Hence, it is not clean and sometimes stinks.

Tattoo on Baigin's body -

Tattooing is significantly important in the Baiga community. The Baiga women consider it to be the main decoration for their body. It was found and believed that the tattooed woman was getting respect in her conjugal family and would getting salvation after death.

Baiga women tattooes all her exposed body parts except the soft and private parts of the body. The tattoo symbol of *Sita-Rasoi* on the forehead of Baiga women, known as *Kapad Goday*, is the identity mark of a Baiga female. In *Kapad Goday*, they make a 'V' shaped hearth in the middle of the forehead followed by three dots (Tipka), two straight vertical lines (Bedha) and one horizontal line (Aadha) on both the sides of the hearth at an early age.

It is very painful to get tattooed on different parts of the body. Even though, it is painful, it is believed to be the most important ornament of the body which remains for whole life and even goes with the person even after death. It is believed that this tattoo is done with the Mantras by the Badnin, which can not be spoiled even by god and it appears also after rebirth in some form in some parts of the body. Tattooing gives power of tolerance

to the women in life and they can face even the painful incidents boldly. It is also believed that it saves them from various diseases and ill-effects of the malevolent spirits.

The Baiga women wear half blouse and *Moongi* sari by which the tattoos on the body remains visible to others. The tattoo work is done by the females of Badi community in the Baiga area. The woman who does this tattooing work is known as Badnin or Godarin. It is necessary for every girl to get tattooed before marriage and it is the duty of the parents too. Recently, this practice of tattooing is not being considered so important and the girls are getting out of this painful practice gradually. Now, it depends upon their interest and is not strictly observed as it was in the past. Only a few dots on the forehead are tattooed by some girls today.

Hygiene and Defecation Practice among Baigas

Baigas usually live in their huts in hamlets. They go outside their huts, bit away from the hamlet, to their adjacent fields or nearby forest area for urinal and defecation. They have the customary practice of open defecation. Traditionally, after defecation they use stone and leaves to clean themselves instead of water. Use of water for cleaning after defecation was a taboo among them according to a myth and associated belief related to their origin. Now, some of the young Baigas

have started to using water for this purpose. With the changing world they are getting aware and taking benefit of various government schemes and programs. A vast cultural change is witnessed among them. Now, under the *Swatch Bharat Abhiyan* run by the Central Government of India, they are provided grants for making toilet (*Souchalaya*). Many of them are taking the benefit of this scheme. A few literate Baigas have started using toilet and this is a sign of change in their sanitation habit and which may give success to this *Souchalaya Nirman Yojana* in future among Baigas.

Under the Swachh Bharat Mission (Rural) government is trying to promote the village cleanliness program in Baiga villages. *Janpad Panchayat* and *Gram Panchayat* are also promoting the constructing of personal and public toilets in the Baiga villages. Baigas are not habitual of using toilets. They follow the customary practice of open defecation and don't follow the proper hygienic practices related to sanitation. Their cultural background contradicts with the basic idea of toilet. Moreover, Baiga settlements in hamlets are quite dispersed, which also creates a geographical barrier for proper and clean water supply to the Baiga houses.

Current Situation and Analysis Discussion

Area of Study

State - Madhya Pradesh

District - Anuppur

Tehsil - Pushparajgarh

The study had been conducted in the Baiga villages of Pushparajgarh Telsil in Anuppur District of Madhya Pradesh. The field work was mainly done in Pondki and Harratola Gram Panchayat of Pushparajgarh Tehsil of Anuppur District. The quantitative data was collected through household survey by using structured schedule. Qualitative data is collected through interview and focused group discussion. The villages were selected purposely depending on the availability of good number of Baiga households. The data is collected from all the age groups of both sexes, especially through group discussion with the Baigas of older as well as younger generation. The fieldwork was done purely by scientific research methods.

Studied Households

The quantitative data was collected by household survey. The household survey was carried out in Umargohan village of Pondki Gram Panchayat and Pharrisemer village of Harratola Gram Panchayat. Both the villages come under the Pushparajgarh Tehsil of Anuppur District of Madhya Pradesh. Quantitative data is collected through structured household schedule.

Number of Baiga households in the studied villages:

Table 4: Number of Baiga household covered in the studied area

Tuble 4. Hamber of build mousehold tovered in the studied area						
Sl.No.	Panchayat	Village	Hamlets	No. of	Total Village	
				Household	Households	
1	Pondki	Umargohan	Lankatola	20	20	
			Bhelawagoda	09		
			Tikratola	03		
			Bichtola	01		
			Upartola (Baigan			
				09		
2	Harratola	Pharrisemer	Tola)		40	

	Nichetola (School		
		08	
	Tola)		
	Bokha Tola	07	
	Barati Tola	03	
Total			60

Umargohan village falls under the Pondki Gram Panchayat of Pushparajgarh Tehsil. This village has only one Baiga hamlet known as Lankatola, which is situated at the last end of the village. This village is situated at the border of Madhya Pradesh and Chhattisgarh states. This is a remote village is connected through *pacca* road and the road ends at Lankatola hamlet, which is followed by forest. Lankatola is situated at the end of the village on hill top. A water stream of Johila river runs through this area, which is the major source of water. Apart from this there is also one well and hand-pump in the Baiga hamlet. The hand pump is the main source of drinking water. A government primary school is situated at the entry road of the hamlet. Two teachers are posted in this school. The school is equipped with three toilets, constructed at different times by different agencies. Out of which only two are in working condition. But, there is no source of water in the school building. Hence, children are forced to go to the near by water stream in front of the school for sanitation. The Baigas live in this village with their neighbours of mainly Gond tribe and few families of other communities.

Pharrisemer village falls under the Harratola Gram Panchayat of Pushparajgarh Tehsil. Pharrisemer. This village is connected through a road starting from Podki village at Amarkantak - Shahdol highway 9A and crosses Harratola village to reach Pharrisemer village and goes towards Damgarh village. The Pharrisemer village is spread on both side of the main road crossing the village. The village area starts near Bhelawagoda, followed by Tikratola and approach road from Bichtola to Upartoal. The main road after Bichtoal passes through Nichtola, Bokhatola and the village ends at Baratitoal. The whole area of Pharrisemer village is a valley surrounded by hills and forest. It's a big village and the Baiga families live in seven hamlets of this village. Out of which Baigantola or Upartola is a pure Baiga hamlet. In rest of the six hamlets Baigas live with the people from Gond, Ahir and other communities. There is one primary school between Upartola and Bichtola. Two teachers are posted in this school. The school toilet is incomplete and not in usable condition. The basic sources of water are wells, handpumps and a river stream that flows through this area. This river stream originates from the adjoining hill near Upartola and joints Barati River near Baratitola. A Government secondary school is situated at Nichetola, which is also known as School-tola. This school has one toilet, which is not in much use. The individual toilets are constructed under the Shouchlaya Nirman Yojana in all the hamlets of the village except Baratitola, which is a comparatively new settlement near the agricultural fields Basic demographic data was collected through household census schedule, from 60 Baiga families including 240 persons, along with the qualitative ethnographic data in the study area.

Family Size

Family is the basic unit of the Baiga tribe. It has got an important place in the Baiga community. The oldest man is regarded as the head of the family. Before marriage the children live with their parents. After marriage the sons make their own houses and live separately. It is a tradition among the Baigas to provide separate room or house to the newly married couple to allow some privacy and freedom to them for starting their new life. It also prevents quarrels. Usually, for this purpose, a new room or house is constructed next to the parents' house and if possible within the rectangular settlement adjacent to the common central open space. For this reason, maximum families among the Baigas are of nuclear type. But, they live with homogeneity like a joint family.

Baigas have the tradition of polygamy.

	Table 5 : Family size and total number of studied persons							
Sl.No.	Family Size	No. of Household	Percentage (%)	Persons				
1	One	5	8.3	5				
2	Two	10	16.7	20				
3	Three	6	10.0	18				
4	Four	16	26.6	64				
5	Five	13	21.7	65				
6	Six	6	10.0	36				
7	Seven	1	1.7	7				
8	Eight	2	3.3	16				
9	Nine	1	1.7	9				
	Total	60	100.0	240				

Due to the tradition of nuclear family among the Baigas most of the families have less number of family members at the studied area. 25 percent families of the studied area are composed of only newly married or old age couples. Most of the families have 3, 4 or 5 members, usually composed of father, mother and unmarried children. 83.3 percent families have five or less than five members. Most of the families have one, two or three children. This is a natural automatic family planning trend, which is observed among the Baigas of the study area. Only 6.7 percent families have more than six members and most of these are extended families.

As maximum numbers of families have family size of around five members, the required size of the leach-pit of IHHL is one square meter (1 m2) according to government specifications (See table 1). Hence, in the area of study it is observed that twin circular leach pits of 1 m2 are constructed with the toilet, which is technically appropriate for the maximum number of Baiga families.

Gender and Toilet Users:

Table 6: Gender wise toilet users and non-users

	Table 6 : Gender wise tollet users and non-users					
	Toile	t Users	Toilet N	on-users		
Gender					Persons	Percentage
	Number	Percentage	Number	Percentage		
Male	30	12.5	92	38.3	122	50.8
Female	28	11.7	90	37.5	118	49.2
Total	58	24.2	182	75.8	240	100.0

The sex ratio in the Baiga tribe in the studied area is 967 which is lower than national sex ratio of Baiga tribe, i.e., 993 and national ST sex ratio, i.e., 990. It is found during study that most of the people are non-users of toilet. In the studied area, 24.2 percent Baigas were found to be toilet users. It is also found that these people are partial toilet users. They use toilet occasionally, not regularly. Instead they prefer open defecation. In odd situations of night, rainy season, small kids, etc. they use the toilet. Sometimes guests also use toilet. There is no difference between the situation of male and female in case of toilet use. 75.8 percent people accepted that they do not use toilet for defecation. There is no gender biasness between male and female regarding the use or non-use of toilet. The situation, attitude and preference of Baiga male and female towards the use of toilet is the same.

Age Groups:

Table 7 : Age group of family members (among the 60 families of the study area)

Sl.No.	Age Group	Persons	Percentage (%)
1	0-5	31	12.92
2	6 – 10	24	10.00

3	11-15	27	11.25
4	16-20	26	10.83
5	21-25	22	9.17
6	26-30	22	9.17
7	31-35	20	8.33
8	36-40	22	9.17
9	41 – 45	15	6.25
10	46 – 50	16	6.66
11	51-55	5	2.08
12	56-60	4	1.67
13	61-65	4	1.67
14	66 – 70	2	0.83
15	Above 70	0	0.00
	Total	240	100.00

^{34.17} percent persons are children up to 15 years of age. 10.83 percent are of adolescence age.

35.84 percent are young people between 21 to 40 years of age. 16.66 percent are middle aged people between 40 to 60 years of age. Only 2.5 percent people are old above 60 years of age. Maximum numbers of people in

the study area are children and youth. This reflects the low life expectancy (around 55 years of age approx.) in the Baiga community in my area of study. Women have more life expectancy than men, may be due to excessive intake of alcohol by males.

63.33 percent persons are of working and earning age group between 16 to 60 years. Except these people 36.67 percent people are dependents and most of them are children below 15 years of age.

Children and youth have gradually started the use of toilets. Though, they still use it occasionally. School going kids and persons involved in service are more attracted towards the use of toilet.

Education

Now, the schools are also playing the role of change-agents. There are a number of primary, middle and high schools in the tribal areas. They are also within the reach of the Baiga tribals in some places. The Baiga children were found going to schools in a couple of places during the author's visit to Baiga areas.

The literacy rate among the scheduled tribe population of India is 58.96% (round off 59%), out of which 68.53% are males and 49.35% are females. The scheduled tribe literacy rate in Chhattisgarh is 59.1%, out of which 69.7% are male and 48.8% are female. The scheduled tribe literacy rate in Madhya Pradesh is 50.6%, out of which 59.6% are male and 41.5% are female. (Registrar General & Census Comissioner of Census of India, 2011) Many of the Baigas are now learning to write their names through adult education program and also in company of school going children. New generation is more inclined towards formal education. In Chhattisgarh, literacy rate among the Baigas is 32.17 percent, out of which 62.15 percent are males and 37.85 percent are females. In Madhya Pradesh, literacy rate among Baigas is 38.3 percent, out of which 59.8 percent are males and 40.2 percent are females. Over all literacy rates including women literacy rate is very low. School dropout rate is very high. Due to the increasing educational infrastructure in the Baiga area the general interest towards formal education is gradually increasing.

Table 8: Educational Status of family members

Sl.No.	Educational Level	Persons	Percentage (%)
1	Pre-school (Infant)	24	10.00
2	Pre-primary (Anganbadi)	8	3.34
3	Primary (1-5)	73	30.42
4	Secondary (6-10)	41	17.08
5	Senior Secondary (11-12 th)	02	0.83
6	Under Graduate	0	0.00
7	Illiterate	92	38.33

Total	240	100.00

Most of the Baiga people are studied up to primary or secondary school level. School going kids and younger generation occasionally uses toilet due to awareness and attraction towards the use of toilet. 38.33 percent Baiga people in the studied area are illiterate. Mostly elder generation is illiterate and do not prefer to use toilet due to their traditional sanitation practices.

Family Income:

Table 9: Annual Household Income

Sl.No.	Income group (in Rupees)	No. of Families	Percentage (%)
1	Below 10000	4	6.7
2	10001 – 20000	5	8.3
3	20001 – 30000	16	26.7
4	30001 – 40000	24	40.0
5	40001 – 50000	8	13.3
6	50001 – 60000	1	1.7
7	60001 – 70000	2	3.3
	Total	60	100.0

Most of the families are involved in agricultural and labor work. Many of them also do agricultural labor work. Few are also found working with contractors as labors. Few people are working in stone-crushers in and outside the area of study. Slight migration is also witnessed for earning livelihood. Some members of few families are working with contractors, transporters and as labors outside the state.

In the study area, Most of the people belong to the yearly income group between Rs.20,000 to Rs.50,000. Maximum numbers of people are engaged in agricultural works. Their agricultural fields are uneven lands on hill slopes. They grow seasonal crop depending on rain. Their production is less. Most of their production is consumed by themselves. Few crops are sold to the local traders for getting some money Their low income, traditional ways of livelihood and life style also works as one of the reasons for their hygiene and sanitation practices. Moreover, they live near the forest and for most of their needs they are depended on nature and forest. In the morning they go to the nearby forest areas for collection of forest produce, roots, tubers,

firewood, etc. and come back after defecation. This is the usual practice reported by the informants during field data collection.

Similarly, they go for defecation in the evening near the water bodies or surrounding fields. In night they go for defection near their houses in agricultural fields or a bit away from the habitation. Now, the new generation, especially children in rare cases use toilet in night.

A. Availability of Toilet

<u>.</u>	Table 10 : Availability of Toilet	
Toilet availability	No. of Household	Percentage (%)
Have toilet	41	68.3
No toilet	19	31.7
Total	60	100.0

In the area of study, 68.3 percent Baiga families got benefited by the construction of individual toilet under the scheme of *Souchalaya Nirman Yojana* (IHHL) under SBM(G). 31.7 percent Baiga families do not have individual toilet facility at home. But in most of such cases, at least one close blood relative of these remaining Baiga nuclear families has got the toilet constructed under this scheme and they can share these toilets as they live adjacent to each other. The major concern is willingness to use toilet. In the study, all of these non-benefited Baiga families have shown their interest to have toilet under this government scheme and also willingness of using toilet for sanitation.

All the toilets (IHHL) constructed in the Baiga households in the studied area are constructed by grant of Rs. 12000 under the government scheme of *Souchalaya Nirman Yojana* under SBM(G). Toilets are constructed by the respective village *Panchayats* on behalf of the pre selected eligible beneficiary persons / families. Grant of Rs. 12000 per beneficiary person is given to the respective village *Panchayats* for construction of the toilet. In the area of study, the *Panchayats* employed local private contractors for construction of toilet at each benefited household construction of toilet at each benefited household.

B. Social Awareness (Technique and Benefit):

Information, education and communication (IEC) activities are major part of strategy under SBM(G) for generating mass awareness for development of safe sanitation practices in the society and to get active public involvement to achieve the goal of cleanliness and open defecation free villages. While fieldwork in the area of study, studied families were asked questions regarding the knowledge about the technical aspects of toilet constructed under this scheme. The data is collected through structured schedule and interview. Moreover, the researcher did inform people regarding the various facts related to the technical and administrative aspects of construction of toilet under this scheme. Researcher also made people aware about benefits of using toilet.

Awareness regarding technique used and working process of toilet:

Table 11: Awareness regarding working process of toilet

rance == rrinan ences regar annig recomming processe or temes			
Awareness / Knowledge	No. of families	Percentage	
Fully aware	00	0.0	
Little knowledge	33	55.0	

Unaware	27	45.0
Total	60	100.0

It was unfortunate to discover the fact that no body knew the name of Leach-pit technique prescribed by government for this area in this scheme for construction of family toilets. 55 percent Baiga families had little knowledge regarding the working process of their toilets. 45 percent families were totally unaware about these facts regarding their toilet.

Awareness about benefits of toilet:

Table 12: Awareness about benefits of toilet

Table 12 . Awareness about benefits of tonet				
Sl.No.	Benefits	No. of families	Percentage	
1	Cleanliness	47	78.33	
2	Safety from infection through dirt	16	26.66	
3	Convenience in bad weather	venience in bad weather 58		
4	Honour	7	11.66	
5	Safety from the attack of dangerous insects and animals	42	70.00	
6	Security of females	15	25.00	
7	Manure	0	0.00	
8	Other	0	0.00	

Maximum number of persons accepted convenience in bad weather, cleanliness and safety from the attack of dangerous insects and animals as major benefits of having and using a toilet. 96.66 percent people acclaimed it as great means of convenience during bad weather conditions and odd situations. They find it very useful for kids and sometimes also for guests.

C - Satisfactory Toilet Structure and Construction

Satisfaction regarding standard of construction and structure of toilet:

Table 13: Satisfaction about toilet construction

Table 13 . Satisfaction about tollet constituction		
Construction standard	No. of families	Percentage
Satisfied	5	8.3
Unsatisfied	36	60.0
Without toilet	19	31.7
Total	60	100.0

In the area of study, 68.3 percent Baiga families got toilets under this scheme of *Shouchalaya Nirman*. Out of which, maximum number of families were found unsatisfied with the standard of toilet construction. Many of them find it useless due to bad construction. Only a few people (8.3 %) were found satisfied with the construction of their toilets. Out of these, very few people expressed sentiments of pride on having a toilet. When they were asked, "what they like most about their toilet?" They replied that the toilet provides freedom and they can use the toilet anytime. It also saves them from the shameful situation of being looked at by others during the act of defecation. They found toilet useful in odd times and situations, especially for kids.

Reasons of dissatisfaction about standard of construction and structure of toilet:

Table 14: Reasons of dissatisfaction about toilet construction

Sl.No.	Reasons of dissatisfaction	No. of benefited families	Percentage
1	Bad construction	29	80.55
2	Not appropriate technique	12	33.33
3	not as per govt. specification	29	80.55

4	Small in size / Inconvenient structure	06	16.66
5	Other	08	22.22

Out of 41 families having toilet, 36 families expressed dissatisfaction about standard of construction and structure of toilet constructed for them by Gram Panchayat. Many people reported that the standard of construction is bad and it is not as per specified government scheme. Few people also complained about the small and inconvenient size of their toilets. Many people found it useless due to lack of water facility. A good number of toilets were found incomplete at Lankatola of Umargohan village and few toilets had only one Leachpit or common Leach-pits of two adjacent toilets.

In my area of study, it is observed during the fieldwork that the toilets were not constructed according to prescribed norms following proper technique and providing proper amenities in the toilet. Many toilets did not have twin leach-pits attached with the chamber behind the toilet. In village Pharrisemer, Most of the toilets had only one leach-pit instead of two. At some places two toilets of family and relatives were found constructed adjacent to each other for sharing the same single leach-pit.

Many toilets were found without adjacent water tanks in both the villages. Tap and wash-basin were not found in any toilet. It is noticeable here that the Rs. 2000 was specially added in the grant amount for the purpose of water tap, tank and wash-basin for cleaning after defecation. Wash-basin was specially added in the structure of toilet for cleaning hands. Tap and wash-basin were found totally missing. Water tank was also missing in many toilets, especially in Lankatola of Umargohan village. The size of water tank was found too small at Pharrisemer village.

D. Utility Utilization of toilet for defecation:

Table 15: Toilet Utilization

1 22.2 22 1 1 01100 0 01112 011011			
Utility of toilet	No. of families	Percentage	
Users	10	16.6	
Non-users	31	51.7	
No toilet	19	31.7	
Total	60	100.0	

Out of 60 studied Baiga families, 41 families have their own toilet, where as 19 families do not have individual toilets. Around 83.4 percent families were found non-users of toilet. Only 16.6 percent families were using their toilets and it was also specified by these families that they are not regularly using their toilets. It is noticeable that they are still practicing open defecation. The main reasons behind this situation are lack of water and their prevalent traditional defecation practice. Many informants, especially the older generation, said that they feel uneasy while using a Reasons for not using toilet (non-users):

Table 16: Reasons behind non-use of toilet

Sl.No.	Reasons for non-use of toilet	Families	Percentage
1	Not in habit	24	77.42
2	Don't like or enjoy using toilet	13	41.94
3	Useless due to bad construction	31	100.00
4	Lack of water	21	67.74
5	Traditionally unacceptable or taboo	00	0.00
6	Don't want dirt near living place	00	0.00
7	Kinship behaviour (one cannot use it in other's presence)	00	0.00
8	Other	08	25.81

Out of 41 Baiga families having toilets, 31 families were found non-users of toilet. 10 families accepted that they use toilet occasionally. These toilet non-user families reported that the main reason behind not using the toilets constructed under the scheme of *Shouchalaya Nirman Yojana* is bad and inappropriate construction along with lack of water facility in toilet. The other reason reported by few families is that their toilets are incomplete. It was witnessed during fieldwork that many toilets had only one leach-pit instead of two. Water tanks were missing at some toilets and taps and wash-basin were not found in any toilet of toilet. They usually defecate in their surrounding fields and close to the water body in the forest.

Reasons for not using toilet (non-users):

Sl.No.	Reasons for non-use of toilet	Families	Percentage
1	Not in habit	24	77.42

2	Don't like or enjoy using toilet	13	41.94
3	Useless due to bad construction	31	100.00
4	Lack of water	21	67.74
5	Traditionally unacceptable or taboo	00	0.00
6	Don't want dirt near living place	00	0.00
7	Kinship behaviour (one cannot use it in other's presence)	00	0.00
8	Other	08	25.81

Out of 41 Baiga families having toilets, 31 families were found non-users of toilet. 10 families accepted that they use toilet occasionally. These toilet non-user families reported that the main reason behind not using the toilets constructed under the scheme of Shouchalaya Nirman Yojana is bad and inappropriate construction along with lack of water facility in toilet. The other reason reported by few families is that their toilets are incomplete. It was witnessed during fieldwork that many toilets had only one leach-pit instead of two. Water tanks were missing at some toilets and taps and wash-basin were not found in any toilet. Moreover, 77.42 percent Baiga families accepted that they have the habit of open defecation and 41.92 percent Baiga families responded that they don't like or enjoy using toilets. Thus, it is found that a good number of Baiga families are still not habituated to use the toilet due to their usual practice of open defecation. This reflects that the lack of mass awareness about the benefits of using a toilet is also resulting in the less use of toilet. It was also informed by the Baigas of studied area that proper awareness activities were not run in their areas. Even Gram Nigrani Samiti (village monitoring committee) is ineffective and it is not working properly. Many people do not know about the Gram Nigrani Samiti or about its members known as Swachhatagrahi or Swachhata Doot. Many Baiga people even told that they have been forced to take the benefit of this scheme by Gram Panchayat and they do not find this scheme useful for them. It was observed that the Baiga families live in dispersed habitation in remote hilly forest areas and they have to bring water from various sources for their day-to-day use. In this situation, arrangement of water for sanitation purpose increases their burden of work. It seems to them easier to complete their daily sanitation works next to the water body in the surrounding forested area. Moreover, they are unaware of the ill effects of open defecation. Mass awareness is needed about both, the benefits of the toilet and the Shouchalaya Nirman Yojana of SBM(G).

E. Pollution Concept and Belief

It is found in the area of study during fieldwork that the Baiga's traditional belief system of not using water after defecation is now obsolete. In earlier days, use of water for cleaning after defecation was taboo among them according to a myth related to their origin. As told by the Baiga informants during study, they were supposed to use stone or leaf for cleaning after defecation. With the changing world they are getting aware and taking benefit of various government schemes and programs. A vast cultural change is witnessed among them.

Now, there is no strict practice or concept of pollution related to defecation. After defecation, people clean their hands and legs and then can continue their regular works or enter their houses. It is a normal hygiene practice among the Baigas and there is no prevalent concept of becoming polluted due to act of defecation found in the studied area. Hence, it is clear that among Baigas concept of pollution is not a cultural or traditional hindrance in construction and use of toilet.

Conclusion and Suggestions

Conclusion

Scheme of Souchalaya Nirman Yojana (IHHL) under the 'Swachh Bharat Abhiyan' or Swachh Bharat Mission - Gramin (SBM-G) was officially launched, by Prime-Minister of India on 02nd October 2014, to provide financial aid to the poor families for making first toilet at their home. Under this scheme, eligible families get the grant of Rs. 12000/- for building up concrete toilet at home. Swachh Bharat Mission (Rural) is actively working in the field of rural cleanliness and sanitation and running this scheme in rural areas. The main objective of SBM(G) is to bring about an improvement in the general quality of life in the rural areas, by promoting cleanliness, hygiene and eliminating open defecation (ODF) by accelerating sanitation coverage in rural areas and through Solid and Liquid Waste Management activities to achieve the vision of Swachh Bharat by 2nd October 2019, as a fitting tribute to the Mahatma Gandhi on his 150th Birth Anniversary.

In the studied area, a good number of Baiga families got benefited by the construction of individual toilet under the scheme of *Souchalaya Nirman Yojana* (IHHL) under SBM(G). None of the Baigas in studied area tried to make individual toilet themselves. The main reasons found behind this situation was their low economic status, lake of resources, available open forested area and lake of willingness to make toilet. Hence, toilets are constructed by the respective village *Panchayats* on behalf of the preselected eligible beneficiary persons / families under the government scheme of *Souchalaya Nirman Yojana* of SBM(G). The major concern is willingness to construct and use toilet. But in the studied area, all the non-benefited Baiga families have shown their interest to have toilet under this government scheme and also willingness of using toilet for sanitation.

Their low income, traditional ways of livelihood and life style also works as one of the reasons for their hygiene and sanitation practices. Moreover, they live near the forest and for most of their needs they are depended on nature and forest. In the morning they go to the nearby forest areas for collection of forest produce, roots, tubers, firewood, etc. and come back after defecation. This is the usual practice reported by the informants during field data collection. Similarly, they go for defecation in the evening next to the water bodies or surrounding fields. In night hours they go for defection closer to their houses in agricultural fields or a bit far from the habitation. Now, the new generation, especially children in rare cases use toilets in night.

Information, education and communication (IEC) activities are major part of strategy under SBM(G) for generating mass awareness for development of safe sanitation practices in the society and to get active public involvement to achieve the goal of cleanliness and open defecation free villages. Lack of awareness in studied area is an important reason behind not making or using toilets. Many Baiga people were found unaware of the benefits of using toilets, technique used in toilet construction, how the toilet works or how it should be maintained. Baiga people were also found partially aware about the scheme details. Many of them were apathetic towards this scheme.

In the studied area, only a few people were found satisfied with the construction of their toilets. Maximum number of families was found unsatisfied with the standard of toilet construction. Many of them find it useless due to bad construction. Few people also complained about the small and inconvenient size of their toilets. Many toilet non-user Baiga families reported that the main reason behind not using the toilets constructed under the scheme of *Shouchalaya Nirman Yojana* is bad and inappropriate construction along with lack of water facility in toilet. It was witnessed during fieldwork that many toilets had only one leach-pit instead of two or common Leach-pits of two adjacent toilets. Few toilets were found incomplete and useless. Rs. Two Thousand was specially added in the total grant amount of Rs. Twelve Thousand (10 + 2) for the purpose of water tap, tank and wash-basin for cleaning hands after defecation. Water tank was not constructed in some toilets and

taps and wash-basin were found totally missing in the studied area.

In the studied area, only 16.6 percent Baiga families and their 24.2 percent Baiga people were found to be toilet users. It is also found that these persons are partial toilet users. They use toilet occasionally, not regularly. Instead they prefer open defecation. In odd situations of night, rainy season, small kids, etc. they use toilet. Sometimes guests also use toilet. There is no difference between the situation of male and female in case of toilet use. Most of the Baigas accepted that they do not use toilet for defecation. Approximately only 1/5 Baigas use toilet occasionally in the studied area. There is no gender biasness between male and female regarding the use or non-use of toilet. The situation, attitude and preference of Baiga male and female towards the use of toilet are same. Many informants, especially the older generation, said that they feel uneasy while using toilets. They usually defecate in their surrounding fields and near the water body in the forest. School going kids and younger generation involved in service occasionally uses toilet due to awareness and attraction towards the use of toilet.

A good number of Baiga families accepted that they are still not habituated to use toilet due to their usual practice of open defecation and they don't like or enjoy using toilets. It was observed that the Baiga families live in dispersed habitation in remote hilly forest areas and they have to bring water from various sources for their day-to-day use. In this situation, arrangement of water for sanitation purpose increases their burden of work. It is easier for them to complete their daily sanitation works near the water body in the surrounding forested area. Moreover, they are unaware of the ill effects of open defecation. This reflects that the lack of mass awareness about the benefits of using toilet is also resulting in the less use of toilet. It is also informed by the Baigas of studied area that there were no proper awareness activities in their areas. Even *Gram Nigrani Samiti* (village monitoring committee) is ineffective and it is not working properly. Many people do not know about the *Gram Nigrani Samiti* or about its members known as *Swachhatagrahi* or *Swachhata Doot*.

Though the number of toilet users found is very less in the study, but it is observed and also responded by the toilet users that by using toilet they feel good and also feel freedom from shame or disgraceful situation of getting caught during defecation. Though they also admitted that they do not regularly use their toilets and they still practice open defecation. But, it is a positive sign that Baiga people, especially children and youth have gradually started using toilets. A good number of persons in studied area accepted toilet as great means of convenience in bad weather conditions, odd situations, cleanliness and safety from the attack of dangerous insects and animals as major benefits of having and using toilet. They find it useful for kids and sometimes also for guests. Younger generation especially children are using the toilets. During the study it is found that people have shown their willingness towards the use of toilet if provided good toilets with better amenities and so the number of toilet users may increase in future.

Suggestions

- Mass awareness needs to be generated about both, the benefits of the toilet and the Shouchalaya Nirman Yojana of SBM(G).
- Effectiveness of the awareness and implementation activities should be checked.
- Construction standard and structure of toilet should be perfectly as predefined under this scheme. Strict monitoring and evaluation of the quality and usability of constructed toilets should be done.
- Water facility should be incorporated in the scheme. Source of water should be at home or near the home. Increase the number of Hand-pumps and water tanks to be installed at hamlets.
- Education and awareness is effective means of cultural change. More effective awareness programs may be run at school by incorporating family members of the children.
- Traditional political organizations are still much respected among the tribal societies. Help of these traditional institutions and leaders can be taken to bring change in culture and habit.

Bibliography

١.

Chaurasiya, V. (2009). *Prakriti Putra Baiga (Hindi)*. Bhopal: Madhya Pradesh Hindi Granth Akademi. Elwin, V. (1939). *The Baiga*. London: John Murray (Reprint: 2007, New Delhi: Gyan Publishing House). Grierson, G. A. (2005). *Linguistic Survey of India* (Vol. 6). New Delhi: Language Division of Registrar General & Census commissioner of India.

Leach, M. (1998). Culture and Sustainability. In E. Louis, & S. Paul, *World Cultural Report* (pp. 93 - 104). Paris: United Nations Educational, Scientific and Cultural Organization.

Ministry of Drinking Water and Sanitation. (2017, October). Guidelines for Swatchh Bharat Mission

(Gramin). Retrieved November 12, 2018, from Swachh Bharat Mission (www.sbm.gov.in):

http://www.mdws.gov.in/sites/default/files/Complete set guidelines 1.pdf

Ministry of Drinking Water and Sanitation. (May 2012). Handbook on Technical Options for On-Site

Sanitation. Retrieved September 16, 2018, from http://swachhbharatmission.gov.in

Ministry of Tribal Affairs. (n.d.). *Scheduled Tribe*. Retrieved May 29, 2017, from Ministry of Tribal Affairs, Govt. of India: http://tribal.nic.in/Content/DefinitionpRrofiles.aspx

Reddy, P. H., & Modell, B. (1997). The Baigas of Madhya Pradesh: A Demographic Study. *Journal of Biosocial Science*, 29 (1), 19-31.

Registrar General & Census Comissioner of Census of India. (2011). Census of India 2011. Retrieved June 22,

2017, from Office of the Registrar General & Census Commissioner, New Delhi, India:

http://www.censusindia.gov.in/2011census/PCA/SC_ST/

Russel, R. V., & Hiralal. (1975). *Tribes and castes of central provinces of India* (Vol. III). Delhi: cosmo Publication.

Sharma, T. D. (2012). Baiga (Hindi). Raipur: Chhattisgarh Rajya Hindi Granth Akademi.

Singh, K. S. (1994). The Schelduled Tribes. Delhi: Oxford University Press.

Soni, A. (2015). *Baiga - A Visual Ethnogrphy* (Vol. 1). Amarkantak, Madhya Pradesh, India: Indira Gandhi National Tribal University.

Tiwari, S. K. (1997). Baigas of central India. New Delhi: Anmol Publications Pvt. Ltd. .

Appendices

Schedule for data collection

A. English

B. Hindi

II. Photographs

Appendix – IA: Household Schedule for Data collection (English version)

Appendix – IA: Household Schedule for Data collection (English version)

APPENDIX-I

Project: A Socio-Cultural Appraisal of Swachh Bharat Abhyan Shauchalaya Nirman Yojana among Baiga Tribe

Household Schedule

Clan	
at/	
Gath:	
Vame of the informant	

Address (Village /Gram Panchayayt):

Zobile no .:

Religion:

Uses toilet							
Income							
Education Occupation							
Lducarion							
Marriage							
Аде st							
Marital							in the second
Sex							
Age Sex							
Relatio							
Name of the family members							
Z-62	-	2	4	S	10	7	· cc

ž	÷
H	ı
-	ì
H	i
	ŝ
7	٩

4

-	2
	Yes No
	* truler? (*)
	n bare to
The second second	Do vox
	-

- Yes No Jon? want to make or use toilet If No, do you want if if get, will you use if (<)
 - If yes, who founded the tooker (v) Soff investment. Count under the government scheme
 - Who made your tollet? (v) | Self | Contractor | Parchayal 4

- Series had Leacher Softwar B : Social Amureness (technique and benefit)
 5. De you know the technology used in multing of your tode?? (
 - (softy aware: Little knowledge: Chancone. 6. Do you know how your toller works? (~)
 - 7. What me the benefits of tolleft (-)

Clearliness Safety from its Accion through that Consenience in bad weather Security of Females Sufery from the attack of Honor

dargerous insects and animals Offer (spenity) Manue

C. Sathfactory tellet structure and construction

- 8. Are you satisfied with the manufacture and of your rode() (*)
 - 9. If yes, wind is the specialty / like the most?

Not appropriate technique not as per givit, specification Other (specify) Inconstructor structure Bud construction Small in sine / 10 H root, why? (+?)

- 11. Do you use tolder fin deferation? (<) [Yet No
 - 12. H yes, reseased

13. If no, masouse for not esting tollet? (*) Not in justice	Don't like or enjoy using tollet	University to but construction	-
Lack of welct	Traditionally unaccupiable or taboo	Don't want dirt near living place	
cachip behaviour ne estenci use it	Other (specify)		
mother agreement			
표 열 제 결 전	1.68	1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	1.68

E. Pullation concept and belief

- Yes No 14. Is there any cultural concept of becoming probated by doing defecution? (*)
 - H yes, this factor is nestricting in making and using solle?
 H Yes, discusive

Project: A Socio-Cultural Appraisal of Swackh Bharat Abhyan Shanchalaya Nirman Vojana among Baiga Tribe

Table of the state of the	
मता (टीमा / साम / पंचारात) :	i mi
मीबाइस नन्दर	A money afternoon Broat sensor? (*) podd tobere deruge deruge
यारियारिक स्ट.ल्या के: नाम	कें: कुर्जाहिक अर्थका (१९०० की क्षेत्रोक्तक) प्रज्ञाह की जिल्लेक होंगे जिल्ला स्थापन स्थापन अर्था आया अर्था के कि अर्थ कार्य अर्थ के कि अर्थ क
	ि का का अन्तरीही कालक क्षीतका को काम का है? (४) कम्पूर्ण जाताकार क्षा जाताकार जाताकार जाताकार का जाताकार के जाताकार
	TOTAL CONTRACTOR OF TAXABLE SERVICES OF SE
	To a displacement of the state
	াট আছি জাত্তী মানাটি (প') জন্মন দিন্তান একপ্ৰিক জন বিবাসনা পত্নী জনকাট নিন্তান কৈ প্ৰশ্নান নিৰ্মান কৰিব। কৰিব সভাযোগী জনতা নিৰ্মান কৰাম নিৰ্মাণৰ বিভাগৰ নিৰ্মাণৰ বিভাগৰ নিৰ্মাণ
	2007
	्राम्बा आप शीय के तिरंग भौतितहरू को उपबांध करते हैं? (त) स्थि क्षित 2 मार्च हैं, इनस्पार
	T (4) many mpt to the fact many many to many many to many many many many many many many many

Appendix – II : Photographs Picture 1: Way to Umargohan village Primary School at Lankatole, Omargohan. (Insight - Tallets at

Picture 3: Toilets with beneficiary at Lankatola hamlet in Umargohan village of Podki Gram Panchayat







Picture 4: Beneficiary under Souchalaya Nirman Yojana

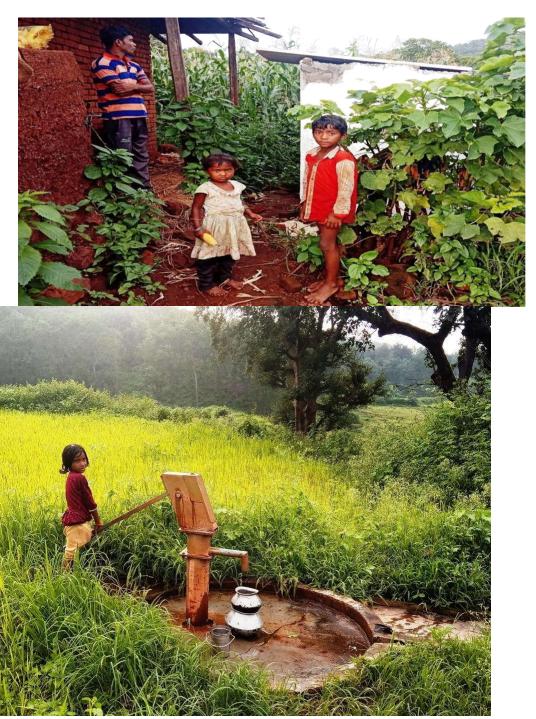
Picture 5: Researcher with Baiga villagers at Lankatola hamlet in Umargohan village





Principal Investigator taking information at Lankatola

Picture 7: School going children (new generation) with new toilet



Picture 8: Water source at Lankatola – Handpump

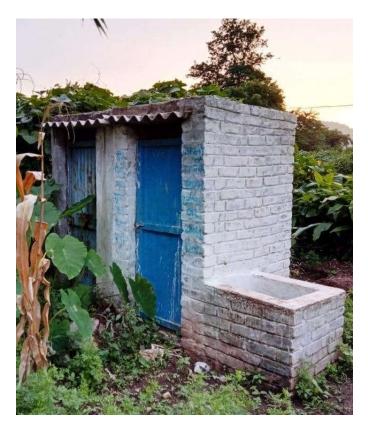
Picture 9: Bringing water from far away sourcesPicture 10: Twin Leach-Pit technique



Picture 11: Construction of toilet by Baiga mason (under Souchalaya Nirman Yojana)

Picture 12: School with toilet at Pharrisemar village of Harratola Gram Panchayat
Picture 13: Two adjacent toilets with water tank at Pharrisemer







Picture 14: Construction of toilet under Souchalaya Nirman Yojana

Picture 15: Local private contractor constructed toilet at Pharrisemer





Picture 16: Two Joint toilet at Upartola, Pharrisemer

Picture 17: Single pit for two joint toilets shown in Pic. 16 is non-usable condition





Picture 18:

Primary school with incomplete non-usable toilet at Bichtola, Pharrisemer



Picture 19: Newly constructed toilet with sub-standard broken door at Upartola, Pharrisemer



Picture 20: Handpump as water source at School-tola, Pharrisemer

Picture 21: River stream at Upartola, Pharrisemer



22: Occasional toilet user of Bichtola, Pharrisemer

Picture 23: Occasional toilet user at Bhelwaguda

Picture 24: School going kid with mobile in front of his family toilet (IHHL)



Picture 25: Researcher filling up household schedule at School-tola, Pharrisemer



Picture 26: Principal Investigator collecting quantitative data and qualitative information at Tikratola,
Pharrisemer

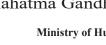
Contributor Dr Amit Soni

Assistant Professor

Department of Tribal Studies

Indira Gandhi National Tribal University (Amarkantak, M.P.)

Mahatma Gandhi National Council of Rural Education



Department of Higher Education Ministry of Human Resource Development, Government of India



5-10-174, Shakkar Bhavan, Ground Floor, Fateh Maidan Road, Hyderabad - 500 004

Telangana State. Tel: 040-23422112, 23212120, Fax: 040-23212114 E-mail: editor@mgncre.in, Website: www.mgncre.in

Indian Journal of Rural Education and Engagement Guidelines to the Authors

Typescript Requirment

Research papers of maximum length 3000 words containing original research findings in a clear and concise manner.

Review articles maximum length of 4000 words.

Submission of Typescript

Authors should submit the soft copy (MS-Word compatible) in A4 size, in Times New Roman, 12 font size.

It should include:

- a) Title page, containing the title and subtitle
- b) Abstract
- c) Keywords
- d) Author (s) affiliation with mailing address including the e-mails
- e) Authors to submit manuscript online (softcopy) in MS-Word to: editor@mgncre.in and also a hard copy to Editor, Indian Journal of Rural Education and Engagement, MGNCRE, 5-10-174, Shakkar Bhavan, Ground Floor, Fateh Maidan Road, Hyderabad-500 004.

Certificate by the Author(s)

It is mandatory on the part of the corresponding author to furnish the following certificate at the time of submission of manuscript in the online submissions.

(Signature and Names of all the authors)

Title Page:

It should include title and subtitle of the article, name(s) and affiliations of the author(s), and the contact person to whom communications should be sent (in the case of multi-authored papers).

Abstract:

An abstract of about 200 words for research papers and about 150 words for review articles should be provided along with the paper.

Keywords:

Four to six key words representing the complete subject of the paper should be given.

References:

References to the published literature should be presented in the style of American Psychological Association (APA) Publication Manual.





Mahatma Gandhi National Council of Rural Education

Department of Higher Education
Ministry of Human Resource Development, Government of India

5-10-174, Shakkar Bhavan, Ground Floor, Fateh Maidan Road, Hyderabad - $500\ 004$

Telangana State. Tel: 040-23422112, 23212120, Fax: 040-23212114 E-mail: editor@mgncre.in, Website: www.mgncre.in

Indian Journal of Rural Education and Engagement

MGNCRE