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**EDITORIAL**

**The Indian Anthropological Society Goes to North East India :  
Reflections on the 46th Annual Conference in Imphal**

RAJAT KANTI DAS

*Editor, Journal of Indian Anthropological Society*



A photograph showing Dr. Najma Heptulla, the Governor of Manipur, at the inaugural function

The 46th Annual Conference of The Indian Anthropological Society organized by the Department of Anthropology of Manipur University, Imphal in collaboration with the Anthropological Society of Manipur during October 8-10, 2016 holds a special place of importance in the history of the Indian Anthropological Society for a number of reasons. Firstly, this Conference could attain the status of an 'International Conference' with the enthusiastic participation of a number of foreign delegates. Secondly, it was the first occasion the Conference could be held in North East India, which had an added significance in the sense that not only the University Department but also a region-based society upholding the cause of the discipline of anthropology collaborated in the effort. And what was particularly significant was its focus on North East India. The Conference at the end could provide us with an authentic picture of North East India, which, though not all inclusive, is educative enough to arouse our interest.

In the present context, it is difficult to bring the whole of North East India under one umbrella. That we are used to treat North East India as a unified region manifesting a type of individuality may be attributed to its unique

historical and geographical characteristics. The individuality referred to here could be traced back to individual existence of cultures, where local communities used to function more or less like homogeneous categories. Things have changed now. Individuality at the cultural level can no longer be fixed in absolute terms and with it the problem of communication between cultures has assumed greater importance. Today, an individual culture tends to take the form of a synthetic culture. No wonder, reality at the social-cultural level is now riddled with complexities. With reality becoming more and more complex and slippery, local communities symbolise and display a type of freedom-based tradition, the spirit of which is not quite reflected in such an expression as 'ethnocentrism'. Then how could it find proper expression, one may ask? Is it in any way connected with the rise of intellectualism or an exercise in that direction, which has engaged the attention of almost all communities of the region? Tradition is one area that has come under increasing intellectual scrutiny. Actually, there is not one tradition but a number of traditions or a mixture of traditions manifested at the community level. Tradition refers not only to traditions of one's making or belonging, learning or knowing, but also to tradition built around exchange and borrowal. The more important perhaps is creating a new tradition based on critical scrutiny of ideas, norms and practices. A new situation has been created where the intellectuals play the dominant role. Side by side, there has been an unprecedented rise in people's consciousness towards civil and political rights. On the theoretical plane, intellectuals are caught between Western liberalism and, to a great extent, Asian authenticity. This is a much talked about and debated position. Authenticity or the urge to prove one's authenticity may not entirely be an Asian phenomenon. If we look at it from North East Indian perspective, expressions of authenticity are more community-centric, on the basis of which generalizations are drawn. But generalizations, when they take the form of overgeneralizations, ignore the reality at some points. Greater attention is now paid to ethnic factor to explain community-centric activities. In the process, cultural history and culturally-guided actions are often twisted or manipulated to suit specific purposes of self projection and display. Questions may be raised about their authenticity. The history that actually happened in the context of specific cultural group could only be brought to light through genuine contact with people's experiences. Here lies the importance of anthropology. But in the contemporary situation the historical perspective cannot entirely be based on experience alone. We have come to realise that knowledge growing out of direct experience is hardly spontaneous these days because our observations get distorted and at times flawed, which could be attributed to biases, or shall we say, compulsions that have entered into our observations and explanation. Even search for the roots tends to take a tortuous course. We are increasingly drawn towards a type of knowledge that can be branded as 'agreed-on knowledge', which speaks of some form of commitment to a pre-conceived goal based on traditional mode of control.

This type of knowledge can lead us astray because here we may not be in a position to exercise our free choice or will. It is too much to expect that the North East Indian experience about its journey from local to national will be the same as the rest of the country. The specificity of North East India may be located here. One even gets the impression that the exposure of the people of North East India to similar situations at the international level is more spontaneous and uninhibited compared to the rest of India. North East India's international link is, if anything, more varied and historically specific. I just give one example. One of my Ph.D. Examiners happened to be a Japanese Professor from a University of Japan. After the award of the degree, he wrote a personal letter to me, in which he expressed, among other things, his strong desire to pay a visit to Manipur to offer flowers to the Imphal river in memory of the Japanese soldiers who had lost their lives in this area during the Second World War. His wish did not materialise, but the episode could at least give an indication about the type of link he and probably a number of Japanese wanted to have with this part of North East India. In the same way, it may be possible to establish historically-defined relationship of communities of some other regions with different groups of people across the international boundary, the people who had left their imprint here in some form.

To look at North East India in terms of ethnic, communitarian or cultural 'separatists', seems to be more fashionable these days, but such an attitude speaks more of conservatism, stereotypic notion and a false sense of egotism. The sooner we get rid of it, the better for us. We sometimes behave like 'impetuous cosmopolitans' with the dubious distinction of creating differences and adding confusion because even when we recognise the importance of increasing communication, our attitude displays a type of rigidity. In the field of social research, North East India provides ample opportunities to examine the role of "agencies" by which the subjects of study themselves become active choice-making agents. Social formations, culture-conditioned institutions, political organizations, religious bodies, enterprise creators operating from within and outside, state-controlled functionaries may come within this category. In a highly sensitive, culturally conscious and ethnically surcharged North East India, it may not always be easy for a researcher to penetrate into what the Novelist Forster (1984) once said as 'the hidden life at its source'. Of course, with the extension and elaboration of new concepts of time, space, politics and identity, the hidden life no longer remains as 'hidden'. Still, the need for a comprehensive understanding of the fast changing situation grows even more, which requires collaboration of a number of disciplines engaged in social-cultural research. Here the contributions of biological anthropology in the context of North East India have some relevance because they convey a social message and display a type of cultural commitment.

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## **Exploring post-sterilization regret in an underdeveloped society of rural West Bengal, India**

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**Abstract:** The state of West Bengal has witnessed fertility transition during the last decade, though the level of infant and child mortality remained at a high level, particularly among the socio-economically disadvantaged communities. At the same time, the adoption of female sterilization has increased substantially. Adoption of sterilization in low fertility situation combined with relatively higher level of infant and child mortality could result in post-sterilization regret. The present study tries to explore post-sterilization regret in an underdeveloped region in the state of West Bengal, India. Data of 766 sterilization users belonging to 45 villages of Birbhum district of West Bengal were collected in a small-scale research study. Multivariate binary logistic regressions were used to identify the socio-demographic characteristics associated with post-sterilization regret. Women who have living children of both sexes and have participated in decision making regarding sterilization were significantly less likely to report sterilization, while those who had an incidence of child loss, reported post-sterilization health problems, did not have informed choice before sterilization and belonging to socio-economically marginalized communities were more likely to report post-sterilization regret.

*Key words :* Post-sterilisation, underdeveloped society, rural, West Bengal

### INTRODUCTION

Female sterilization is still the most widely used contraceptive method in the world. Globally, out of 661 million couples of reproductive age who were using any modern contraceptive method during the last decade, 223 million were using female sterilization alone (United Nations, 2009). Female sterilization is the most common method in the countries of Asia, Northern America and Latin America (ibid). Since sterilization is a permanent method of contraception which cannot easily be reversed, decision regarding sterilization should be made after careful thought and after having been informed about its irreversibility (Petta et al., 1995; Ramanathan and Mishra 2000). In terms of outcomes, although it was observed that most sterilization users report satisfaction with the procedure and having experienced a little or no change in their sexual activity or marital relationship, about 10% of sterilized women worldwide reported to be dissatisfied or had regret (Ramanathan and Mishra, 2000; Singh et al., 2012; Gary, 1996; Vieira and Ford, 1996; Henshaw and Singh, 1986).

During the post-Emergency era of Indian Family Welfare Programme, contraceptive method acceptance shifted from male sterilization to female sterilization due to variety of reasons such as development of new technique

(such as laparoscopy) of female sterilization; delusion and apprehension about the side effects of vasectomy (such as weakness, loss of strength and libido); and emphasis on women-centred policies and programmes (such as Reproductive and Child Health programme) (National Population Stabilization Fund, 2007). It is worth noting that although method-specific contraceptive targets were abolished in 1996 and Community Need Assessment Approach was introduced (Srinivasan, 1998); numerous national level surveys demonstrated the dominance of female sterilization in India's family planning programme. According to the most recent District Level Household and Facility Survey (DLHS), carried out during 2007-08, 34% of currently married women have adopted female sterilization and the percentage remained almost at the same level compared with DLHS conducted during 2002-04 [International Institute for Population Sciences (IIPS), 2010]. However, the third round of National Family Health Survey (NFHS) conducted during 2005-06 revealed three percentage point increase of female sterilization from 1998-99 among currently married women in India (37% during 2005-06 as against 34% during 1998-99). The survey also revealed that during 2005-06, the overall contraceptive prevalence was 56%, and out of which 66% of users reported female sterilization as their current contraceptive method (IIPS and Macro International, 2007).

The State of West Bengal of India, which is one of the populous states, located in the eastern part of the country. The state is one of the middle ranking states in terms of human development indicators with large population. Like the states of southern India, West Bengal has also witnessed fertility transition in the recent past. The total fertility rate (TFR) of West Bengal was 1.7 in 2011 with rural and urban TFR were 1.9 and 1.3 respectively (Registrar General of India, 2013). Like other Indian states, women of West Bengal are generally encouraged to marry early and complete childbearing soon after the marriage. According to the recently released data of the fourth round of NFHS conducted during 2014-15, 18.3% of women aged 15-19 years who were mothers or pregnant at the time of survey (IIPS, 2016). Once women achieve their desired family size, they adopt sterilization soon. According to the fourth round of DLHS, conducted during 2012-13, 34% of currently married women adopted sterilization, which declined marginally from the third round of DLHS conducted during 2007-08 (IIPS, 2014). However, according to the fourth round of NFHS-4, conducted during 2014-15, 29.3% of currently married women accepted sterilization, which has declined from 32.2% during 2005-06 (IIPS, 2016).

Nonetheless, typically, sterilization tends to occur at an early age and age at sterilization has been declining from 1990s in India (IIPS, 1995; IIPS and ORC Macro, 2000; IIPS and Macro International, 2007). In West Bengal, the median age of sterilization was 26 years in 1992-93, which declined to 24.6 years in 2005-06. However, last round of DLHS (DLHS-4) shows some

increase in mean age of sterilization (26.5 years). It was argued that lower age of sterilization could be related to women's autonomy within the family – a woman who has completed childbearing becomes 'matriarch' of the family, thus reducing the mother-in-law's role in the family (Säävälä, 1999).

At this juncture one can argue that early age at sterilization combined with low fertility could result in post-sterilization regret. National level surveys conducted during last two decades in India have revealed that not more than 5% of sterilized women did express post-sterilization regret (Ramanathan and Mishra 2000; Singh et al. 2012). Post-sterilization regret in Brazil, which has one of the highest sterilization rates in the world, was found to be 15-20% (Schmidt et al. 2007; Nervo et al. 2000; Hillis et al., 1998).

Earlier studies have also tried to investigate differences with respect to the socio-demographic, economic and cultural characteristics of clients who have reported post-sterilization regret. These studies have found that those who adopted sterilization at an early age (Schmidt et al., 2007; Curtis et al., 2006; Jamieson, 2007; Malhotra et al., 2007), had fewer number of living children, particularly only had girl children (Schmidt et al., 2007; Malhotra et al., 2007; Loaiza, 1995; Kim et al., 1991) and, experienced child loss (Ramanathan and Mishra, 2000; Kim et al., 1991; Machado et al., 2005; Ludemir et al., 2009) were significantly more likely to report post-sterilization regret amongst sterilization acceptors. Further, characteristics related to service delivery such as low quality follow-up services found to be associated with higher reporting of post-sterilization regret (Ramanathan and Mishra, 2000; Zavier and Nair, 1998; Zavier and Padmadas, 2000). Studies have also observed that women who were involved in decision making regarding their sterilization were less likely to report regret (Malhotra et al., 2007; Ludemir et al., 2009). Additionally, external pressure from clinicians was found to be associated with regret in the United States (ACOG, 2009).

Other reasons of regret cited in the literature include change in marital status, perceived side-effects and health changes, and contraceptive failure (Vieira and Ford, 1996; Loaiza, 1995; Thapa and Friedman, 1998). Further, regret from the loss of fertility or perceived loss of interest in sexual relations following sterilization has also been found (Vieira and Ford, 1996). Some studies have also revealed that women who did not attain higher education as well as did not participate in wage earning sector activities outside home tend to report post-sterilization regret compared to their respective counterparts (McGonigle and Huggins, 1990).

It is worth noting that studies on post-sterilization regret in India are limited. Some studies were conducted on nationally representative sample surveys focussing only the role of demographic variables such as age at sterilization, year since sterilization, incidence of child loss and issues related to quality of care (for example, Ramanathan and Mishra, 2000; Singh et al., 2012), while small-scale studies (for example, Malhotra et al., 2007; Zavier



and Nair, 1998) did not adequately focus post-sterilization regret among socio-economically marginalized communities such as scheduled castes (SCs), scheduled tribes (STs), particularly in the context of low fertility coupled with high infant and child mortality. Understanding post-sterilization regret among the socially and economically disadvantaged is necessary, since adoption of female sterilization was found to be higher among them (IIPS and Macro International 2007). It is possible that being unaware of modern temporary methods and possible side-effects of sterilization or its irreversibility, they perhaps prefer sterilization and even accept it.

Given this context, the overall objective of the present study was to examine post-sterilization regret among socio-economically marginalized communities living in rural areas of an underdeveloped district in the State of West Bengal, India. The present study has the following hypotheses:

1. Acceptors of sterilization who have both sons and daughters are less likely to report post-sterilization regret compared to those having only sons or only daughters.

2. Any experience of child loss during any point of time as well as incidence of perceived health problem after sterilization are positively associated with post-sterilization regret.

3. Participation in decision making regarding sterilization and informed choice before sterilization could reduce post-sterilization regret even after controlling other confounders.

4. Post-sterilization regret would be higher among women belonging to socio-economically marginalized communities compared to caste Hindus since incidence of infant and child mortality is higher among these communities.

## MATERIALS AND METHODS

### *Study Setting*

Birbhum district is one of the typical backward districts of West Bengal in terms of human development indicators such as healthcare, education, access to amenities etc. (Ghosh and Saha 2013). Although the population composition of the district is proportionately heterogeneous, a large proportion of the population belongs to socio-economic marginalized sections such as SCs and STs.

According to Census of India (2011), 29.5% were SCs and 6.9% were STs. Further, a considerable proportion of population (27%) belong to the Muslim minority community. Moreover, more than 90% of the population lives in the rural areas and earn their livelihood through agriculture, mining and quarrying, and related activities. A few key indicators of the study district, and the state of West Bengal, are presented in Table 1.

Table 1: *Profile of the study district (Birbhum) vis-à-vis state (West Bengal)*

Characteristics	Birbhum	West Bengal
Population (in '000) <sup>§</sup>	3,502	91,347
Population/KM <sup>2§</sup>	771	1029
Overall sex ratio <sup>§</sup>	956	947
Child sex ratio (0-6 years) <sup>§</sup>	952	949
% of SC to total population <sup>§</sup>	29.5	23.0
% of ST to total population <sup>§</sup>	6.9	5.5
% of Muslim to total population <sup>†</sup>	37.1	27.0
Male literacy (%) <sup>§</sup>	77.4	82.7
Female literacy (%) <sup>§</sup>	64.1	71.2
Institutional delivery (%) <sup>@</sup>	78.4	74.6
Current contraceptive use (%) <sup>@</sup>	69.0	71.8
Mothers who had at least three antenatal check-ups for the last birth (%) <sup>@</sup>	79.6	81.3
Mothers who had full antenatal check-up (received at least 3 ANC, at least one TT and 100+ IFA tablets/syrup)	24.8	36.8
Mothers who received postnatal care within two days of delivery for their last birth (%) <sup>@</sup>	39.3	50.2

Sources: § Primary Census Abstract, Census 2011; \*Religion Primary Census Abstract (PCA), 2015; @ District level household and facility survey (DLHS)-4, 2012-13.

### *Data*

The data used in the present study is a part of the larger study on improving health status of women and institutional delivery of public reproductive health services in rural West Bengal, India conducted by the Institute of Development Studies Kolkata (IDSK) in collaboration with Rosa Luxemburg Stiftung, Berlin during 2012. The study was conducted in the rural settings in Birbhum district.

A multistage sampling design was adopted in selecting respondents. At the first stage, proportion of non-agricultural labourer was used as sampling stratification frame. Three blocks, namely, Saithia, Mohammed Bazar and Suri-I which have the lowest, medium and highest proportions of non-agricultural labourers according to Census (2001) were selected for the study. At the second stage, 15 villages were selected by probability proportional to size (PPS) sampling from each block. By definition, PPS sampling technique refers to the higher probability of selection of the larger regions/sub-regions/primary sampling units (PSUs) compared to the smaller regions/sub-regions/PSUs in a given geographic or administrative boundary. For example, if an administrative block has five villages having households 2,000, 1,500, 500, 200, 50 and two out of these five villages have to be selected, the probability of selection would be higher for the villages having 2,000 and 1,500 households than other villages, which are comparatively smaller in size. Large-scale

surveys, particularly the Demographic and Health Survey (DHS) use this sampling design to select PSUs. The implicit rationale to use PSS sampling compared to other sampling method is that larger villages will have higher variation with respect to socio-demographic and economic characteristics of population compared to smaller villages and such a variation could be captured by the sampling design itself. It may be mentioned here that the PSS sampling can only be used to select regions/sub-regions/PSUs and not households within PSUs.

A rapid houselisting exercise was conducted in each of the 45 selected villages. In order to maintain the variations in the exposure to the length of childbearing period among currently married women, the respondents were divided according to their age-15-24 years representing younger, 25-34 years representing middle aged and 35-44 years representing older at the next stage of stratification. At the final stage, from each selected village 30 respondents, who are currently married, non-menopausal, not pregnant at the time of survey or did not deliver a baby within 6 months preceding the survey (lactational amenorrhea period), were selected through simple random sampling on the basis of proportional representation of their age. Thus, the targeted sample size was 1,350. Of this, finally, 1,348 currently married respondents were selected and interviewed in the study. However, the present study was confined to 766 women, who reported female sterilization as their current contraceptive method.

Data were collected between February, 2012 and April, 2012 through a standard pre-tested questionnaire by door-to-door visit. Ethical approval for this study was obtained from the institutional ethics committee (IEC) of the institution of the author and permission was obtained from the local administration before undertaking the study. Informed consent was obtained from the study participants before data collection and the collected individual data were kept confidential.

Sample weights were calculated in order to provide block level estimates of the various indicators. The calculation of weight combines two weights, viz., village weight i.e. inverse of selection probability of a village within a block and individual weight i.e. inverse of selection probability of an individual of a particular age-group in a particular village.

#### *Analytical Model*

To identify the predictor variables associated with post-sterilization regret, multivariate binary logistic regression models were used. Primary outcome variable in the analyses was created from the question '*do you have any regret after sterilization?*' which was asked in the survey among sterilization acceptors and dichotomous in nature.

Predictor variables used in the multivariate binary logistic models in order to test their significant association with post-sterilization regret are presented

in Table 2. The variables primarily fall into six main categories: main predictor variables associated with post-sterilization regret – based on which study hypotheses were created; additional predictor variables associated with post-sterilization regret; individual level variables; socio-religious category; other household level variables, and place of residence (administrative blocks).

As information on household income or expenditure was not directly asked in the survey, the wealth index has been calculated by using factor analysis and has been taken as the proxy for household economic status. The wealth index consists of the following household and economic characteristics: type of house, toilet facility, source of lightning, main fuel for cooking, source of drinking water, use of separate room for cooking, ownership of house, ownership of agricultural land, ownership of irrigated land, ownership of livestock and ownership of durable goods. On the basis of the composite score related to these characteristics, the household wealth has been divided into poorest, poorer, middle, richer and richest.

Besides, caste and religion have been pooled together to form a single categorical variable and categorized as Scheduled caste Hindu, Scheduled tribe Hindu, forward caste Hindu and, Muslims/other minorities. The variable ‘mass media exposure’ has been created from four variables, namely, ‘reads newspaper or magazine at least once a week’, ‘listens to the radio at least once in a week’, ‘watches television at least once a week’, ‘visits the cinema/theatre at least one a month’. If women are exposed to any one of these, they have been classified as ‘exposed to mass media of any sort’.

Table 2: Variables tested for significant association with post-sterilization regret in multivariate binary logistic regression models 1-6

Model 1: Main predictor variables associated with post-sterilization regret: sex composition of children (only daughters, only sons, both sons and daughters); experience of child loss (no loss, 1 or more loss); involved in decision of sterilization (self/jointly with husband, only husband, others); informed about modern temporary methods (no, yes); reported self-perceived health problems after sterilization (no, yes).

Model 2: Model 1 + additional predictor variables associated with post-sterilization regret: age at sterilization (<20, 20-24, 25 and more); years since sterilization (<2 years, 2-5 years, >5 years); informed about inability of child bearing after sterilization (no, yes); sterilization is the first contraceptive method (no, yes); place of sterilization (public, private)

Model 3: Model 2 + socio-religious category (scheduled caste Hindu, scheduled tribe Hindu, forward caste Hindu, Muslims/other minorities)

Model 4: Model 3 + individual level variables: parity at sterilization (<=2, >=3); educational attainment (not-literate, primary, secondary or high); working for cash (no, yes); exposure to mass media of any sort (exposed, non-exposed)

Model 5: Model 4+ other household level control variables: type of house (nuclear, non-nuclear); wealth quintiles (poor, middle, rich)

Model 6: Model 5 + administrative blocks (Md. Bazar, Suri 1, Sainthia)

Altogether six models were estimated. Model 1 included main predictor variables, namely, sex composition of living children, experience of child loss, participating in decision making of sterilization, whether informed about temporary modern methods before sterilization, and reported any self-perceived health problem after sterilization. This allowed a test of whether there were differences in the likelihood of reporting post-sterilization regret across these characteristics. In the similar way, Model 2 included other predictor variables which could be associated with post-sterilization regret in addition to the variables described in Model 1. Model 3 included socio-religious category to test whether women belonging to socio-economically marginalized communities would report regret more compared to forward caste Hindu women. Model 4 introduced individual level variables in addition to the variables mentioned in Model 1, Model 2 and Model 3. Model 5 incorporated other household level variables in addition to the variables of Model 4. Model 6, which is the final model in the analyses included place of residence (administrative blocks) variable, was tested, adding to the variables already included in the earlier models. In brief, the relations between various models are as follows:

- Model 1 – main predictor variables associated with post-sterilization regret
- Model 2 – Model 1+ additional predictor variables associated with post-sterilization regret
- Model 3 –Model 2+ socio-religious category
- Model 4 – Model 3 + individual level variables
- Model 5 – Model 4 + other household level variables, and
- Model 6 – Model 5 + administrative blocks.

Estimating the models in this way allows testing the significance of the association of main predictor variables and socio-religious category with post-sterilization regret after controlling for a wide range of other confounding factors. Moreover, this also allowed the identification of factors that reduced the significance of the variable of interest in each model, hence enabling the identification of variables which are associated with the main predictor variables, and post-sterilization regret among women.

Data were analyzed using Stata Release 11. To obtain the basic socio-demographic characteristics of samples, descriptive statistics were produced for the study area using weights. The differences in reporting post-sterilization regret in relation to main predictor variables were examined through bivariate analysis using Pearson's chi-square test of significance at  $p < 0.05$ . The odd ratios produced by multivariate binary logistic regression were used for interpretation. The model assumes that the effect of any of the predictor

variables should be same regardless of the choice of category of the response variable. Only the significant variables with a two tailed P-value <0.05 are reported in the Table 5.

## RESULTS

### *Sample characteristics*

The socio-demographic characteristics of the respondents are summarized in Table 3. In the study sites, more than half of the women and their husbands were more than 30 years and more than 40 years of age respectively. It may be interesting to note that although median age at marriage was found to be quite low (16 years for women and 22 years for their husbands), the mean number of children ever born was less than two. Nearly three-fourth of couples has one or two living children. It possibly implies that fertility transition has been taken place even in underdeveloped districts and among socio-economically marginalized communities in West Bengal. It may be observed that nearly one-third of the respondents were non-literate, while one-fourth of their husbands were so. Further, more than half of the respondents were not engaged in any wage earning sector activities, while less than half of the women were exposed to mass media of any sort; inter-spousal communication regarding contraceptive use was very high. In compliance with all-India family norm, a little more than six out of 10 households were nuclear. It may be noted that more than half of the respondents belong to marginalized communities comprising 40% SCs and 16% STs. Further, 4% of the sample households belong to Muslim minority community.

Table 3: *Sample characteristics of surveyed respondents (N=1,348)*

Characteristics	Percentage/mean (range)
<i>Respondent's age (Years)</i>	
<20	4.9
20-29	38.4
30+	56.7
<i>Husband's age (Years)</i>	
<25	4.9
25-39	38.4
40+	56.7
<i>Median age at marriage among respondents (years)</i>	16.0
<i>Median age at marriage among husbands (years)</i>	22.0
<i>Mean number of children ever born</i>	1.99
<i>Number of living children</i>	
No living children	4.7
1-2	76.7
3 or more	18.6
<i>Respondent's educational attainment</i>	
None	32.7
Primary	24.6
Secondary	36.9

Higher	5.8
<i>Husband's educational attainment</i>	
None	26.5
Primary	17.6
Secondary	43.6
Higher	12.3
<i>Respondent's work status</i>	
Not-working for cash	54.8
Currently working for cash	45.2
<i>Husband's work status</i>	
Not-working for cash	16.9
Currently working for cash	83.1
<i>Exposure to mass media of any sort</i>	
No/irregular	43.6
Almost regular/regular	56.4
<i>Any inter-spousal communication regarding contraceptive use</i>	
No	8.0
Yes	92.0
<i>Type of family</i>	
Nuclear	63.0
Non-nuclear	37.0
<i>Socio-religious community</i>	
Hindu-Scheduled castes	40.2
Hindu-Scheduled tribes	16.1
Hindu-Others	39.8
Muslims/other minorities	3.9
<i>Median distance to nearest public health facility (Km)</i>	2 (0,5)
<i>Availability of any grassroot level public health and family planning workers</i>	
No	17.8
Yes	82.2
Median age of first use of contraception (years)	20.0
Median age of sterilization (years)*	22.0

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\*Among sterilization users(N=766)

It was also revealed that more than eight out of 10 villages do have grassroot level public health and family planning workers at the time of survey and also the median distance from nearest public health facility was just about 2 kilometres. It is important to observe that the median age of first use of contraception and the median age of sterilization were low.

#### *Post-sterilization regret by selected characteristics*

Post-sterilization regret varied across the categories of the variables of interest considerably (Table 4). It was revealed that about 9% of women have expressed any post-sterilization regret among those who adopted sterilization as a means of contraception. It seems that sex composition of living children was very much associated with regret after sterilization. It was found that only

2.2% of women expressed their regret if they have both son and daughter, while about 15% women reported such if they either have only sons or have only daughters. Similarly, women who had lost their children were more likely to report regret compared to those who did not lose any children. Further, women who were involved in decision making regarding their sterilization were less likely to report regret. Post-sterilization regret was substantially higher among women who reported any self-perceived health problem during post-sterilization period compared to those who did not report any health problem. Post-sterilization regret also varied significantly according to age at sterilization and year since sterilization.

Table 4: Percentage of women reporting post-sterilization regret by selected characteristics (N=766)

Characteristics	Post-sterilization regret (%)
<i>Sex composition of living children</i>	
Only daughters	15.1
Only sons	15.0
Both sons and daughters	2.2
<i>Experienced child loss</i>	
No loss	7.8
One or more loss	14.4
<i>Informed about modern temporary methods</i>	
No	8.5
Yes	10.0
<i>Decision regarding sterilization</i>	
Self/jointly with husband	7.7
Husband alone	8.2
Others	23.7
<i>Experienced health problems after sterilization</i>	
No	7.2
Yes	17.1
<i>Age at sterilization (Years)</i>	
<20	9.0
20-24	9.9
25+	5.6
<i>Years since sterilization</i>	
10+	8.1
5-10	8.3
<5	10.3
<i>Whether sterilization is the first method of contraception</i>	
No	8.6
Yes	8.7
<i>Place of sterilization</i>	
Public	8.7
Private	8.0
Total	8.7



*Multivariate findings*

Adjusted Odds ratios with 95% confidence interval (CI) of multivariate binary logistic regressions are presented in Table 5. Women who had both living sons and daughters were significantly less likely to report sterilization regret, while women who had only living sons were more likely to report sterilization regret (AOR = 0.12, 95% CI = 0.11, 0.13 for women had both sons and daughters and AOR = 1.32, 95% CI = 1.28, 1.37 for women had only sons) compared to the women who had only daughters even after controlling a range of socio-demographic, economic, cultural and place of residence variables in model 6. Any experience of child loss was also found to be significantly associated with reporting post-sterilization regret; those women who have experienced any child loss were significantly more likely to report regret compared to those who did not experience any child loss (AOR = 1.42, 95% CI = 1.37, 1.46) even after controlling a number of confounders in the final model (model 6). To note, information regarding modern temporary methods substantially declines the odds of reporting sterilization regret consistently only after controlling individual, household and spatial characteristics in models 4, 5 and 6 (AOR = 0.82, 95% CI = 0.78, 0.85 in model 6).

Participation in the decision regarding sterilization has been found to be one of the significant predictors of post-sterilization regret among respondents in the unadjusted models as well as even after controlling the range of predictors. Among those women whose husband or other family members or relatives took final decision regarding sterilization were significantly more likely to report regret compared to those who alone or along with husbands decided about sterilization (AOR = 1.23, 95% CI=1.20, 1.27 for husband's decision and AOR = 3.39, 95% CI = 3.22, 3.56 for others' decision in model 6). Further, experience of any perceived health problem after sterilization was found to be positively and significantly associated with regret after sterilization (AOR = 3.31, 95% CI = 3.19, 3.43).

Table 5: *Adjusted odds ratios (AOR) (and 95% confidence intervals) from logistic regressions identifying association between post-sterilization regret and selected characteristics (N=765)*

Characteristics	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
<i>Sex composition of living children</i>						
Only daughters(ref.)	1.00	1.00	1.00	1.00	1.00	1.00
Only sons	1.24 (1.21, 1.28)***	1.30 (1.26, 1.33)***	1.32 (1.28, 1.35)***	1.27 (1.24, 1.31)***	1.24 (1.20, 1.27)***	1.32 (1.28, 1.37)***
Both sons and daughters	0.14 (0.13, 0.15)***	0.14 (0.13, 0.15)***	0.14 (0.13, 0.16)***	0.13 (0.12, 0.14)***	0.12 (0.11, 0.13)***	0.12 (0.11, 0.13)***
<i>Experienced child loss</i>						
No (ref.)	1.00	1.00	1.00	1.00	1.00	1.00
One or more	1.68	1.78	1.52	1.45	1.31	1.42

	(1.63, 1.73)***	(1.73, 1.83)***	(1.47, 1.56)***	(1.41, 1.50)***	(1.27, 1.34)***	(1.37, 1.46)***
<i>Informed about modern temporary methods</i>						
No (ref.)	1.00	1.00	1.00	1.00	1.00	1.00
Yes	1.01 (0.97, 1.04)	0.90 (0.86, 0.93)***	1.06 (1.02, 1.10)*	0.93 (0.89, 0.97)***	0.76 (0.73, 0.79)***	0.82 (0.78, 0.85)***
<i>Decision regarding sterilization</i>						
Self/jointly with husband (ref.)	1.00	1.00	1.00	1.00	1.00	1.00
Husband	1.07 (1.04, 1.10)***	1.29 (1.26, 1.33)***	1.13 (1.09, 1.16)***	1.13 (1.09, 1.16)***	1.01 (0.98, 1.04)	1.23 (1.20, 1.27)***
Others	3.26 (3.11, 3.42)***	3.87 (3.66, 4.08)***	3.24 (3.08, 3.41)***	3.41 (3.24, 3.59)***	2.49 (2.36, 2.62)***	3.39 (3.22, 3.56)***
<i>Experienced health problems after sterilization</i>						
No (ref.)	1.00	1.00	1.00	1.00	1.00	1.00
Yes	2.98 (2.90, 3.07)***	3.43 (3.32, 3.54)***	3.06 (2.96, 3.16)***	3.73 (3.61, 3.86)***	3.41 (3.29, 3.54)***	3.31 (3.19, 3.43)***
<i>Additional variables associated with post-sterilization regret</i>						
<i>Age at sterilization (Years)</i>						
<20 (ref.)		1.00	1.00	1.00	1.00	1.00
20-24		0.97 (0.94, 0.99)*	1.01 (0.98, 1.04)	1.04 (1.01, 1.07)*	1.19 (1.15, 1.22)***	1.10 (1.07, 1.13)***
25+		0.46 (0.44, 0.48)***	0.50 (0.48, 0.52)***	0.56 (0.54, 0.58)***	0.53 (0.51, 0.56)***	0.47 (0.45, 0.49)***
<i>Years since sterilization</i>						
10+ (ref.)		1.00	1.00	1.00	1.00	1.00
5-10		1.08 (1.04, 1.11)***	1.07 (1.03, 1.10)***	1.02 (0.99, 1.05)	0.99 (0.97, 1.03)	0.96 (0.92, 99)
<5		1.34 (1.30, 1.38)***	1.35 (1.31, 1.39)***	1.48 (1.43, 1.52)***	1.24 (1.20, 1.28)***	1.34 (1.30, 1.38)***
<i>Informed about inability regarding childbearing</i>						
No (ref.)		1.00	1.00	1.00	1.00	1.00
Yes		0.50 (0.52)***	0.48 (0.50)***	0.50 (0.52)***	0.54 (0.56)***	0.45 (0.47)***

<i>First contraceptive method is sterilization</i>						
No (ref.)						
Yes	1.00	1.00	1.00	1.00	1.00	1.00
	0.89	0.79	0.80	0.79	0.63	
	0.91)***	0.81)***	0.82)***	0.81)***	0.65)***	
<i>Place of sterilization</i>						
Public (ref.)						
Private	1.00	1.00	1.00	1.00	1.00	1.00
	0.64	0.72	0.72	0.63	0.82	
	(0.60,	(0.67,	(0.66,	(0.58,	(0.76,	
	0.69)***	0.78)***	0.78)***	0.68)***	0.89)***	
<i>Socio-religious category</i>						
Upper caste Hindu (ref.)						
Scheduled caste Hindu			1.00	1.00	1.00	
			1.68	2.57	2.86	
			(1.63,	(2.48,	(2.76,	
			1.73)***	2.65)***	2.96)***	
Scheduled tribe Hindu			0.56	0.78	0.72	
			(0.53,	(0.74,	(0.67,	
			0.60)***	0.83)***	0.76)***	
Muslims/others			2.33	3.68	4.92	
			(2.18,	(3.40,	(4.51,	
			2.50)***	3.99)***	5.37)***	
<i>Control variables</i>						
<i>Individual level characteristics</i>	No	No	Yes	Yes	Yes	Yes
<i>Other household level characteristics</i>	No	No	No	No	Yes	Yes
<i>Administrative blocks</i>	No	No	No	No	No	Yes

Additionally, socio-religious identity was found to be significantly related with post-sterilization regret. It was observed that sterilized women belonging to SC Hindu households or Muslim households were significantly more likely to report regret compared to forward caste Hindu, while sterilized women from ST Hindu community were less likely to report any regret compared to the same reference category even after controlling a number of potential confounders (AOR = 2.86, 95% CI = 2.76, 2.96 for SC Hindu women; AOR = 0.72, 95% CI = 0.67, 0.76 for ST Hindu women and AOR = 4.92, 95% CI = 4.51, 5.37 for women belonging to Muslim community).

Apart from these variables, age at sterilization, years since sterilization, prior information about inability regarding child bearing, place of sterilization and, sterilization being the first contraceptive method have significant bearing upon reporting of post-sterilization regret as found in the present analyses as shown in the Table 5. For example, while higher age of sterilization (25 or more) was significantly less likely to be associated with post-sterilization regret, lesser years since sterilization (less than five) was significantly more likely to be associated with post-sterilization regret. Similarly, those who were informed about inability of conceiving a baby after sterilization or whose first contraceptive method was sterilization were significantly less likely to report

any post-sterilization regret. It may also be noted that women, who had undergone sterilization operation in private facilities, were less likely to report post-sterilization regret possibly indicating better quality of care and follow-up services after sterilization compared to the public facilities.

#### DISCUSSION

The present findings regarding the predictors of post-sterilization regret need to be interpreted in light of socio-demographic, economic and cultural context of an underdeveloped region where majority of population belong to socio-economically disadvantaged sections.

The present study found that post-sterilization regret was independently associated with sex composition of living children, experience of child loss, participation in decision making of sterilization, self-reported ill health after sterilization and, informed choice regarding modern temporary methods even after controlling other potential confounders.

It was observed that women who had only sons had higher odds of reporting regret compared to the women who had only daughter, while the reporting of regret was substantially lower for the women who had both sons as well as daughters. It is consistent with the earlier findings in the developing country set-up (Singh et al. 2012; Gary 1996; Vieira and Ford 1996; Boring et al. 1988). It is important particularly amongst marginalized communities in the context of low fertility, where women tend to perceive that although sons may take care of their economic needs, daughters will look after them during old age and thus look for a 'balance' of sexes in children (Pallikadavath and Wilson 2005).

As found in a number of studies in both the developing and developed countries, women who had an experience of child loss were more likely to report post-sterilization regret compared to those who did not (Ramanathan and Mishra 2000; Singh et al. 2012; Machado et al. 2005; ACOG 2003). The present finding is important for the following two reasons. First, fertility transition has taken place in West Bengal as a whole even in the underdeveloped districts of the state (Guilmoto and Rajan 2013). It was found that among the study respondents the mean number of children ever born was less than two. Second, recent trends of infant mortality rates indicate that decline in infant mortality has stagnated at a relatively higher level in India as well as in West Bengal (Registrar General of India 2013). Thus, very low level of fertility combined with relatively higher level of infant mortality seems to be one of the very significant contextual issues for the adoption of sterilization and post-sterilization regret in the study population. Though data regarding deaths of offspring during post-sterilization period were not collected in the survey, as Singh et al. (2012) noted some women might have experienced child loss after adoption of sterilization. Reversal operations are not offered in the Indian public family welfare system at present and are only available in

the private sector facilities involving substantial cost, which is often unaffordable for the poor and socially marginalized.

If a woman had negative attitudes towards sterilization, then it is quite possible that she could have more negative subsequent feelings about sterilization. Further, she is also likely to be more negative if her husband or some other, rather than she dominated the decision making. Confirming to the findings of Miller et al. (1991), the present study also found that poor couple communication, dominance of the decision making by the woman's husband and conflict with her husband during decision making are risk factors for regret among women. Arguably, such regret has a potential not only to develop depression and low self-esteem among women in future but these women also tend to report self-perceived health problems compared to other sterilized women. Earlier studies in the Indian context have shown that self-reported perceived health problems during post-sterilization period has been potentially linked with post-sterilization regret (Ramanathan and Mishra, 2000). The present study has also found that even after controlling for a number of confounders, self-perceived health problems have independent effect in reporting post-sterilization regret.

Informed choice of different available modern temporary contraceptive methods was found to be one of the important predictors in our study. It has been found that informed choice to women before offering sterilization has been at the minimum over the decades as various national level surveys have pointed out (IIPS, 1995; IIPS and ORC Macro, 2000; IIPS and Macro International, 2007). The latest round of NFHS, 2005-06 suggests that in India among those women who were sterilized within five years preceding the survey, only about 24% of women were informed about temporary modern methods before sterilization (IIPS and Macro International, 2007). In the present study, we found that out of those respondents who adopted sterilization only about 12% of them were informed about modern temporary methods. It is important to note that National Population Policy, 2000 as well as National Health Policy, 2002 envisaged government's commitment to the provision of expanding contraceptive method choice in order to enable people to make voluntary and informed choices through offering a basket of modern temporary methods (Santhya, 2003). At the same time, centrally sponsored incentive scheme to encourage eligible men and women for undergoing sterilization has been in place since 1991. The revised scheme of 2006 suggests that women opting for tubal ligation were eligible for Rs. 600 (USD 10) and men undergoing vasectomy were eligible for Rs. 1,100 (USD 19), to compensate for wages lost during recovery (Singh et al., 2012). Furthermore, grassroot level public health and family welfare workers are also entitled for Rs. 200 (USD 3) for vasectomy and Rs. 150 (USD 2.5) for tubal ligation for counselling, motivating and providing follow-up visits to the sterilization acceptors (Government of India, 2007). Under such an incentive structure for both the acceptors as well as the

motivators, there is a high possibility that, the grassroot level public health workers could lure poor couples for undergoing sterilization by not offering alternative choices (Ghosh and Siddique, 2016). Thus, it is imperative to understand that the increase in the female sterilization rates consistently over the decades, particularly during the recent past, combined with low level of informed choice could partly be attributed to incentive schemes of the governmental agencies (ibid).

The finding of this study suggests that women belonging to SCs are more likely to report regret than others. Structural discrimination against SCs takes place in the Indian social system not only in the study area but also in other parts of India. They have low literacy rate, have meager purchasing power, poor access to basic amenities, resources and entitlements and are often employed as casual labourer (Chatterjee and Sheoran, 2007). Earlier studies have found that districts in which more than 20% of people belong to Muslim community significantly lowered the odds of adoption of sterilization (Stephenson, 2006). Importantly, the present study has found that sterilization regret among rural Muslim are found to be significantly higher compared to caste Hindus. It is not uncommon that in a community where adoption of sterilization itself is low, the acceptors would have higher degree of regret. Further, it was argued that lack of agency makes rural, poor, uneducated women irrespective of socio-religious identity the most avid consumers of the modern technology of sterilization at the cost of the modern, young, urban, rich and educated women who are more likely to use modern temporary methods or natural methods of family planning (Chattopadhyay, 2007; Basu, 2005). In this context, Chattopadhyay (2007) argued that it is '*... state's tacit and sometimes not so tacit attempts at controlling the composition of the population by permanently disabling the reproductive potential of certain undesirables – the poor, the uneducated, the rural, woman*' (39: p-5). On contrary, a village study conducted in a coastal area of India suggest that reversible contraception is undesirable, socially unacceptable, and usually unnecessary, although the achievement of fertility goals is likely due to the use of female sterilization (Hall et al. 2008).

It was noted in many earlier studies that separation and divorce are associated with post-sterilization regret in many societies (Vieira and Ford, 1996; Nervo et al., 2000; Ludemir et al., 2009; Hillis et al., 1999). However, data collected in the present study only pertain to the currently married women. Thus, due to unavailability of data we could not examine such association. Other limitations of the study must also be acknowledged. First, the study is based on cross-sectional data at a single point of time, which ideally does not allow determining cause-effect relationship between post-sterilization regret and its causal factors. Prospective studies among users of sterilization could be useful to determine the direction of causation. Second, we could not include male sterilization in the present analyses since number

of such cases was too small to analyse. Third, it is worth to mention here that we could not differentiate child loss before and after the sterilization because of data were not collected in this respect. However, it should not influence our findings because there is hardly any reason to believe that women will report regret for sterilization when any of her child died before sterilization; these women still have the opportunity to replace her dead children (Singh et al., 2012). Finally, post-sterilization regret as well as perceived health problems after sterilization could not be validated externally since these data were self-reported and were not examined clinically. However, it may be noted that estimates obtained on various socio-demographic and economic indicators (including post-sterilization regret) from this data very much resemble national level surveys. Survey teams were adequately trained and quality control measures were satisfactorily ascertained as said earlier.

Experience of post-sterilization regret by women has critical implications for quality of services provided by the Indian family welfare programme. Socio-economically marginalized communities living in underdeveloped rural regions are often deprived of information, amenities and opportunities, particularly which pertain to public health and family welfare (Ghosh and Saha, 2013). Grassroot level public health workers must provide quality counselling to women who are opting for sterilization, particularly regarding its irreversibility as fertility desire could vary in changing circumstances. The present study found that among those who expressed regret, only half of them reported that they did not want any more children at the time of interview. Also, information must be provided about its possible side-effects. Public health workers must be sensitized enough to provide information regarding other alternative modern temporary methods and should advise mix of methods, particularly to the younger couples. The providers must discourage adoption of permanent method among those women who have history of foetal wastage and child loss and encourage the usage of safe modern temporary methods. This is imperative for the marginalized communities due to their low uptake of antenatal, delivery and post-partum care combined with high prevalence of pregnancy wastage, infant and child mortality. Our data also suggests that more than six out of ten sterilizations were performed soon after the child birth. Family planning programme planners could also consider discouraging post-partum sterilization as done in many countries since women's decision for undergoing sterilization could be influenced by the process of child birth and immediate environment in hospital settings. Further, in order to reduce post-sterilization regret incentive schemes for acceptors as well as for motivators should be reviewed. There is need for greater commitment from the Indian State to deal with ethical and moral issues arising out of the sterilization as well as post-sterilization regret, particularly among poor and socially marginalized.

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## **Negotiating Rapport and Shades of Participant Observation: Notes from Fieldwork in Jaunsar-Bawar**

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**Abstract:** The paper tries to examine fieldwork based research strategy, especially focusing upon intricacies involved in establishment of rapport which involves highly complex negotiative interactions carefully calibrated by the anthropologist. Based on doctoral fieldwork of the author, it examines rapport establishment as systematic exploitation of the opportunities and breakthroughs that keep cropping up before the anthropologist during proactive interactions in the field. It is surmised that there can never be any codified prescription for the rapport establishment which can be seen largely as friendly interactions carefully maneuvered and steered by anthropologists for enhancing the quantity and quality of the data.

*Key words :* Participant observation, fieldwork, rapport, Jaunsar Bawar

### *Anthropological Fieldwork*

According to Powdermaker, “Anthropological fieldwork has been characterized by the prolonged residence of the investigator, his participation in and observation of the society, and his attempt to understand the inside view of the native people and to achieve the holistic view of a social scientist..” (Powdermaker, 1969:418). While this definition broadly outlines the context of anthropological fieldwork, for any neophyte anthropologist fieldwork entails walking through the labyrinthic pathways negotiating unique situations which will emerge in the field from time to time. The dilemma of a typical anthropologist seeking advice for a good fieldwork was aptly summarized by Evans-Pritchard as follows:

I first sought advice from Westermarck. All I got from him was “don’t converse with an informant for more than twenty minutes because if you are not bored by that time he will be”. Very good advice, even if somewhat inadequate. I sought instructions from Haddon, a man fore-most in field-research. He told me that it was really all quite simple; one should always behave as a gentleman. Also very good advice. My teacher Seligman told me to take “ten grains of quinine every night and to keep off women”. The famous Egyptologist, Sir Flinders Petrie just told me not to bother about drinking dirty water as one soon become immune to it. Finally I asked Malinowski and was told just to remember not to be a bloody fool. (Evans-Pritchard, 1973:1)

The dilemma of Evans-Pritchard is every anthropologist’s dilemma. You can never predict what situation an anthropologist will be in and what should be the best way to deal with a typical adverse field situation? Besides broad advice such as being given by Haddon that one should be a gentleman there is not much that can go as good advice. Even being a gentleman, at times may

not prove to be the right advice as was true with Napoleon Chagnon who would have become a pauper had he remained a gentleman among the Yanomamos. Therefore, anthropological fieldwork as a data collection strategy is inimitable and context driven. As against the linear informant-information-researcher mechanism of data gathering, the experience based anthropological fieldwork involves complex maneuvering by the researcher where data gathering becomes cumulative endeavor something akin to absorption action of a sponge. While maintaining the focus in research, the anthropologist is never oblivious to what is happening around. The holistic framework in field research implies that episodes and events are always integrated and therefore anything happening in the field is important. The ever presence of anthropologist in the field exposes an anthropologist to the 'imponderabilia of actual life'. Fieldwork thus implies driving amidst the forest of information from outskirts to the deeper and dense areas of ones topic of study. It further involves investment of emotional capital which is necessary in maintaining friendly relations.

An anthropologist in the field is like an omnipresent entity. Active fieldwork entails active presence of anthropologist in the field. Fieldwork thus involves intimate, personalized and emotional interaction with the people and at the same time it is a rigorous scientific endeavor. An anthropologist in the fieldwork is constantly struggling to make concerted efforts so that the flow of required information is not hindered. In fact, the major difference between a good and a not so good anthropological fieldwork lies in how the anthropologist was able to handle opportunities and challenges that keep cropping up constantly in the journey of fieldwork based research.

The 'field' in fieldwork is not merely a place; for an anthropologist, it is no less than a battleground where, the anthropologist is required to steer the flow of information as a master strategist and consciously manage impression in order to conduct a successful fieldwork. The expression 'immersing in the field' implies deliberate attempt by the anthropologist in making efforts in 'going native'. It means the change in attire, etiquettes, habits, mannerism, speech, food habits and sundry other behaviors helping an anthropologist in camouflaging in the local culture. Here the expression camouflaging is not used in the sense of being deceitful and secretive but as an act of mingling and dissolving in the culture. To an outsider, a typical anthropologist, in the context of the 'other culture' may look like a specially privileged guest who is friendly to many and enemy of none. The over indulgence on part of anthropologist in meeting and greeting people, in showing extra concern about the well being of the people are deliberate attempts in good rapport building. As a good listener, the anthropologist knows much more than any single individual; becoming storehouse of confidential and the other information of the community.

Establishment of good rapport is the most essential part of any anthropological fieldwork. However, rapport is a very complex state of existence

and it is affected by myriad factors such as the gender, age, social status, purpose of research, reference person, attire, accent and sundry other traits that people identify with the researcher. The rapport is also a function of how the researcher is talked about in the field setting. In a typical 'other culture' setting, an anthropologist is not only an outsider living alongside but also a wanted intruder constantly asking for access to the social and cultural milieu with a purpose of making recording of the social interactions. However, the fieldwork based information gathering is not a one-way affair. People are equally interested in knowing intimate details of the anthropologist as well. Thus anthropologist in the field situation is someone who is subjected to critical assessment by the people, who try to understand the purpose and intention of anthropologist out of the activities that an anthropologist is indulging in. For the lay people, it is not so easy to bracket anthropologist into an occupational category as what anthropologist does will not generally fit into a known category, especially if the field has not been visited by an anthropologist before.

#### *The Khos Fieldwork*

My doctoral fieldwork (Joshi, 1985) among the Khos of Jaunsar-Bawar was no less a challenge to me in management of impression and continuous building of the rapport. My choice of Khos as a field site for the doctorate arose because of my prior exposure during undergraduate and M.Phil. fieldwork. However, the earlier fieldworks were for smaller duration and not very intensive. I was reminded of D.N. Majumdar's expression that a good fieldwork involved being in the field for a longer duration. Majumdar (1962) had stated, "A stay of one or two weeks in Chakrata is not enough to enable any one to understand the intricate social structure of an ancient people, living a quaint life, and practicing a curious mixture of monogamy, polyandry and polygyny" (p. ix). Majumdar had conducted a legendary fieldwork in this area as is clear from many books and articles that came out of his pen. However, Majumdar's fieldwork was not concentrated in any one area and his ideas and writings were based on fieldwork done in various places across the length and breadth of Jaunsar-Bawar. In fact, Majumdar would pay annual visits to Jaunsar-Bawar during summer vacations exploring different aspects of these polyandrous people. He did it for more than two decades.

D.N. Majumdar's ethnography of the Khasa is therefore a summation of socio-cultural features collected not only at different places but also at different times. For example, in his well known book 'Himalayan Polyandry' the data had been collected from three villages from Jaunsar and Bawar. Thus D. N. Majumdar's ethnography was extensive but not intensive. For example, D. N. Majumdar has not mentioned at any place that he was well versed in the local dialect. Perhaps, he did not know Jaunsari language. This extensive study of Majumdar had almost covered all the villages of Jaunsar-Bawar for twenty two long years and had the total span of four years and eleven months; still if

he was not able to converse fluently in the local dialect which keeps on changing from one area to another; his field insight would rather be truncated.

#### *Choosing the Field Site*

Although I had some idea of the field area as I had been to different places in Jaunsar-Bawar, I decided to explore the most appropriate village for my doctoral work as I had to stay there for a longer duration and for intensive fieldwork. Furthermore, I needed to select a village which should have been moderately large, multi caste in composition and had medical pluralistic character. There were five such villages where I tentatively planned to pursue my research. I was very careful in searching for a village where I get full cooperation from the people. For selecting the village, I spent nearly five days in the town talking to different kinds of people. This time was also utilized in collecting official records pertaining to medical facilities and utilization besides information on development related activities. Many persons suggested that I work in Silgaon, which had a state Allopathic dispensary, multi caste population and different kinds of healers. Another attractive feature of this village was that it was on the road side, just 30 kilometers away from the Chakrata town. Finally, it was almost in the midway between Jaunsar and Bawar which represented two subcultures.

Luckily, the Pradhan elected head of this village also paid a visit to the town and the Primary Health Centre In-charge was kind enough to introduce me to him. In this brief meeting, though, I was able to give only a very rough idea regarding my research purpose, I was greatly impressed by the readiness of the Pradhan in welcoming me to his village. With his status as Pradhan and due to his frequent encounters with the outside world, he could understand the purpose of my research and so invited me to come to his village. While choosing the village for the study was not much of a problem, getting entry into the village was not as easy as the Pradhan headman of the village was mostly out of the village visiting offices and cities for various political and business purposes. I had to start from the periphery. I initially camped in the saw mill which was located way outside the village. One relative of the Pradhan was working in the saw mill. He became my initial contact and it was through him that I was slowly introduced to the villagers. Thus my actual entry to the village took nearly a fortnight and the rapport building was not a sudden one shot affair but it was carefully guided and slow process.

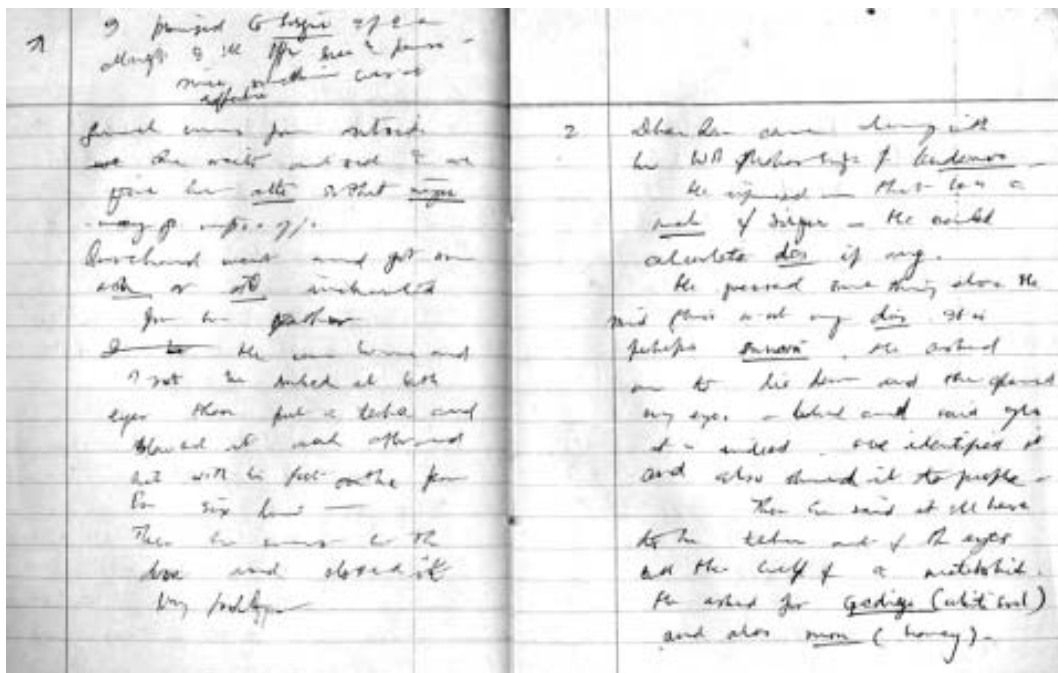
The present fieldwork was conducted in the early nineteen eighties. It was a time when Morris Frielich's 'Marginal Natives' was available and anthropologists were grappling with the question of the 'extent of participation'. The ideas such as reflexivity, author's position, informed consent, ethical concerns and sundry other contemporary necessities were not present at that time. Even Malinowski's diaries had not yet reached Indian libraries. In the beginning of the fieldwork, I was confining myself to the peripheral or marginal section of the village. The people working in the saw mill (all except one of

them had come from outside, mainly Himachal Pradesh). The younger brother of the village Pradhan headman was managing the mill for all purposes and he was also the branch post master of the village. Besides him, I was also interacting with the In-charge of the health sub-centre of the village. He was a pharmacist hailing from neighboring Garhwal region. There was one school teacher who hailed from Dehradun but had married locally. All of these were the gate keepers providing me initial information. The villagers were extremely busy people whom I would see going and coming from the fields at different times. My interviews were mainly confined to the people who were either frequently going outside or had links outside. As I was working on the topic of indigenous health seeking, I was quite depressed on learning that people mostly consult doctors trained in biomedicine and have almost abandoned traditional system of medicines. Some would go to the extent of saying that the indigenous medicines have now become ineffective due to pollution and contamination. I then chanced upon a *baman* priest-cum-healer who was the brother-in-law of the teacher hailing from Dehradun.

In the initial period of my fieldwork, I was perceived as someone interested in learning about the local culture but generally I was given information as they deem it fit for an outsider. Perhaps people were afraid that if they give details on their peculiar beliefs and practices, I may laugh at it and make fun among 'my people'. They were particularly sensitive to the practice of polyandry which they thought is being made fun of in the outside world. In the similar vein, they thought of shamanistic and magico-religious practices as being weird not to be disclosed to the outsiders. They were not wrong in thinking in this manner and have some idea regarding how the people in the cities talk about them. I had quite often heard people in Dehradun district headquarter warning me that I should be careful in Jaunsar-Bawar as they were expert in magical practices and particularly their women folks were expert in magically changing outsiders into he-goat and ram.

Against the backdrop of villagers being suspicious of outsiders, especially if they want to know about intricacies of local culture, establishment of rapport and gaining of trust were very strenuous tasks. My approach, in such a scenario, was to flow along with the available opportunities. If someone visited the village health centre, I would ask what had happened and what actions were undertaken. I was more interested in noting down the information given to me voluntarily rather than proactively. It was during my initial days that I was invited to a play being enacted in the neighboring village. This play called "Roop Basant" was being enacted on a story being taken in from the plains. The props, dialogues, attires, music and all other properties used in the play were hired from the city. The direction to the play was being given by a teacher hailing from Dehradun plains. In all, it was a play organized by the outsiders for the villagers. I was asked to be the chief guest in this play. My choice as a chief guest was perhaps a befitting choice as I was identified as an 'outsider'.

Accompanied by few youths from Silgaon, I went to see the play. It was after returning from this play that I got the first opportunity to indulge in participant observation and intimate rapport building. I am describing the whole incidence from my field jotting diary. Given below is the transcription of the two pages of my jotting diary (see Figure 1):



I promised to Silgur if I am alright I'll offer rice & paisa – since medicine was not effective female comes from outside she waits and stands and we give her *atta* (flour) so that *najar* (evil-eye) may wipe off.

*Name* went and got some ash or oil enchanted from his father. He come back and I got it rubbed at both eyes then put a teeka and blowed it and other with his foot on the floor. For six times —. Then he went to the door and closed it very forcefully.

*Name* came along with his WB *name* of *name*. he informed me that he is a *mali* (diviner) of Silgur – He would calculate *dos* (supernatural cause) if any.

He guessed something else. He said that this is not any *dos*. It is perhaps *sunnava*. He asked me to lie down and then opened my eyes – looked and said yes it is indeed. He identified it and also showed it to people -.

Then he said it 'll have to be taken out of the eyes with the help of a matchstick. He asked for *Godiya* (white soil) and also *mon* ( honey).



*The Incident*

It was fourth of August, a pleasant summer morning of the majestic and splendid Chakrata hills. I did not sleep the previous night. The reason being – I had witnessed a play organized in the neighboring village. I, along with my village mates had arrived early in the morning. My village friends had straight away attended to their domestic and agricultural chores while I decided to get a good night sleep, though it was morning.

I had hardly dosed off that I heard a knock at my door. A Bajgi musician woman was asking for my permission to take away their rages stacked in my room. A *dhiyanti* village daughter, she had come to her natal village for attending a festival. I allowed her to do so but felt intense itching in my eyes. Thinking it to be due to dust particles, I used the commonsense childhood technique of rolling upper eyelids gently over the lower ones. Contrary to any relief, it made my eyes completely locked. It was a terrible experience, of temporary blindness – the world was dark around me. I could only hear mothers calling their children, greeting calls and ululations. I got up from my bed and realized that the more I try to fiddle with the eyes the more intense the pain becomes. I therefore left all efforts and for the first time in my life realized the agony of being in a village away from amenities. I was baffled since I had not known of such a state ever in my life. For a moment I thought that I was going to be blind. The mere thought of it made me shiver.

I had two options left to me. Either I wait for few hours and catch the first vehicle going towards the town. In this case, I needed to take somebody with me as an escort. The other option was to gear the traditional knowledge into action and see what it does. It took me quite a while to decide and I finally chose the second option as I wanted to learn and first hand experience the journey of therapy.

Although I was participating in the day to day life of the village, it was the first opportunity for me to get the glimpses of participant observation where the participation was centered on me, the anthropologist. I think such opportunities appear quite rarely in the field. Of course, there was great risk, in choosing to be a guinea pig but the insightful returns were immense. Since I had not studied any case of in-depth health seeking behaviour so far, enacting a sick role would have definitely enriched my knowledge on this subject. I became eager to adopt a sick role which was not difficult to adopt as I was in a dramatically pathetic condition. Furthermore, it was a festive day and most of the people had remained stationed at home and some of them had even invited their relative to celebrate the festival, so gathering of a therapy management group would be very convenient.

Knocking against few things on my way to the door, I managed to reach it and called out loudly for help. Fortunately, a kid heard me. I asked him to go to my landlord and call someone immediately. A boy from their house came to see me a few moments later. I told him that I had severe pain in my eyes and

was unable to see anything. He, at once, said that his brother's spouse has an expertise in taking out dust from the eyes, which he logically thought had troubled me.

He went back and came along with his elder brother, a little later. The cause of something entering the eyes was dropped altogether. My hunch is that as I was an outsider, the woman being a *ronti* village daughter-in-law, her coming to help me was not a dignified thing and therefore it as a cause was abandoned. His brother came up with a new diagnosis and suggested that I had 'hot' trouble. He had accompanied me to the play last night. He said that he had himself felt itching after remaining awake all night. His etiology was that the 'hot' had entered eyes because of excessive strain caused to them. He suggested a humoral remedial action involving of treating 'hot' with its opposite humor – the 'cold'. A glass of sugar water ('cold' in quality) was prepared and was given to me to drink. A few drops were also applied over my eyelids. It indeed resulted in cold sensation and lessened the intensity of the pain. My eyes also released some water. The relief however was momentary. This remedial action was again repeated and I was informed that it will take nearly half an hour to completely neutralize the effect of 'hot'. But nothing happened in spite of repeating this remedy many times and I was back to where it had all began.

Apart from self medication efforts of mine and abortive second cause, the first remedial action was already taken resulting in a failure. I had taken a position to surrender myself to the actions and explanations of the village people without giving any of my own opinion. The sick role actually allowed me to act like that. I was confining myself only to express my pain and agony in a realistic manner and tell people if they had any question regarding my symptoms or behaviour prior to getting the pain in the eye. The first diagnosis 'hot' got dismissed.

News spread around and the local Community Health Worker, a close friend of mine, came to my room with Sulfonamide drops. He poured few drops in my eyes and I was asked by him to calmly lie down. A small crowd had gathered by now but as it was a festival day and my friends had to complete their routine works, they left promising to come back soon.

After an hour or so, the Allopathic Sub-Centre pharmacist came to see me. By that time, my eyes had swollen very badly. On examining me, he announced a new cause – 'hot-cold'. He regretted that he could not provide me the Boric (Boric Acid) powder as it was out of stock. He, however, suggested that I constantly wash my eyes with lukewarm water. He was also kind enough to boil some water for me with which he washed my eyes very delicately. When nothing happened, he also nodded his head in bewilderment and left. On my own, I took some sugar in cold water that again gave me a momentary relief.

So far, we were confining ourselves to the causative domain of *bimari* considered to be caused due to natural agencies like the humour. As a person

hailing from urban area, I was considered as unlikely person to have fallen to a *dos* supernatural cause. However, I was not immune to the supernatural cause, as I learnt a little later.

The Community Health Worker came again with two youngsters. On learning that earlier interventions had failed, they discussed afresh. The entire incidence was re-heard and re-analyzed. While I was reporting about my return from the neighboring village, I was stopped in the middle of my narration. It was inferred that I had crossed the abode of *succi matri* – the ‘pure and high’ invisible fairies on my way which perhaps was the cause of my present trouble. The cause of my trouble has clearly shifted to supernatural cause *dos* now. Taking this as the new cause of my trouble, an instant remedial action was proposed. The remedial action consisted of ameliorating *succi matri* effect through supplication consisting of symbolic offerings and a vow. I was required to propitiate *succi matri* upon getting relief from the present ailment only. Such a vow becomes invalid, I was told, if there is no immediate relief, saving on the burden of elaborate ritual.

When this vow could not alter my trouble, the *succi matri* interference as a cause was automatically dropped. My illness episode was again probed. It gave them another clue. This time, the entrance of Bajgi musician female was reckoned as a cause. It was explained to me that when people come from outside, there is a chance that they may carry with them the ‘evil-eye’ which can be easily transferred to an innocent person. Since, the Bajgi woman had come from outside, she was now held as the potential carrier of the ‘evil-eye’. I was further informed that women in particular are easy containers of such evil-effects, though; it is also inherent in some of them. It was therefore customary for the guests to stay outside the entrance and enter only after wheat flour called *bhunda* is thrown in all directions – an action which is supposed to ward off the adverse effects of the ‘evil-eye’ in particular. Although in general cases, the ‘evil-eye’ effect is manifested through itching all over the body (allergic reaction), my specific case could also be enveloped into it as I was having itching in my eyes, it was explained.

For ‘evil-eye’ treatment I was advised to take help of the Silgur deity which was considered to be most appropriate in warding-off the ‘evil-eye’. I was simply asked to request Silgur and promise proper supplication if I feel relieved. Had I felt better, I was required to offer rice grains and a coin to the Silgur the next day empty stomach. I did accordingly but the itching in the eyes remained. It was paining but frankly speaking, I was now enjoying the decision making of the therapy management group.

‘Evil-eye’ was not abandoned so easily. I was told that an old man of the village had expertise in enchanting ash for ‘evil-eye’. It was quickly sought and the treatment action was made. In this intervention, ash was gently rubbed on my right eye first followed by the left and of making a tick mark at the forehead and finally of going at the entrance of the house and blowing the ash

out with a loud sound – ‘ho’. It was a ‘brush and blow’ act to ‘drive out’ the ‘evil-eye’. The action was repeated six times and at the end, the door was also closed with a bang. Nothing happened.

The news that the person who has come from Delhi is having problem was fast spreading around in the village. While two of my companions (who had accompanied me to the play last night) were constantly there, others were coming and going. Perhaps they were also spreading the news of my trouble. My sickness was becoming topic of general discussion in the village as owing to festival day many guests had arrived in the village. However, my landlord showed primary responsibility in my treatment. It was his family members who were taking one after another action in providing me the relief from my itching.

Everyone was perplexed. A little while later, one senior adult from my landlord’s family entered my room accompanied by his relative who had come from outside. This relative of him was a practicing diviner of Silgur. I was assured that a *dos* will be easily revealed to him. The incidence was probed again. On learning of the circumstances related to my eye itching, he at once announced that there seems to be no *dos* to me. If there was no *dos* then my trouble must fall in the broad category of *bimari* (natural cause of illness). He took charge of me.

He asked me to lie down. Gently pushing my eyelids up and down, he carefully looked inside. He came out with a new diagnosis – *sunnava ro bossi*, which laterally meant – ‘sitting of the gossamer’ in the eyes. According to him, the gossamer must have entered my eyes while I was sleeping as my bed was near the window. Confidently sure of it, he showed it to others for approval.

The taking out of gossamer was a very delicate operation. White clay and wild honey were the main ingredients in my treatment. They were so confident of the treatment that inspite of unhygienic preparations, I agreed to go for it. First, a few drops of white clay solution were poured inside the eyes. The solution was used as writing medium by school children as also for painting the ceiling. I was informed that the solution would collect gossamer at one place. My eyelids were then forced open and I was asked to look in different directions. Then my head was tilted to the sides. Sometimes later, the eyes were examined. Everyone saw that the gossamer had clotted together. It was taken out with the help of a cotton tipped matchstick.

The treatment action was repeated several times. My itchiness had subdued considerably but the pain was still there. A few drops of wild honey were poured into eyes. I was told that the honey would heal the bruise caused by the poisonous gossamer. I closed my eyes and lied down. After nearly fifteen minutes some more dirt was taken out and I was told that my eyes had become free of the gossamer.

There was perceptible change in the way people were behaving with me after this incident. I was able to feel that the people, who had spent time with

me during my sickness, had come closer to me. This brings me to the point whether rapport establishment is a matter of time or if more the time we spent in the field better will be the rapport? I think rapport establishment is not dependent upon quantity but quality of interaction. The incident had done two important things. One was my suffering which brought natural sympathy towards me making people more receptive to my enquiries. Secondly, my commitment and adherence to local natural and supernatural agencies during my illness made them realize that I may not be the one of those outsiders who would make fun of their beliefs and practices. Thirdly, I was becoming much more knowledgeable about the health seeking behaviour. My case made it amply clear why people abandon one cause and switch over to another? I learnt that traditional medicinal practices are not blindly followed. People stick to a cause only if it is empirically valid. Of the myriad causes attributed to my sickness, those causes were easily abandoned which were not proven on empirical ground. Finally, it was the diviner of Silgur, a supernatural healer, who identified my cause to be *bimari* which falls in the domain of natural causation (Joshi, 1988). It clearly indicates that people are rational in their decisions and give due cognizance to empirically verifiable actions

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## **Subsistence strategies of the Mundas in a village of Sundarban, West Bengal**

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**Abstract:** In this paper, an attempt has been made to highlight some of the observations of our fieldwork in a Munda village in the Satjelia island of Sundarban, South 24 Parganas, West Bengal. Here an attempt has been made to describe the various subsistence strategies which have been adopted by a group of Munda villagers in a specific natural environment. A special attention is given to study the recent out-migration of the Mundas from their residences for a temporary period under the present economic hardships faced by them. The women and men of the village were found to be engaged in a variety of occupations, like cultivation, forest product collection, petty business and agricultural as well as non-agricultural works. The same person or family was also found to be engaged in more than one occupation and the challenging visits to forests and risky rivers and creeks were also found to be taken up by the womenfolk. A closer look at the age composition of the villagers vis-à-vis occupation revealed that the younger generation of Mundas showed a higher preference to engage themselves as migrant workers outside the village, sometime crossing the boundaries of the district and the state. We concluded that the real problem for the Mundas of Sardarpara was their poverty and landlessness, coupled with the risks of visiting the forest as a subsistence strategy.

*Key words :* Subsistence strategy, Occupational diversity, Migrant worker, Landlessness, Munda, Sundarban.

### **INTRODUCTION**

Historically, the research on subsistence pattern in anthropology occupied an important position. All human societies have some form of subsistence pattern. Anthropologists have classified human subsistence pattern into five major types, viz. Foraging (gathering and hunting), pastoralism, horticulture, settled agriculture and industrialism. Subsistence in all these types has a relationship with the surrounding natural environment and technology and anthropologists have always emphasised the holistic study of subsistence strategies in relation to the physical environment and society. (Heider 1972:207). In today's world it is difficult to find out areas where anyone of the above mentioned subsistence type exist in a pure form. Very often anthropologists come across areas and communities in which people survive by adopting a number of subsistence strategies for survival. The economic system in any society grows out of the subsistence strategies and various other social relationships which include ownership of natural resources, technology, division of labour, occupation, political organization, religious ideas, morals, values and beliefs.

In this paper an attempt has been made to describe the various subsistence strategies which have been adopted by a group of Munda villagers in a specific natural environment. A special attention is given to study the recent out-migration of the Mundas from their residences for a temporary period under the present economic hardships faced by them. Here empirical information collected through direct field observation have been presented and analysed in the form of quantitative data. Qualitative data collected through the case studies and unstructured interviews have also been described to support the quantitative material. Finally, an attempt has also been made to assess the scenario of subsistence strategies vis-à-vis the occupational diversity of the Munda villagers in the context of the changing human-nature relationships in the Sundarban.

In his book *The Tribes and Castes of Bengal* (Vol.II) H.H. Risley mentioned that the Munda is a large Dravidian tribe of Chotanagpur who spoke the Kolarian group of language, which was close to the Hos and Santals, The name Munda is of Sanskrit origin. (Risley, 1891). The original homeland of the Mundas was in the Chottanagpur hill-plateau region of eastern India, which at present is included in the Jharkhand state of India. During the British colonial period large number of Mundas, Oraons and Santals were forcefully uprooted from their homeland to the tea gardens of Assam and North Bengal to work as labourers. Another section of these tribes were brought in by the local *zamindars* (the landowners) to the mangrove forest region of Sundarban in South Bengal. These tribal people cleared the forests and built up embankments and were settled as agriculturists in the different islands of Sundarban. The Sundarban is intersected by a complex network of tidal waterways, mudflats and small islands of salt-tolerant mangrove forests, and presents an excellent scenario of ongoing ecological process wherein the people struggle for their existence under harsh natural conditions with poverty. (Danda, 2007: 27-45).

According to Annu Jalais, an anthropologist who conducted her recent intensive research in a scheduled caste village in the Satjelia Island.

The young men of Satjelia work either in the forest, or in big landowner's fields, or leave the village to work as labourers in the suburbs of Kolkata, North 24 Parganas or Uttarpradesh, and even as far away in the Andaman islands. The young women work as prawn seed collectors both before and after marriage. These migrations are usually undertaken six to eight months annually, and often over a period of two to five years. When the men come back they get married and construct a boat, invest in big nets for prawn seed collection and build their own hut either on their parent's homestead, or on that of a neighbour. (Jalais, 2011:26).

In an earlier study conducted among the Oraons of the Sandeshkhali area in North 24 Parganas of Sundarban by Amal Kumar Das and Manis Kumar Raha of the Tribal Welfare Department of the Govt. of the West Bengal we found that the Oraons, a companion tribe of the Mundas who were settled in Sundarban by the local *Zamindars* from their original homeland in the then

Bihar during the British period. Both these tribes depended on agriculture and other subsidiary economic pursuits and suffered from landlessness and poverty. In the words of the authors.

The Oraons have been known as settled group of agriculturalists for a long time, and this constitutes their basic economy. Agriculture is the primary occupation and the basic economy of the Oraons of the Sunderban area also, but it is often supplemented by one or more subsidiary occupations such as daily labour, business, service, fishing etc.

Agriculture alone, cannot provide them with sufficient means of livelihood throughout the year (as the land holding in comparison to population is much less), and they have to supplement this with the earning of the subsidiary sources. (Das and Raha, 1963:66).

Das and Raha however did not report either any case of forest product collection or long distance out-migration among the Oraons in their study area, although they mentioned about fishing as a subsidiary occupation of this tribe. Possibly, the reason behind this was the area where Das and Raha conducted their fieldwork situated at a much greater distance from the forest than the areas where AnnuJalais and our fieldwork were conducted in the remote Satjelia Island of Sundarban in the South 24 Parganas.

### **Area and the people**

#### *Sundarban*

The Sundarban literally means 'beautiful forest', in Bengali, is a huge archipelago situated between the vast Indian Ocean to the south and the fertile plain of Bengal to the north. Created by the confluence of the *Ganges*, *Meghna* and *Bramhautra* rivers and their innumerable distributaries, the Sundarbans constitute the southern end of both Bangladesh and West-Bengal. It is the largest delta in the world measuring about 10,000 sq. kms. of mangrove forest spread over India (approx. 4200 sq. kms. of reserved forest) and Bangladesh (approx. 6000 sq. kms. of reserved forest) is also the largest mangrove forest in the world. Sundarban is a vast area covering 4262 sq. kms. in India alone with a large portion in Bangladesh. About 2585 sq. kms. of the Indian Sundarban forms the largest tiger reserve and National Park in India. The river *Hooghly* marks the Western border of the Sundarban. The Sandwip channel, which runs west along the Chittagong Hills, acts as the eastern border. On the Indian side, the Sundarban is located within the North and the South 24-paraganas districts of West-Bengal.

#### *Satjelia*

The island of Satjelia, shaped like a heart and is one of the southernmost inhabited island of the West Bengal Sundarban. It is one of the last islands to have been reclaimed and inhabited by people from other areas. The island Satjelia is situated under the district of South 24-Parganas at the eastern side of Gosaba Block of Sundarban. It is the largest island in the block of Gosaba with an area of 615 sq.kms. inhabited by 42,000 souls. (Jalais, 2011:24-25).



The population density turns out to be 68.29 per sq.kms. which is extremely low when compared with the population density of West Bengal, because most of this island is covered by the mangrove forest of Sundarban. There are two *Gram Panchayats*, named Lahiripur and Satjelia in the island. There are 14 villages under the Satjelia *Gram Panchayat* and 11 villages in Lahiripur *Gram Panchayat*. The distance between Gosaba to Satjelia is 12.7 kms and takes about 1 hour in a motorised launch through the rivers. The village in which we have conducted our fieldwork is named by the Mundas as Sardarpara and it is located in the Satjelia Island of the South 24 Parganas of West Bengal.

*Sardarpara: a tribal village under harsh economic condition*

The village Sardarpara (the real name of the village) is situated on the bank of a river and is close to the mangrove forest zone of Sundarban in the Satjelia Island. The topography of the village presents the typical scenario of the region. The river which the people called the 'Dutta River' encircled the village on the east and the south and flows between the forest and the villages. The village has a high earthen embankment which protected the human habitation from the tidal waves of the river. The embankment formed a semilunar mud path around the village which is also its main road. (See Fig.1). The embankment rises up to 10-12 feet with a width of 5-6 feet and was found to be in a bad condition. The villagers expressed their grievances against the local panchayat and the government for not undertaking the repair of the embankment since the devastations caused by the *Aila* cyclone in 2009. This field observation conforms to the findings of Amitesh Mukhopadhyay on the aid politics at Sundarban. (Mukhopadhyay, 2009:1-24).

The houses of the village are arranged in almost linear fashion below the embankment and the agricultural fields are situated on the western side of the village. A settlement inhabited by Namasudra caste (classified as a scheduled caste named *Pod*) is located on the north of the village along with a small marketplace named Tipligheri. Sardarpara is mostly inhabited by the Munda group of tribe, who are enlisted under the scheduled tribe category of the government. According to the villagers the Mundas in Sundarban were known as 'Sardars' since during the British period they were the leaders in clearing the forest and building the embankments. 'Sardar' in Bengali language means the 'leader' or 'captain' of a team. The Mundas of this village spoke Bengali in their day-to-day conversation and we did not face any difficulty in communicating with them in Bengali language. Officially, the village Sardarpara is a settlement of the scheduled caste population, which comes under the Sadhupur mouza (the governmental revenue collection unit) having a J.L.No.48 in the Lahiripur *Gram Panchayat* of the South 24 Parganas district of West Bengal.

The houses of the village presented the poor economic condition of the inhabitants. Most of the houses were built of mud walls having roofs thatched with straw. On closer enquiry, we have found that most of the Munda villagers

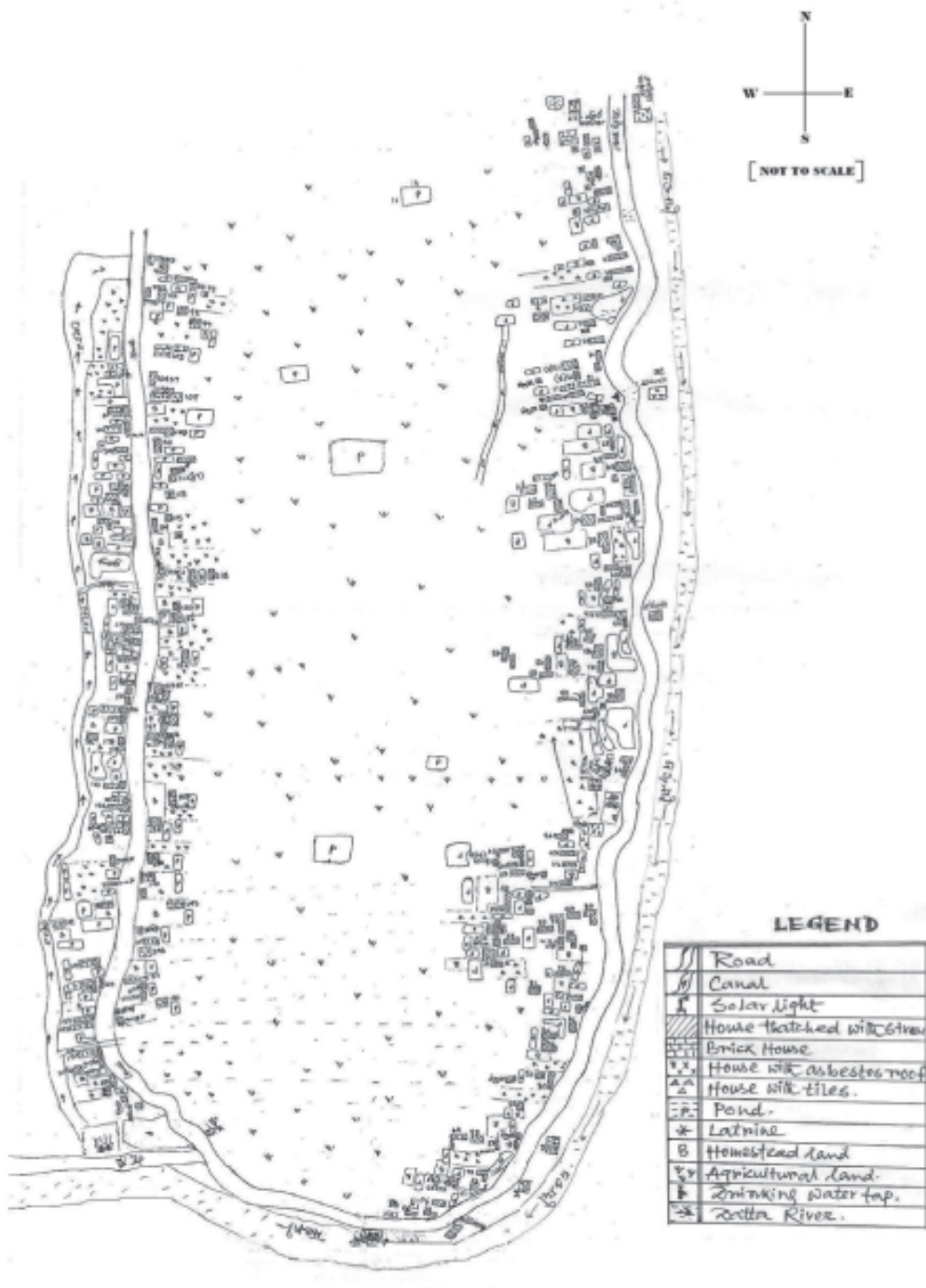


Figure I: Village Map (Sardarpara)

did not own any agricultural land and many of them used to visit the nearby forest for the collection of crabs, fish, honey and some fuelwood. Most of the families who owned some agricultural land used to cultivate only one crop in a season which depended on rainwater. Some of the landowning Munda families were also found to lease out their land to the Namasudra neighbours on yearly contract basis. We have also found a number of villagers, particularly the men, who migrated from the village to work as non-agricultural as well as agricultural labourers in distant areas outside the village and again returned to their homes. In the next two sections of the paper, we will first describe briefly the materials and methods and then present some quantitative and qualitative data about the subsistence strategies adopted by the villagers for their survival.

#### **MATERIALS AND METHODS**

The data for this paper were mainly collected as part of the general fieldwork of the M.Sc. second semester course in Anthropology at Vidyasagar University during the month of February 2014 by the students and the second author who was the field supervisor. There were 24 students who participated in the fieldwork along with their teacher. The fieldwork was conducted in a team and direct observation and interviews of the villagers and the people of the locality were done for 11 days. Data on village settlement pattern and the drawing of the map was done collectively while collection of household census, case studies on economic activities, socio-political organisations and religious performances were collected by individual students under the constant supervision of their teacher. The other sources of data were the various books, papers and reports (published and unpublished) on Sundarban district. After the completion of the fieldwork the data were classified and tabulated both individually and collectively by the students and their teacher. At a much later period, the first author of the paper again conducted a fieldwork for four days in the same village and collected some data on the economic life of the villagers of Sardarpara and also cross-checked some information collected during the earlier fieldwork. This paper is written on the basis of the data collected in these two fieldworks. In these fieldworks we always gave priority to the privacy of the informants and took consent of the informants while collecting data. Real names were not used in the case studies. We never shot any photograph without the permission of the villagers and were also conscious about showing honour and respect to the values and beliefs practiced by the Mundas of the village.

##### *Subsistence strategies*

The first important thing about this table below (Table 1) is here we have counted the frequency of engagement of an individual under a particular subsistence strategy since any individual (women and men belonging to the working age group) in the village was found to be engaged in more than one type of

subsistence activities. So what we counted in the table are not the individuals but the frequency of subsistence activities performed by the individuals. The second important point is by and large the subsistence strategies of the Mundas in this village was centred around natural resources, like land, water and forest. Agriculture and the collection of forest produce constituted the mainstay of the economy of the village. Following Gadgil and Guha the Mundas of Sardarpara can be called a group of 'ecosystem people'. (Gadgil and Guha, 1995:1-6).

The subsistence strategies adopted by the Mundas of the village show that forest product collection is the most important one. (Fig II). There were three kinds of subsistence activities under this category, viz. (i) collection of crabs, prawns and fish from the river, estuaries and creeks, (ii) collection of honey from the forest land and (iii) collection of fuelwood. All these activities involved various kinds of risks and danger which might come from nature, wild animals and governmental laws and restrictions.

#### Case 1 Tiger attack and its aftermath

Name of the respondent: Rita Sardar (name changed). Date: 20.02.2014

Age: 32.

Sex: Female.

Place: Informant's house at Sardarpara.

Name of the tiger attacked victim: BirenSardar (name changed).

Age: 40.

Sex: Male.

Biren Sardar was a victim of tiger attack while collecting honey from the forest. This pathetic incident changed his life forever. It occurred in 2005. According to his wife the total cost of his medical treatment was around Rs 80,000 and she had to mortgage her gold ear ring and nose ring which she received from his parents in marriage. They had to lease out their 1.5 bigha (acre 0.49) of agricultural land and the villagers also raised some money for the treatment of her husband. After 3 months of treatment his condition was much better but due to the attack of tiger he lost his right eye and could not even talk. He has almost become speechless. That was the last time he went to the forest. At present he occasionally worked as agricultural day labourer in his neighbour's land. The family now has to pay Rs. 20,000 to get back their mortgaged land. He did not get any help from the forest department since he entered the forest without any boat licence and insurance.

Secondly, the products from the first two categories were sold in the market to earn cash while most of the fuelwood collected from the forest were found to be used for consumption at the household level. Under the category 'Agriculture' we have included the activity of an individual who owned land as well as the agricultural activities of a landless individual. It was found that about 26.54% of the subsistence activities of the Mundas in Sardarpara village

depended on agriculture and related activities. Although this subsistence activity did not involve the kind of risks as it was in case of forest product collection, but it also had its difficulties, like uncertainty in water supply for an owner cultivator, the low wages for an agricultural labourer and lack of protection for the women and children at home of a migrant male labourer. The non-agricultural activities were found to occupy the third position among all the subsistence strategies while petty business and service sectors have not yet become important subsistence activities for the Mundas of Sardarpara but interestingly, the contribution of women in earning livelihood for the family was found to be higher under the category ‘petty business’ which mainly involved the sale of traditional rice-beer in the local market brewed at home. The women and men contributed in equal proportion in the service sector which included the jobs of primary school teacher, ICDS worker, tailor and temporary maid servants.

In this village we have found that the women were also engaged in all kinds of subsistence activities for survival although variation among the sexes was noticed in the various types of activities. In all the three major subsistence activities found in the village, the contribution of the women was lesser than men in absolute terms although the gender difference is not equal in the three types of subsistence activities; the contribution of women was however found to be larger in case of petty business.

Table 1 Subsistence strategies of the Mundas at Sardarpara

Subsistence activities	Forest product collection		Agriculture		Non-agricultural activities		Service (permanent & temporary)		Petty business		Total
	M	F	M	F	M	F	M	F	M	F	
Sex	86	16	41	19	30	18	2	2	2	10	226
	(38.05)	(7.07)	(18.14)	(8.40)	(13.27)	(7.96)	(0.88)	(0.88)	(0.88)	(4.42)	(99.96)
Total	102 (45.13)		60 (26.54)		48 (21.23)		4 (1.76)		12 (5.30)		

( )Percentage out of the total

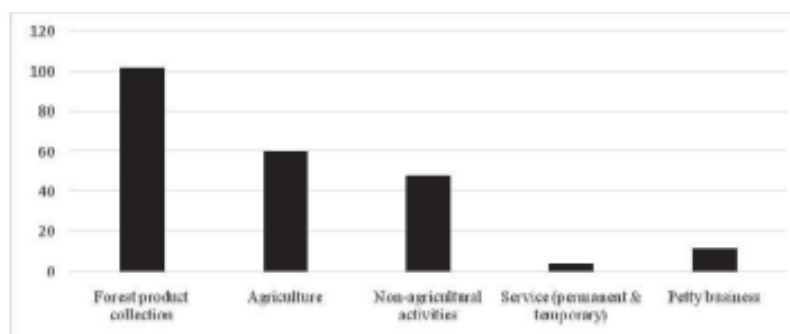


Fig: II Bar graph showing the subsistence strategies

Case 2 The post *Aila*<sup>2</sup> crisis of a Munda family of Sardarpara.

Name of the respondent: Tapas Sardar (name changed). Date: 16.02.2014

Age: 41 yrs.

Sex: Male.

Place: House of the respondent.

Tapas Sardar of Sardarpara owned 3 bighas of land. In his land cultivation was done twice a year. Paddy cultivation was done in the low land. In the high land various types of vegetables like potato, brinjal, pumpkin, tomato, etc. were cultivated. In the low land, paddy was cultivated twice a year in the rainy season and vegetables were cultivated during the winter and summer. Source of water for the cultivation of vegetables was a nearby pond excavated and owned by him. For cultivation in 3 bighas of land 20 kg of seeds were required. Before monsoon began the seeds were spread over the field. For cultivation spade and power tiller were used. Tapas used to employ hired agricultural labourers at the rate of Rs. 250/- per day and the labourers used to work from 7 a.m. to 5 p.m. He and his family members also worked in the agricultural land. For better yield of crops he used to apply urea and phosphate, and also some pesticides. Sometimes he also applied organic fertilisers made from cow dung. Tapas Sardar also used to contribute the paddy in *Dharmogola* a local cooperative bank formed by the villagers. After the *Aila* disaster in 2009 the production of paddy in his land was drastically reduced like many other villagers of Sardarpara. In order to overcome the economic crisis he has started to work as a migrant labourer outside Sundarban.

The economic life of the Mundas in this village, like the other tribal groups who were settled in Sundarban began with the clearing of forests for agriculture. Our informants at Sardarpara also narrated the story of their first settlement in this village through the clearing of forests for cultivation by their ancestors. Agriculture was the main foundation of their economy and they still depended on agriculture. In fact almost all the residents of the village narrated the damage of the agricultural land caused by the *Aila* cyclone in 2009. An international NGO, the WWF (World Wide Fund for Nature) started their development work after the cyclone and their main objective was to keep the people of Sardarpara away from the forest related subsistence activities in order to reduce human-animal conflict for sustainable development. Accordingly, the WWF personnel worked in the village to create alternative livelihood generation schemes centering on agriculture and other related activities, like pisciculture. The importance of agriculture in Sardarpara is ubiquitous and therefore the nature of land ownership also require a closer scrutiny. The villagers reported their landholdings in *bigha* which is the common local term used throughout Bengal. The data were converted to acres and the following table (Table 2) was computed to understand the nature of landholding pattern among the Mundas of Sardarpara.

Table 2 *Agricultural Landholding Pattern of Sardarpara*

Size category of land in acres	Number of households	Mean household size
Landless	35 (35.35)	4.77
<0.5	25 (25.25)	4.68
0.5-1.0	24 (24.24)	5.62
1.0-1.5	8 (8.08)	5.00
1.5-2.0	5 (5.05)	3.80
2.0-2.5	—	—
2.5-3.0	2 (2.02)	6.00
TOTAL	99 (99.99)	4.94

( ) Percentage out of the column total. [1 BIGHA=33 DECIMAL] [100 DECIMAL= 1 ACRE]

The table shows that there is a substantial number households in Sardarpara which do not own any land and the percentage of such households is 35.35. Another major chunk of the households (about 25.25%) own less than 0.5 acre of agricultural land. There are 24 households which owned land between 0.5-1.0 acres. Only 15.15% of the households owned 1-3 acres of land in Sardarpara and with this meagre landholding the majority of the families had to support 5 or more members. The overall scenario of landholding at Sardarpara revealed a grim picture. This is one of the major reasons behind searching for non-agricultural economic pursuits by the Mundas of this village. The villagers reported that after the *Aila* which also hit the Sardarpara village badly damaged the fertility of the agricultural land. Demographers on Indian internal migration have also reported that temporary migration in rural India is mainly 'distress driven'(Keshri and Bhagat, 2010:40-41).

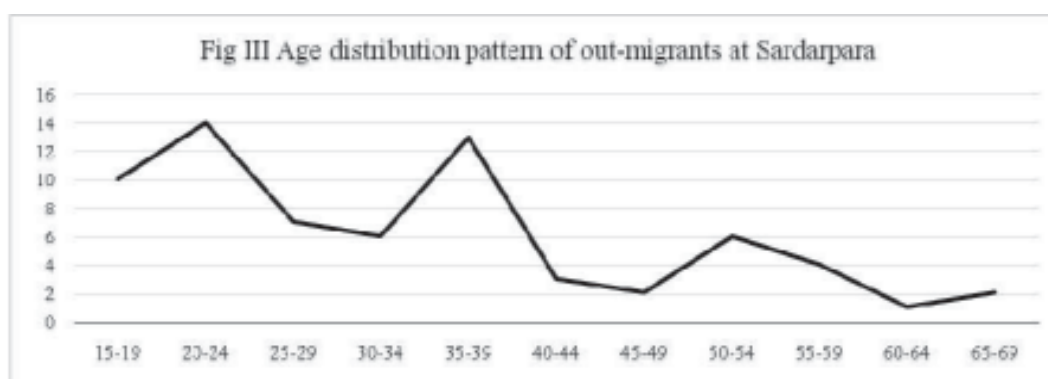
The next important fact about the subsistence strategies adopted by the Mundas of this village was out-migration in search of livelihood. The fact first came to our notice when we collected the household census data. In a number of households it was reported by the respondents that some of the adult male members were not present since they had gone out to distant places (no female out-migrant was found) to earn money by working as agricultural and non-agricultural labourers. In course of our fieldwork we have met persons who had just returned from some distant place after staying for 2-3 months outside their homes. The reasons for such out-migration were mainly landlessness, lack of economic opportunities in and around the village and reluctance to undertake the risks involved in forest product collection. The table below shows the scenario of out-migration among Sardarpara males in terms of the nature of work and age composition. Here we have treated those persons as out-migrant who stayed at least one month or more out of his residence. In this context it may be mentioned that all-India level governmental demographic data on the scheduled tribes reported that overall internal migration rate has decreased over time. (Statistical Profile of Scheduled Tribes in India, 2013:53-63).

Table 3 Age distribution of out-migrants vis-s-vis employment outside Sardarpara

Age group (years)	Agricultural labourer	Non-agricultural labourer	Total
15-19	(14.28) 1 [1.47]	(14.75) 9 [13.23]	10 (14.70)
20-24	(42.85) 3 [4.41]	(18.03) 11 [16.17]	14 (20.58)
25-29	(14.28) 1 [1.47]	(9.83) 6 [8.82]	7 (10.29)
30-34	(14.28) 1 [1.47]	(8.19) 5 [7.35]	6 (8.82)
35-39	-	(21.31) 13 [19.11]	13 (19.11)
40-44	-	(4.91) 3 [4.41]	3 (4.41)
45-49	-	(3.27) 2 [2.94]	2 (2.94)
50-54	-	(9.83) 6 [8.82]	6 (8.82)
55-59	-	(6.55) 4 [5.88]	4 (5.88)
60-64	-	(1.63) 1 [1.47]	1 (1.47)
65-69	(14.28) 1 [1.47]	(1.63) 1 [1.47]	2 (2.94)
Grand total	7[10.29]	61[89.70]	68 (99.96)

( ) Percentage out of column total.

[ ] Percentage out of grand total



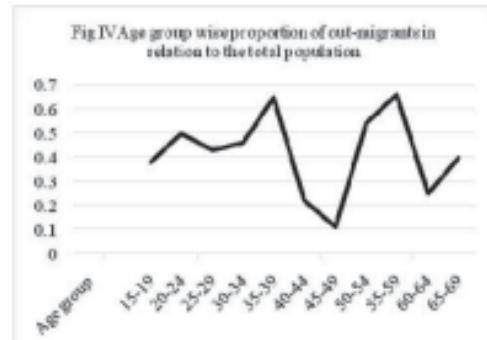
From the table it is visible that the bulk of the migrant labourers worked as non-agricultural workers while only a small section of the migrant workers were found to be engaged as agricultural labourers. The age composition of the migrant labourers revealed that non-agricultural workers were found in all the age groups of the working population. From the interviews with the migrants and the members of their family it was known that a variety of non-agricultural works were being done by them which included masonry, plumbing and mining labourer etc. The highest number of migrant labourers was found in 20-24 age group. The number of migrant workers from the village declined sharply after the age group 35-39 but they were found in all subsequent higher age groups and we found two more peaks in the distribution, one at the age group 35-39 and a lesser peak at the age group 50-54. The agricultural workers among the migrant labourers were not found in the age groups of 35-39, 40-44, 45-49, 50-54, 55-59 and 60-64. We have found three migrant workers from Sardarpara in the age groups 60-64 and 65-69. We have already mentioned that one of the reasons of out-migration is landlessness of



the Mundas in the village. In order to substantiate the above statement we tabulated the landholdings of the migrant workers in Table 5.

Table 4 Age group wise proportion of out-migrants in relation to the total population

Age group	Number of males (m)	Number of migrants (nm)	Proportion (nm/m)
15-19	26	10	0.38
20-24	28	14	0.50
25-29	16	7	0.43
30-34	13	6	0.46
35-39	20	13	0.65
40-44	11	3	0.22
45-49	17	2	0.11
50-54	11	6	0.54
55-59	6	4	0.66
60-64	4	1	0.25
65-69	5	2	0.40
Total	157	68	0.43



In the above table an attempt has been made to view the proportion of out-migrant males in relation to the total population in the respective age groups. Grossly, the overall proportion of out-migrants is less than half of the total population. In terms of age groups the proportion of migrants out of the total population of the respective age group varied between 0.11 (45-49) to 0.66 (55-59) and there were two peaks of the distribution of the proportion of the migrants according to age groups. One peak was found at the age group of 35-39 while the other peak at the age group 55-59.

Table 5 Relationship between agricultural landholding and out-migration among the Mundas of Sardarpara

Size category of land in acres	No of migrants
Landless	22 (32.35)
< 0.5	19 (27.94)
0.5-1.0	17 (25.0)
1.0-1.5	9 (13.24)
1.5-2.0	1 (1.47)
2.0-2.5	-
2.5-3.0	-
TOTAL	68 (100.00)

( ) Percentage out of the column total

This table clearly showed an inverse relationship between landholding and the number of migrant workers at Sardarpara. The number of migrant workers sharply declined twice from the landholding category 0.5-1.0 and

1.5-2.0 acres respectively. In fact we did not find any migrant worker from those families who owned more than 2 acres of agricultural land while the bulk of the migrant workers (32.35%) came from the landless families. Put simply, lesser the amount of land owned by a family greater is the chance of occurrence of migrant workers in that family.

Table 6 *Relationship between household size and out-migration among the Mundas of Sardarpara*

Household size	Number of migrant worker	Number of households	Number of migrants per household
2-3	10 (14.70)	18	1.80
4-5	29 (42.65)	48	1.65
6-7	23 (33.82)	25	1.09
8-9	6 (8.82)	6	1.00
Total	68 (99.99)	97	1.43

( ) Percentage out of the column total

If one adult male member leaves the household for a considerable period of time, then it puts the members of the family under socio-economic and psychological stress. This stress has to be managed by the other members of the household. Here we have computed the number of migrants per household under each household size category. Overall, it was found that every family of Sardarpara had a migrant worker and there was little variation when the migrant per household was calculated in each household size category. Here we have also made an attempt to see whether the size of a household has any relationship with the number of migrant workers in the Munda village. It was found that the household size of the majority of the migrant worker lay between 4 to 5 individuals and the next highest contribution was made from the size category of 6-7 individuals. There are fewer migrants at the two ends of the distribution in terms of household size categories. In other words, smaller and larger households did not permit greater number of migrant workers as did the medium size households. In this context recent empirical studies on migration from the Sundarban area may be compared with our data. In a study published by Avijit Mistry in 2013 of the Jawaharlal Nehru University, the author found that in seven census villages which included villages of Satjelia there was a predominance of males among the migrants (89%) and on an average one person migrated from each household. (Mistry, 2013:94). Mistry however made no detailed analysis of the age composition of the migrants as has been done in our study.

## Case 3 A Munda migrant labourer

Name of the Respondent: Arun Sardar (Name Changed) Date: 19.02.2014

Age: 40

Sex: Male

Place: Sardarpara, respondent's house

No. of Family members: 5

ArunSardar worked as a migrant labour and travelled to Gujarat, Tripura and Assam. He did not travel every year but in the previous year he went to Assam. He has his own agricultural land in Sardarpara. They lived in Lahiripur for 10 generations. He recollected that his ancestors lived in Ranchi and they migrated to Sundarban several generations ago.

He worked as a labour in the oil-fields of Gujarat. For this reason, he could live at home for not more than 2-3 months in a year. He earned Rs. 8000/- per month for 8hours of work in a day.He only owns 0.33 acres of agricultural land in which he employed another villager as agricultural labourer on a daily wage. The meagre amount of crop which is produced in his land is being consumed by the members of his family. He also worked in his own agricultural land. For the betterment of their livelihood Arun became a committed migrant labourer.

## Case 4 Son turned migrant labourer after the death of his father by tiger attack

Name of the respondent: Kamala Sardar (Name Changed). Date: 16.02.16

Age: 34

Sex: Female

No. of Family members: 5

Place of interview: House of the respondent

Kamala narrated that her husband Nirmal Sardar (name changed) was attacked by the tiger in the Bengali month *Bhadra* (August-September) last year, i.e. in 2015 at *Kusumkhali* creek under the core area of the forest under the *Sajnekhali* beat office of the Sundarban forest. Nirmal entered the forest for crab collection along with three members of his family. Around 4 p.m. a tiger attacked and took him away. He died on the spot and his body was not found. Kamala could not recollect the exact date of the attack. Their boat was a hired one by a lease of rupees 25000/- for eight months since they did not own any boat licence issued by forest department and they were already under debt with the boat owner. According to law, for the entry into the permitted area of the reserve forest, a crab collecting party has to pay fee which entitles the forest product collector to get accidental benefit from life insurance in case of attacks by the tiger. But if one enters the prohibited core area of the forest then no life insurance benefit is payable to the family of the dead person. Ironically, the villagers used to evade the orders of the forest department and entered the core areas since better catches of fish and crab are available in those areas. According to Kamala, her husband and his fishing team like many others had exactly done this unlawful act for getting a good catch of fish and crab. So they could not claim any insurance money for the deadly accident which came upon their life. After Niraml's

death Kamala began to work as an agricultural day labourer in a nearby village and used to earn Rs.200 - Rs.250 per day and her son started to work as a migrant labour through a local labour contractor in some mines in the Gujrat state and has been earning Rs.6500 per month. Kamala's son was 22 years old. Kamala told that they will never go to the forest again. Incidentally, Nirmal had a permission letter from the authorities to catch fish and crab from the permitted areas of the forest and Nirmala and her relatives made several attempts to get some compensation for the death of Nirmal which proved to be futile.

### *The pattern and reason of out-migration*

From the data presented in the above section we may now make an attempt to identify the major features of the pattern of migration found among the Mundas of Sardarpara.

1. No woman was found to migrate from the village even for a short period of time to earn their livelihood although we have found woman engaged in extra-domestic work as well as in the collection of forest products often risking their life. Migration was found to be a male affair in the village.
2. The age distribution pattern of migration among the males revealed three peaks, two in the age group of 15-19, 20-24 and the other in the age group 35-39 after which the migration declined sharply.
3. However, when the number of migrants was considered as a proportion to the total population of the respective age groups, one peak of the distribution of proportions was found to be in tune with the age distribution curve of the migrant workers. The rest of the peaks, one at 20-24 and the other at 50-54 age groups did not match with the age distribution curve.
4. It was found that at least one person migrated from households of all sizes although there was a variation and it ranged between 1.00 to 1.80 persons per household and interestingly, the higher values were found from the smaller households.
5. Landholding was found to be one of the most important correlates of male out-migration at Sardarpara. In fact, we did not find any male migrant who owned more than 2 acres of land. On the other hand, highest number of male migrants were found from the landless families.

Out-migration in this tribal village of Sundarban was found to be one of the strategies of survival which undoubtedly was on the rise after the *Aila* disaster for obvious reasons. The economic dependence of the Sardarpara villagers revolved round agriculture and forest product collection. After *Aila*, almost all the agricultural land owned by the villagers became uncultivable and remained in that condition for three to four years and this has led the villagers to search for alternative sources of livelihood, and migration provided the

answer. When we visited Sardarpara in 2014 it was found that cultivation in the *Aila* damaged agricultural land had already started but our informants reported lesser crop yield than in the pre-*Aila* period. The case studies collected from the families whose members were attacked by tigers showed that they had taken up migration as one of their subsistence strategies.

### CONCLUSION

The subsistence strategies adopted by the Mundas of the village revealed that forest product collection occupied the most important position. There were three kinds of subsistence activities under this category, viz. (i) collection of crabs, prawns and fishes from the river, estuaries and creeks, (ii) collection of honey from the forest land and (iii) collection of fuelwood. All these activities involved various kinds of risks and dangers which came from nature, wild animals and governmental laws and restrictions. The economic life of the Mundas in this village, like the other tribal groups who were settled in Sundarban began with the clearing of forests for agriculture. The Mundas of Sardarpara also narrated the story of their first settlement in this village through the clearing of forests for cultivation by their ancestors. Agriculture was the main foundation of their economy and they still depended on agriculture, although a substantial number households in Sardarpara did not own land. This is one of the major reasons behind the search for non-agricultural economic pursuits by the Mundas of this village. The villagers reported that after the *Aila* which also hit the Sardarpara village badly damaged the fertility of the agricultural land. Last but not the least, is the emergence of temporary non-seasonal out-migration as a subsistence strategy adopted by the Mundas of this village. The age composition of the migrant labourers revealed that non-agricultural workers were found in all the age groups of the working population and the highest number of migrant labourers were found in 20-24 age group. No less important is the inverse relationship between agricultural landholding and the number of migrant workers at Sardarpara. Lesser the amount of land owned by a family greater was the chance of occurrence of migrant workers in the family. In sum, this study of subsistence strategies of a tribal community in a difficult environment revealed a precarious scenario of their existence which needed urgent attention of the administrators and policy makers.

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### NOTES

1. Mundas are the fourth largest scheduled tribe in West Bengal with a total population of 2, 30,015. They are concentrated in Jalpaiguri (69,468), Twenty Four Parganas (62,685) and Medinipur (33,238) districts. (Mandal, Mukherjee and Dutta, 2002:31).

2. Cyclone *Aila* hit coastal West Bengal on 25 May, 2009. It is described as one of the worst storms to hit Kolkata in 20 years. Over 5.1 million people have been affected in 16 districts of West Bengal. The cyclone, which was accompanied by heavy rainfall, flooding and landslides, had led to a situation which was precarious in South 24 Parganas and North 24 Parganas districts of the Sundarban area. (ADRA Report 2011 & Situation Report, GoWB 2009) Approximately 920,000 houses have been damaged, the majority of them in Sundarban. Sardarpara was also affected by the *Aila* cyclone. The villagers reported to us that their houses were damaged and agricultural fields were inundated by river water and they could not cultivate crops for 2-3 years. The embankment of the Sardarpara village was also severely damaged. It was later repaired but when we did our fieldwork the condition of the embankment was not also in a good condition.

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## **Transition in Child Care Practices: Reflections on Gender and Intergenerational Relations in an Urban Setting**

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**Abstract:** With the increased participation of women in the paid employment, child care has emerged as a vital issue in the urban areas where extended families are rare. My work involving urban working women in white collar office jobs reveal that while the core concern is to have a reliable care giver, the kinds of child care supports used by working mothers is dependent on other variables like the number of employed hours, availability of reliable daycare center, presence of elderly at home especially grandmother and the age of the child. With the institutional formal care system still to be found trustworthy in India, the informal care provided by the elderly has emerged as a significant option. The fieldwork for this paper was conducted in a Delhi based autonomous organization. Using in-depth interviews of 10 women, I examined their narrations to understand how women manage and prioritize their childcare responsibilities and their paid work. The important issues highlighted in this paper problematize women's autonomy with respect to her reproductive abilities and division of housework and intergenerational relations. A central concern of this paper was also to have a better understanding of gender arrangements and the adjustments made across generations and power relations between the members of the household.

*Key words :* Paid work, child care, grandparent's support, intergenerational relations

### INTRODUCTION

The whole discourse on working women in India initially delineated various concerns from economist and feminist perspectives focusing on their contribution in the economy; their unpaid care work; women rights in the family; gender inequality at workplace or her presence in public sphere. A large body of research emerged in India on these issues over the years; on urban women, her career and family roles (Rout and Kagan, 1999); fertility and female labour participation (Eapen, 1992); women's paid work and well-being (Jose, 2012); multiple roles and coping strategies (Venkatesan, 1996); employment trends (Neetha and Mazumdar 2011); home based work and unpaid care work (Raju, 2013; Neetha, 2010); Indian women managers in public sector (Naqvi, 2011); reproductive health, reproductive rights and maternity benefits (Swaminathan, 1997; Lingam and Yelamanchili, 2011); childcare options and grandparental child care (Sriram and Ganapathy, 1997; Husain and Dutta, 2015).

Post 1980's the economic reforms and globalization brought unprecedented transformation in the social and cultural fabric of the society and this changing scenario significantly changed women's position in the

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Indian society. Newer job opportunities created by MNC's and BPO's led to increased women workforce and simultaneous increase in the number of studies undertaken by researchers. (Upadhyay, 2008; Belliappa, 2013; Patel, 2011; Radhakrishnan, 2012). The core concern of the research shifted from work-home conflict to work-life balance issues, where the modern working woman was seen as embracing her dual responsibilities with commitment and grace. The image generated by media too was laced with positive appearances of women in the paid work. But the newer roles of a professional/productive worker in addition to being a homemaker meant evolving as an independent professional employed worker; a multi-tasker and also adjusting to the new family situations. It also meant to simultaneously adhere to the traditional and modern discourses for them. On one hand the traditional discourse instructed towards 'respectable modernity' (Belliappa, 2013) whereas the modern discourse focused on the individual choice and personal development. The tradition-modern dyad led to prioritize, adjust, negotiate and challenge the hegemonic discourses, especially working women who desired to create a niche for themselves in the public sphere through their paid work. Thus, it became essential to understand the experiences and subjectivities of the women who formed a diverse category.

Women, especially in societies like South Asia, recently entering into modernity, were believed to be particularly vulnerable in this conflict because they were caught between the traditional expectation of living for others and the late modern ideal of living a life of one's own (Belliappa, 2013). Beck and Beck (2001) have argued that the labor market and family are often in conflict within late modernity because the needs of the labor market, flexibility, individualization and mobility are antithetical to the needs of the family life, stability, rootedness and altruism.

Further, the role of woman as a mother demanded her to rework their priorities in a way that men are rarely expected to do in our society. The study participants of this research investigation were an educationally advantaged group of urban women, engaged in white collar jobs. They self-identified themselves as belonging to middle class and have been residing in Delhi since birth. It was their parents who had shifted to Delhi from neighboring states like Punjab, Uttar Pradesh and Himachal Pradesh for better work and living opportunities. The narrations of these women also reflect that they identified themselves as modern urban women who had better educational opportunities, had a professional degree and a respectable job. For them being modern was to be professionally qualified, being up-to date, accepting the prominence the virtual world in their lives, owning basic consumer goods like LCD'S, laptops and cars and being able to provide a comfortable life for their family members and their children. Having a career and being employed was not only seen as a necessity but was considered both a choice and a compulsion; choice because they studied and earned a professional degree to become financially



independent and create an identity for themselves in the wider community and compulsion because single earnings could not provide all the comforts that could meet the parameters of modern life.

But in matters of marriage, motherhood decisions or childcare, many adhered to the traditional ways. The marriage decisions were made in collaboration with parents and immediate family members while the motherhood decisions were largely influenced by parent-in-laws. It was also agreed by informants that many had less autonomy in their motherhood decisions especially during their first pregnancies and childcare was a family affair but the greater responsibility of the child was that of the mother. The elderly support was essential for them to be present in paid employment as the long office hours (8-10 hours daily including commuting) left them with little time for their children. Managing paid work and childcare responsibilities led them to prioritize and negotiate at the home and the work front.

#### BRIEF PROFILE OF INFORMANTS

The focus of this study was on narrations of 10 women from the Research and Technical Department in the age group of 27-35 years. These women were chosen from the main sample (of my doctorate study) on the criteria of their age (27-35 years); were married and had small children (in the age group of 2-8 years) and had elderly support in the family (elderly may or may not be co-residing with them). The informants had a doctorate/M.Tech degree (prerequisite for being employed in the Research/Technical division of the organization). The recruitment was done through an examination followed by an interview held by the Organization. The office through its intramural and extramural research projects promotes biomedical research in Delhi and thus the work of my study participants involved, meeting deadlines of various projects, attending trainings, workshops, conferences and seminars in Delhi and other places in India. The promotion in the office was performance based and the informants had to regularly update on the latest biomedical studies. Three of the informants in this sample of 10 were also doing certificate courses through distance learning.

The sample drawn here was primed by keeping in mind the dual responsibilities they faced in the formative years of their career which also coincided with the child care responsibilities. The absence of reliable day care centre near their home or near office made them dependent on the elderly at home to assist them with childcare and household duties. The grandparents were both staying with them or at a convenient distance and provided the necessary support to these women so that they could continue with the paid work. For two of the informants in the present sample it was the maternal grandparents who were residing at a convenient distance and extending help with childcare.

While taking repeated interviews of these women over a period of time my main concern was to interview them in their own time and space. This allowed me to have some informal moments with my informants that enabled me to note her feelings, behaviour, pauses, overt and covert responses and her actual behaviour in the situation of the interview. Through these narrations I tried to examine the transition in women's role as a care provider and also a productive worker. The study also attempted to reflect on the changing gender arrangements within the family and increasing role of grand-parents in child care in the absence of the working mother, and arrangements reflecting inter-generational dependencies. These women tend to view that being employed was a necessity, agreed to the skewed division of labour at home and had strategies for managing the dual burden.

While interviewing women on the aspect of motherhood and child care, various views were voiced but a few common concerns irrespective of her age or her caste or class position were, non-availability of reliable day care centres, anxiety about becoming a mother, and adjusting regularly to child's needs and dependency on the elderly at home for childcare. Since a working mother experiences a bigger challenge of managing her dual responsibilities I have used her experiences as a pivot for this study. This is not to say that women without children do not face work-life balance issues. The argument here is that the formative years in a women's career are also the years that coincide with her marriage and the birth of her children. In India, women are often under great social pressure to have children soon after their marriage. Consequently, for most working women, the home becomes a place of additional responsibilities of nurturance and care of the children. Since most Indian sons are also required to take care of their parents, the women are additionally burdened with the care of the elderly.

#### UNDERSTANDING MOTHERHOOD AND MATERNAL CARE IN CONTEMPORARY TIMES

Caring has been equated with reproductive labour (but not the biological process associated with reproduction i.e. sexual activity, pregnancy and childbirth) which constitutes all those 'rational activities' i.e. thinking about particular others, their needs, caring for them, cooking their meals etc. Caring has also been distinguished from productive labour (one that is done to secure resources. (Schwarzenbach, 1987). Therefore caring may be defined as a form of reproductive labour that fulfils three aims necessary for individual survival, development and social reproduction (Engster, 2005). It is also necessary to make a distinction between the psychological motivation to care and the moral sources of our duty to do so. Many people care for others out of affection, love or empathy or perhaps because they conceive their own well-being to be tied up in the other's well-being (ibid, p.58)

Women have been regarded as the prime care givers and femininity is equated with care giving (Nelson and Burke, 2001: 9). Women are still expected

to take the primary responsibility for the home and the family despite of women's increased participation in the labour force (ibid, 2001: 9). Moreover, mothers also see themselves as primary care givers because of the cultural stereotype which privileges motherhood (Vencatesan, 1996; 50). As one of my informants, a 32 year old, researcher by profession feels that it is her duty to take care of the needs of the family members. Working in the Research department since 5 years she is expected to embrace both her duties and is also reminded of the same by her mother-in-law. She shared:

*I am the 'bahu'(daughter in law) of the house... so I have to take care of everything be it food or medicines or tuitions and health of my child....though my mother in law stays with me and helps me but I am told again and again that this is my work....there are many expectations from the 'bahu' and I am a mother also....so more expectations....I myself feel obligated to do so....maybe I have been brought up like that...if sometimes I am not able cope with my duty as mother of 5 year old I am under scrutiny... as if I am not a good mother...also my mother-in-law takes most of the decisions for my child as she is present with the baby for most part of the day.*

In Indian context, the physiological connection between the mother and the child and the latter's dependence on the former have been turned into the strongest moral obligation for the woman (Dube, 2001: 136). Mothering has continued to be basic to women's lives as well as the organisation of the family, and is fundamental to the genesis of the ideology about women. Symbolised in mythology, legends and popular culture, she stands as an eternal icon to represent the generative, nurturing power of life, itself celebrated in temples and sculptures, poetry and literature (Krishnaraj, 2010: 1).

But motherhood has to be understood as a phenomena embedded in social and cultural context. In order to comprehend motherhood and its several expressions, we need to conceptualize it as a social and cultural process. Furthermore, the construction of maternal identity by contemporary women is also informed by an occidental and industrialized socio-cultural model available as a result of social transformations in India as a result of global forces. The images and expectations flowing out of a modernist life style have been transforming to a large extent the status and expectations of women's roles. As a result contemporary women often carry expectations of participating more actively in social life, valuing a professional career and the consequent public and social recognition, and assuming a more proactive role in politics and citizenship. Yet, the set of social discourses converging around the idea of 'intensive motherhood' (Hays, 1996) also mould the context in which the new mothers construct their subjective experience and give multidimensionality to this new maternal identity. Thus, the themes associated with mothering and motherhood in recent times has been child care, maternal well-being, maternal satisfaction and distress and employment and professional achievement. It is important to critically examine the subjective experiences of a working mother and the choices they exercise to fulfil their role as a mother and as a productive worker.

Although overtly, middle class ideologies and practices of motherhood, maternities and child rearing, being less directly governed by official policies, are constituted as natural, unproblematic and apolitical sites of privilege. (Donner, 2008: 34). Yet a closer look at the urban middle class women provides kaleidoscopic insights to the daily challenges these working women face and also problematize the above mentioned domestic roles and expectations.

*I was 27 year old when I got married. It was an arranged marriage....my job then was not permanent... I never wanted to conceive immediately after marriage but this was the only topic at my conjugal home. I think getting married and then becoming a mother were not wholly my decisions...I sometimes felt that my mobility was restricted... I conceived and it became tougher for me to adjust in the new conjugal home, get pregnant and work in office... I did not want to leave my child and go for work ...but never wanted to leave my job... I had studied hard ...was a good student... but after the baby was born I was constantly judged by my in laws as if I was not taking good care of my baby... as a mother why would I not take care of the baby... but there are so many expectations from a young daughter-in-law as if she is some super human being... I joined office after 3 months of delivery...my mother-in-law takes care of the baby.... but whenever the baby is not well...I have to take off from office even if I have some important work... I am told that it's my work...I also sometimes feel guilty that I leave my baby and come to work... but you can't have your cake and eat it too....I cannot be at job and with my baby simultaneously.. I cannot become a full time mother because I want a career too.. and these days rearing a child is a task...you have to take care of their vaccinations which are so many these days, their behaviour changes, health and education, and safety of the child... you cannot leave the child with the servants.... my mother tells earlier it was not like that...we had big joint families...and children were reared by all members...*

Earlier, in the joint households of the upper caste, individual mothers had little role to play and too much attention to one's own child was considered as not right as all the children had to be treated equally (Channa, 2013: 119). Most of the nurturing and care was either left to the domestic helps or to the elder siblings or to any woman who was in charge of collectively taking care of all the children. However, later generations took over the western values of giving personalised attention to their children which was reinforced by the preponderance of the nuclear family where the mother alone, rather than a houseful of women, became singularly responsible for their own children. Thus, in the 1970's in the urban middle class families, the role of the mother had begun to change in a direction that put much more responsibility on the role. (ibid, 2013: 120-121). Also with the medicalization of reproduction and child care, there was significant increase in the attention a child needed. Thus, a more western model of child care was adopted, but the traditional ways were not done away with.

#### GRANDPARENT'S SUPPORT AND INTERGENERATIONAL RELATIONS

With more women in the paid work there has been a shift in the traditional role women of that of a homemaker and care provider to that of partial or total breadwinner and provider. The women in the sample agreed that the increased emphasis on educational achievement and professional success due to

technological progress in contemporary times influenced their decision to be present in the labour market. Often it was also a matter of prestige and pride for parents and parents-in-law that their daughters and daughters-in-law were working and were financially independent. Though most women agreed that their presence in the labour market was both a matter of choice and compulsion but their professional work definitely allowed negotiating a better position for themselves within their families. However, the working mother cannot be constantly present to take care of her child and it is here where the role of other members of the family comes in. The grandparents are an obvious choice because they are at home and can address to the needs of a growing child. Their attention is further engaged as the grandchild is their 'vanshaj' (descendant who would take the family name forward, more so if the grandchild is a boy).

*I like my work and desire to work till I retire. I take care of my household responsibilities equally well. People often complain that they don't have time either for housework or they have pending files in the office....it's all about prioritising...if you really want to work and earn you have to make a choice and prioritise....in India we have cheap labour to do all the housework....so why waste time on washing and cleaning....but I don't take any risks with my child and his needs....childcare should not be compromised for anything....I have my parents helping me with childcare...and would never leave my child in day care.... My parents live nearby and extend all possible help. In the morning I leave my child at their place and in the evening I collect my baby and come back home...they are also happy that they are engaged with their grandchild and enjoying their retirement. Earlier my mother-in-law use to take good care of my baby but after her death it is my parents who help me...for me earning gives me satisfaction and provides me a good comfortable life...I am lucky that I had support from my parents or parent-in-laws otherwise I would not have been able to continue with my job... I would never leave my baby at a day care ...(as shared by 31 year old informant working in research division)*

Child care is a domain where compromises are not made. Absence of good quality institutional care like day care centres and crèches near their house has left most of my informants with no choice but to depend on maternal and paternal grandparents. Non reliability of the quality of care provided by the formal care givers has either forced them to take a break from the regular full time paid work or to compromise and stay in multigenerational household. For some it is difficult to manage the dual burden as 30 year old technical assistant shared:

*I live with my in-laws in a small flat in a housing society...it is very difficult to live up-to their standards....I cannot do everything they wish...I also get tired and need my 'me' time..... which I rarely get.(pause) ....this is affecting my work in office and also my equation with my husband....we have to move out of the house to have some private moments...we don't tell anybody at home and take off from work and go out to see a movie or go for a lunch and return home at the usual office time...but I have no choice....if I live separately who would take care of my child when I go for work.... So I need their help but I'm not liking this whole setup...moreover what do I do by staying at home. Most of the household decisions are made by my in-laws*

The informants agreed that support from the parents or parents-in-law was one of the key reasons for them to stay in paid work. They also shared that they were staying with their in-laws or parents because they needed their support in childcare but were equally concerned with the increased burden on the elderly. Some also mentioned that staying with in-laws had affected their motherhood decisions. The important decisions like having children was influenced by the elders who often made sure that woman enter into motherhood soon after marriage. Staying in multigenerational households also restricted privacy for some as in urban areas informants who live in flats complained of less autonomy and privacy as is reflected in the above narration.

But as the family grows and children require more space, one informant shared that they purchased another flat the same apartment complex, one for the elderly and one for the young couple. This ensured privacy for individual households while maintaining close relationships. There is exchange of material substances, care work, emotional support and hospitality when extended kin visit. As shared by 32 year old researcher:

*We have two flats in the same building. It was difficult to stay together... when a woman is working she has daily priorities and sometimes the routine work like laundry or cleaning are to be left for the next day or for the weekend....but the older generation feels that we are lazy...there is power dynamics involved...the older generation wants to control the situation....so before the environment in the house gets dirty, it's better to take a decision... I bought a flat..I leave my 3 year daughter in the morning with her grandparents...she goes to play school for 2-3 hours and then the school cab drops her home...they take care of her for the rest of the day...they get tired but they help me with childcare....they are also old and need help when they get sick...we extend help...so its reciprocal.. and there is a silent agreement on this set-up...*

So even with the rise in the nuclear household, grandparents continue to be care providers and may not be co residing and may be within a convenient distance. This ensures that privacy and autonomy for both the generations is maintained but the proximity ensures traditional inter-generational obligations to care and support. Although co-residence may be an important criterion for the well-being of the children or the elderly; it may not always ensure a healthy relationship between successive generations.

*I was staying in a nuclear family...me and my husband were both working and I had to leave my child at a day care centre as my mother-in-law was not staying in Delhi with us....all was going well... we use to drop him at day care in the morning with food and a set of clothing and his toys and pick him up in the evening... I never liked it...for I wanted to be with him...but at that time this Child Care Leave Policy was not there and couldn't leave my work as financial situation didn't allow to do so....when my child was 6 years old he use to go school and the school bus dropped him few metres away from the day care....I managed to request and pay a caretaker of the day care centre to pick him from the bus stop and take him to day care.... One day that lady forgot to fetch my child from the bus stop and he himself crossed the very busy double lane road to reach the centre....while preparing him for sleep that night my baby told me that the caretaker had not turned up*

*today.... I couldn't sleep the whole week and this episode still haunts me....anything could have happened to my baby....I requested my mother in law to come and stay with us....me and my mother in law didn't have a nice equation...but she for the sake of her grandchild agreed.....she use to take care of everything when I was away at work....we never talked ....but she really took good care of my child... I could work in office without any tension.....she use to say that her grandchild had similar habits as her husband ...she loved to take care of him...when she died I cried a lot...now when I become grandmother I would retire and take care of my grandchild....like my mother in law did....(tears in eyes)....I would live those moments which I never had with my child....said 35 year old technical assistant.*

The above narration reflects the inter-dependencies the successive generations have and may be helping each other either out of love and respect or due to social pressure and moral duty (as confirmed by informants).

Another important aspect of co-residence is the quality of inter-generational relations. The interdependencies may not ensure conducive home environment as one of the respondents pointed that obligations between generations have to be handled with tact and diplomacy. The fragile nature of the relationships sometimes leaves women under constant pressure to conform to the gendered expectations of families. Though parents-in-law may be supportive of the paid employment of the daughter-in-law but there is no clarity in norms of sharing of household labour. Responsibilities of house and child care were mostly women's job. Few informants told that if the child was ill or had exams it was the mother who was supposed to take leave from her work even if the grandparents were available. It was also mentioned that in joint households, men residing with their parents would not come forward for any help but if in nuclear set up, they would extend all help. The reason they gave was, that men fear criticism from their parents if they took up gender inappropriate roles.

*I don't ask my husband to help as his parents don't like it. My mother in law would come forward to help....moreover If I can pay a kamkarnewali (domestic help) and get the job done why request or argue with anybody....*

Sekaran(1992) also quoted a similar finding that Indian career women prefer to delegate domestic work to paid help than to push their husbands to do more family work, thus maintaining an equilibrium and avoiding conflict without increasing their own workload.

The availability of domestic help and grandparents ensures a woman's continuity in paid employment. She might receive help but at the same time either she feels obligated to her housework and care giving or she may be reminded of that by the elders. There is manipulation of social relations from both the sides of the generation to strike a balance either by choice or due to social pressure. There is always a scope for alternate arrangements as one of my informant suggested that *'things can be worked out if both the generations want to adjust because nobody wants to earn a bad name for the family'*.

## CONCLUSION

It resonates well from the narrations that elderly support was essential for women to continue with her paid work and elderly support ensured the well-being of the child. The narratives of the working mothers reflect that in absence of formal care system she had to depend on her parent or parents-in-law for support. The parents too extended the necessary support in terms of childcare and household chores. The kind of family arrangements that worked well for these working mothers was either a multigenerational household or grandparents residing at a convenient distance. Staying in multigenerational household meant less autonomy in household decisions and childcare practices and elderly also ensured that the women did not deviate much from her gendered roles in the family. But it was felt by these women that even the presence of grandparents, it was the mother who was majorly responsible for child's academic success, habits or emotional adjustments and health.

The desire to fulfil the roles as a mother and a paid worker sometimes left a woman with guilt or anxiety of any perceived failure and led her to make choices and set her priorities. She then negotiated with the authority structures at home and also reclaimed her space through her paid work. She at times opted out of multigenerational households but still maintained reciprocal intergenerational relations. Childcare being a priority for a working mother led her to continuously negotiate the private and public domains.

And while exercising agency, she constructed her own self-portraits and self-narratives and that thereby enabled her to take charge of their lives and women exercised some a genetic skills despite the hostile environment (Meyers, 2002: 5). These individual subjectivities operate within the structural constraints of patriarchy and other forms of inequality but the optimism about human possibilities of inner power are not lost altogether (Channa, 2015: 54).

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## **Conceptualizing Tribe in Indian Context**

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**Abstract :** Identifying a community as 'tribe' in India, as per the definition in Anthropology is a difficult proposition as all such communities in the mainland of this country have maintained some kind of contacts with their neighbouring similar groups or people of other caste based societies since centuries. There remains hardly any scope to find the most important and primary criterion 'isolation' of an anthropologically defined 'tribe' in any such communities. In fact, complete isolation from any other populations is almost a myth, especially in mainland India.

In view of this ground reality a few eminent anthropologists who have important contribution towards conceiving 'tribe' in India have proposed categorizing a group of people as 'tribe' in the context of Indian Civilization. Such proposition is based on the tribal situations as observed in the mainland India, without taking into note of the 'Negrito' groups of people inhabiting the Andaman Islands in the Bay of Bengal.

The four population groups viz. the Great Andamanese, Onges, Angs (Jarawas) and the Sentinelese with same biological and cultural characteristics, living in similar ecology, though in separate islands and pursuing same hunting-gathering economy since when could not be ascertained beyond some speculations. These four 'Negrito' groups lived in complete isolation, in true sense of the term till the British colonial rulers stepped in these Islands about 157 years back.

At the initial stage of contact with the immigrant populations from mainland India, these small groups exerted similar type of resistance to the outside pressures. Over the times with the changes in magnitude of pressures their intensity of resistance also varied.

The recorded history of different levels of contacts of these four Negrito groups provides a scope to the anthropologists in identifying all the characteristics of 'tribe', as defined in anthropology and also to have a deeper understanding on the ongoing processes that operate in retaining the anthropologically attributed criteria of 'tribe' in Indian context.

The author argues that Andaman situation establishes beyond doubt that a group of population categorized as 'tribe' can be observed outside mainland India without looking at them in the context of *varna-jati* system of Indian civilization as proposed by Indian anthropologists..

In fact in the extremely diverse geographical and human situations, a specific approach in conceiving a population as 'tribe' may not be suitable for application in Indian context.

*Key words :* Ideal Tribe, Band, Local Group, Inbuilt Cultural Discipline, Isolated Society.

The physical map of India shows that a significant geographical area of our country is occupied by mountains and high hills covered with dense forests. Besides the Himalayan regions in the north and north-west parts, the Eastern Himalayan range also occupies a large geographical track. In the central and

western parts we find mountainous regions of Satpura and Araballi, while the Western Ghats of hill ranges are located in the peninsular India.

Besides the hills and forests in the main geographical area of India, the Indian islands located in the Bay of Bengal are covered with dense tropical forests.

When we superimpose population distribution of people of India on these geographical areas we find a significant percent of the total population of our country inhabits these hills and forests for centuries together. Whether these populations had settled down in such difficult terrains on their own or they had no other option but to enter such areas on account of mounting multiple pressures from the immigrant dominant populations, is a subject of speculation. However, there are ample references that suggest these terrains were the homelands of groups of peoples known as 'Kinnaras', 'Khasas' and many more in the north-western hills, 'Kiratas' in the north-east, and 'Nishadas' in the western part of the country.

These populations were not completely isolated from other populations, as we usually think. This can be ascertained from mention of their existence in the epics like Mahabharata and Ramayana and in Purana also.

A look into these ancient literature depicts distribution of 'Kiratas' in the areas from Assam to Nepal, Kumaon, Kangra, and other places in Himachal Pradesh and Jammu & Kashmir (Sharma, 2005:138).

The 'Khasas', 'Khasa', 'Khas'. 'Khasiya' is an important community in Western Himalayas. We find mention of this population in *Mahabharata* (11, 1882 ff). They dwelt near the river Shailoda which was flowing between the mountains of Keru and Mandava.

In *Bhagwat Purana* (II, IV, 18) they have been mentioned as the dwellers of north-western region along with 'Kankasas Sakas'. The *Manusmriti* (X.22,44) also places the 'Khasas' in the north-west (Ibid pp 138).

Subba (1999) while tracing the early history of the 'Kiratas', referred to the very important observations of Suniti Kumar Chatterjee, the noted linguist of our country. Subba writes:

"According to Chatterjee the word 'Kirata' had a negative, sub-human or animal connotation. For instance, in the Vedic as well as other Indo-Aryan literature, this word referred to an ugly man, a wild man, a cruel and mean person, a robber, and the like". They are Mongoloid and lived in the eastern Himalayas establishing trade relations in cotton, silk, gold, iron, etc with the Aryans (Subba 1999:22).

As in the Himalayan ranges, the forest clad mountain ranges of Araballi in the western part of India was the habitat places of the large population who have been mentioned as *Nishadas* in the *Mahabharata* as descendants of Lord Mahadeva. Vedic literature has also mention of the *Nishadas* who were the hunters and forest dwellers who often disturbed the lives of Aryan immigrants (Mehta 1984: xii).

When the British colonial rulers stepped in our country, for their convenience in administering the people of India, they initially kept these groups of peoples as a separate category of Indian population. This was done primarily on the ground of their different nature of way of livings in hills and forests in relatively inaccessible terrains isolated from the peoples of the caste based societies.

The British rulers termed this separate category of people "Tribe" following the Latin word "Tribus", that denoted a division within the state. It later came into use as a way to describe the cultures encountered through European explorations. However, it requires a special mention that the term 'tribe' was not then used in the sense as it is used at present.

The British administration considered these several groups of peoples as a single category, though in reality, all of them were not homogeneous in any sense. These populations, as we have already seen, were comprised of many groups, each with a distinct culture. Even the criterion of isolation was not applicable to all these groups. Therefore, conceiving 'tribe' in Indian mainland as an isolated population may mislead in proper understanding of these societies.

Before I examine the approaches adopted by Indian Anthropologists in identifying the special characteristics of this category of people, who have now been categorized as Scheduled Tribe in the Constitution of India, I would make it clear that in conceiving 'tribe' in Indian context my primary focus will be identifying the basic criteria of 'tribe' as conceived in the discipline of anthropology; drawing examples from the four Negrito groups of populations from the Andaman Islands.

*Approaches towards conceiving 'tribe'*

A few anthropologists in India have considered isolation as an important dimension while conceiving 'tribe' in India. On the basis of their own observations and studies, Ghurye, Sinha and Beteille, the three noted scholars of our country who have important contributions towards conceiving 'tribe', looked at this category of populations living in the fringe areas of the caste based societies, as a part of the great Indian civilization.

As early in 1943, Ghurye had published an article '*The aborigines 'so-called' and their future*' wherein he came out with his views on the tribes of India. He was of the opinion that the various groups of people labeled by the government of India as "Tribe" are in reality "Backward Hindus" i.e. groups imperfectly integrated with the caste system. They are not isolated from the Hindu castes of the plains in distribution, language, economy and religious tradition; nor are they necessarily the autochthons of various regions where they live. Only very small sections, living in the recesses of hills and the depths of forests have not been more than touched by Hinduism. He was of further opinion that the British rulers for convenience of their administration

excluded certain areas in order to separate tribes from the Hindus (Ghurye 1943, Preface).

Ghurye's observations regarding the presence of some kind of association of the tribes get substantiated in the references of the *Kinnaras*, *Kiratas*, *Nishadas* and many other population groups inhabiting the Himalayan range deep in forests, could be found in the two Hindu epics *Ramayana* and *Mahabharata*. These suggest some kind of contacts of these groups of peoples with others. But then it may be erroneous on our part to infer that all the groups designated as 'tribe' in these regions were in contacts with the Hindus.

In this context, I would like to mention about the high hill regions of Arunachal Pradesh in the north-eastern Himalayas that in recent past, used to be considered as most inaccessible forest clad mountainous terrains in our country.

The tribes like the 'Kaman Mishmis', 'Tagins', 'Hill Miris', 'Nyishis', 'Sulungs', 'Na', Bangnis and many more who inhabit such difficult terrains had some kinds of economic relations with their neighbouring tribes, within as well as beyond the international borders, since they populated the areas, depending on their ecological niches they inhabit (Sarkar 1996: 395-402).

At many places they had established certain symbiotic relationship with the people of plains. It may not be out of way to mention that Roy Burman had observed many such tribes in the hills and forests along the international borders and also on the borders of the major linguistic-cultural formations within the country who played roles that Roy Burman conceived as 'Bridge' or/ 'Buffer; communities (Roy Burman 1966:103-107).

What I am trying to underline is the inhabitants of the hills and forests were not living in complete isolation even in the epic periods. This does not necessarily mean that they had contacts with the Hindus. In fact these population groups in Arunachal Pradesh have been living in these areas far away from the caste Hindus of the plains of Assam.

It seems just to create a division between these hills and forests dwellers with the vast majority of the people on ground of isolation and a different way of life, the British rulers designated the former as 'tribe'.

Therefore, it would be erroneous to subscribe the views of Ghurye in every respect.

While Ghurye contested the idea of 'tribe' as a separate category and viewed that 'tribe' should be looked into as a section of the larger Hindu society, Sinha (1982:13) observed that 'it was the British scholars who felt that the tribes were outside the frame of *varna-jati* system. The tribes themselves presented a wide spectrum of relationship with the plough cultivations from complete isolation to close interaction.

Sinha (1958:504-518) on the basis of his observations on the central and peninsular India viewed a 'tribe' 'as a system of social relations as well as a

state of mind and cultural tradition, both characterized basically by isolation and lack of stratification. He defined a set of characteristics of 'tribe' namely habitat, economy, social structure and ideological system. To him tribes have specific features like—isolation in ecology, economy, politics and other social relations— from other ethnic groups. They have a strong in-group sentiment, homogeneous, devoid of social stratification and role of specialization other than by age, sex and kinship. Ideally no interaction with Great traditions of Indian civilization, they have a value system of equality, closeness of human, natural and supernatural world, lack of systematization of ideas, etc. He conceived 'tribe' in India in a classical evolutionary frame, where this section of population was constantly moving towards caste pole.

It may be noted that while underling important features of 'tribe', Sinha consciously prefixed the term 'ideally' in the beginning of the sentence 'no interaction with Great traditions of Indian civilization'. This indicates that Sinha was well aware that the criteria of ecological isolation and absence of any kind of contacts with other populations were far from a reality in case of the population groups categorized as 'tribe' (1965:61).

Like Sinha, Beteille ([www.sociologyguide.com/tribal-society/concept-of-tribe.php](http://www.sociologyguide.com/tribal-society/concept-of-tribe.php)) also underlined the needs of conceiving 'tribes' in India in relation to civilization as "the tribes have existed at the margins of Hindu civilization from time immemorial and those margins have always been vague, uncertain and fluctuating. Their mutual interactions go back to the beginning of recorded history and beyond. Hindu civilization acknowledged the distinction between tribe and caste in the distinction two kinds of communities, *Jana* and *Jati*, while *Jana* confined to the isolation of hills and forests the *Jati* settled in villages and towns with a more elaborate division of labour".

Beteille considers 'distinctive condition of the tribe in India has been its isolation, mainly in the interior hills and forests but also in the frontier areas. Though, the isolation was never absolute. The isolation is and always has been a matter of degree. Some tribes have been more isolated than others but at least in the interior areas where the bulk of the tribal population is to found none has been completely free from the influence of civilization. But as 'isolation' was never absolute, this was found not an effective criterion of the 'tribe' in India. However, because of their isolation in the interior areas these tribes could retain their distinctive modes of speech which could be a major criterion of 'tribe'. This also could not be found applicable to all the communities categorized as tribe. In this context Beteille draws attention to many tribes in western India including the Bhils who do not have any language of their own and adopted the languages of the region'.

Beteille was initially in favour of looking at 'tribe' in historical perspectives and the circumstances that necessitated them to deviate from the 'ideal type' of definition of tribe (1960, 1980).

Subsequently (1986) while referring to the 'tribes' of north-east India he stated "They are all tribes because they all stood more or less outside the Hindu civilization and not because they were all at exactly the same stage of evolution" (Laisangkima and Max, 2007).

In other words, Beteille considers the populations who remain outside the larger caste based Hindu society as isolated, irrespective of their nature of contacts with other population groups as could be seen in Arunachal Pradesh.

In a later writing, Beteille (1992) clarified that 'the concept of 'tribe' will be different where tribes and civilizations co-exist. In such situations, when anthropologists speak of tribes, they mean communities of people who have remained outside of the state and civilization, either out of choice or for necessity. That was the reason, it is supposed, for calling them 'non-civilized' but certainly not 'uncivilized'. In India, they all stood more or less outside of Hindu civilization'(Srivastava and Chaudhury 2009: 72).

We find a significant difference in views among these three scholars in respect of conceiving 'tribe' in Indian context.

Ghurye was not in favour of accepting the 'tribe' as a separate category of people outside the Hindu society. Sinha even though accepted the ideal characteristics of 'tribe', preferred looking at this category of people from historical perspectives in the context of *varna-jati* system of Indian civilization, as complete isolation or ideal criterion of 'no interaction' was a remote possibility in central and peninsular India. Beteille also advocated looking at 'tribe' in India in relation to the civilization.

What is apparent from the views put forward by these three eminent scholars of our country that no single criterion attributed in categorizing a 'tribe' in Indian context is satisfactorily applicable to all the groups identified as 'tribe'.

It may not be out of context that the anthropologists in India who seriously attempted in attributing special characteristics to a special category of people designated as 'tribe', did so on the basis of their understanding of those people inhabiting in the mainland India, where influences of larger caste based society in some forms is inevitable. Somehow, the hunter-gatherers of Andaman Islands escaped their attention probably due to lack of adequate anthropological information on the four Negrito tribes of these islands.

It does not require saying this is an important gap towards conceiving 'tribe' in Indian context. The tribal scenarios of these islands differ in every respect from that of the mainland India.

Besides the characteristics of the tribe as viewed by the scholars in Indian context, let me refer to a definition by a western anthropologist that has been conceived elsewhere in globe.

Though there are a number of definitions on "Tribe", however, for the purpose of the present paper I would like to refer to a definition by Sahlins and juxtapose the characteristics of tribe on the societies of the Negrito

populations of Andaman Islands and examine to what extent they bear these characteristics.

*According to Sahlins*

“A tribe is a segmental organization. It is composed of a number of equivalent, unspecialized multifamily groups, each the structural duplicate of the other; a tribe is a congeries of equal kin group blocs. The segments are the residential and (usually) proprietary units of the tribe, the people that settle or wander together in a given sector of the tribal domain and that separately exploit a sector of storage resources”(Sahlins 2009:322-345).

*Andaman Situation*

The Andaman groups of Islands with dense tropical evergreen forests surrounded by sea in the Bay of Bengal were the homelands exclusively of the Great Andamanese, Onges, Angs (Jarawas) and the Sentinelese. Each of these tribes inhabited in complete isolation in different islands separated from each other since time immemorial.

How and when these four negrito populations appeared in the Andaman Islands is still not clear. There are a number of propositions those lack any scientific basis. The first scientific attempt was made by P.C.Dutta of the Anthropological Survey of India who ascertained existence of the Negritos in the South Andaman Islands at least 2042 years before present. He arrived at this conclusion on the basis of analysis of the materials found in different layers of ‘Kitchen Middens’ found near the semi-permanent shelters of the tribes (Dutta 1978: 35).

Dutta’s finding was further corroborated by Zerine Cooper of Deccan College, Pune. Cooper, with the help of Radio Carbon method calculated the approximate habitation period as 2280 ± 90 years( Cooper 1990:73-81). Another 26 years may be added to this for getting an approximate period of existence of ancestors of these Andaman Negritos. Of late the studies by the Anthropological Survey of India and Centre for Cellular and Molecular Biology suggest tribes have close affinities to Asian than African populations and also suggest that the present Negritos of the Andamans are the descendants of the early Paleolithic colonizers of south-east Asia—and the hunter-gathers (Sarkar 2015: 11-14).

These islands were out of any influence of the Indian or any other civilizations in absence of any outside populations. In true sense of terms none of each of these tribes had any contact in any form with any other people excepting their own, till the British colonial rulers stepped in South Andaman Islands initially for a brief period during 1789-1796 and then permanently in 1858.

The four population groups of same biological and cultural characteristics, living in similar ecology, though in separate islands and pursuing same hunting-gathering economy since when could not be ascertained beyond some speculations.



However, we have at least two anthropological accounts one each on the Great Andamanese (Brown, 1948) and the Onges (Cipriani, 1957) that give fairly detailed information on the way of life of these two tribes that existed before their exposures to the outsiders. These, together with the studies on the Angs (Jarawas) (Sarkar, 1990 & 2015) and an introductory account of the Sentinelese (Pandit, 1990) when examined carefully we get the specific characteristics of these Negrito populations.

A look into these available accounts unveils the basic criteria of these two population groups.

The Great Andamanese and the Onges were hunter-gatherers and the Angs and Sentinelese have still been living exclusively on hunting-gathering within their resource areas in the forest and sea around. The Great Andamanese had ten territorial groups distributed from south to north of the Andamans. The Onges of Little Andaman Island had three such notionally demarcated geographical regions. A number of 'bands' comprising mainly family members used to move within their respective territories forming 'local group'. Local groups form the segmental organizations of these small populations. These two segmental societies were self sufficient in economy as the resources in the forests and sea were abundant for their small populations. Therefore, accumulation of any food, excepting honey and seeds of wild jack-fruits for a few days, was absent in their societies.

These small societies were regulated through a strong inbuilt cultural discipline that is apparent in the hunting-gathering activities of their bands within their notionally demarcated territory, shifting of camps periodically in a prescheduled manner, socialization through the well controlled dormitories, and prohibiting marriages within certain kin and so on.

The apparently separate 'bands' showed their solidarity whenever their resources were under threat from outside populations. This strong inbuilt cultural discipline and mechanism of solidarity inspired these small populations to fight against the dominant British administration. This works as a key factor towards survival of these small populations in a hostile environment since they populated these islands (Sarkar 2015:51-61).

The historical accounts of the British Penal settlement clearly indicate the extraordinary solidarity of the Andamanese and the Onges. Both these tribes vehemently opposed clearing of forests in their islands by the outsiders and fought against the mighty colonial administration with the involvement of all the territorial groups.

The inherent cultural discipline could be observed in the customs of marriage prevalent in these small population groups. They do not have any clan organization like the population groups of mainland India categorized as 'tribe'. In absence of any clan organization members of the 'bands' and the affiliated families within the same territory developed custom of avoiding marriages with certain categories of kin.

Each territorial 'local group' had a speech of its own. The Great Andamanese had *Aka Jeru, Aka Bea, Aka Chari, Aka Kora, Aka-Bo, Aka-Kede, Aka-Kol, Aka Juvoi, A-Pu-ikwar and Aka Bele*.

Detailed information in the way of life and the society of the Angs (Jarawas) is available (Sarkar, 1990 & 2015). An examination of this reveals that the Angs preferred not to have any type of contacts with the people of caste-based societies rehabilitated from mainland India nearly 65 years back, near their three foraging territories. The 'bands' of these three territorial groups came together and fought against the outsiders, whenever the situation warranted. Though they have been experiencing pressures from outsiders since the British administration entered these islands they never showed any intension to have any kind of contacts with these populations, instead, preferred to continue with their foraging way of life as 'isolated' community. Movements of the bands for foraging purposes as well as regulations of marriage within this small population of nearly 375 heads is guided by a strong inherent discipline and feeling of social solidarity.

Even after 1997, when they finally extended their friendly gesture, for all practical purposes they remained detached from any type of meaningful social contacts with the people of larger societies.

We have minimum information about the other 'isolated' tribe living in the North Sentinel Island. Contact of the Sentinelese with any outside population is absent in every respects. They protect their island from entry of any outsiders with bows and arrows. Occasionally they receive gift items in the forms of coconuts and bananas and some iron implements from a few government officials from a distance near the sea shore of their land (Pandit, 1990).

The fundamental characteristics of these four Negrito groups fulfill all the essential elements of an 'ideal tribe'.

Let me now examine to what extent these tribes could retain their characteristics of 'ideal tribe' in the contemporary situations that prevail in and around the habitats of these tribes.

*Contemporary tribal situation in Andaman:*

The specific features surfaced from the situations prevailing among the Great Andamanese, Onges, Angs, and the Sentinelese can be as under,

1) Though all these four groups have same biological, cultural, and ecological backgrounds but separated from each other in different islands, had no contact with any outside populations about 157 years back.

2) During all these years three of these tribes had experience of similar kind of pressures of the outside immigrants from the mainland India for establishing contacts with them.

3) These small tribes opposed to such pressures with all their efforts uniting their 'bands' for the purpose.

4) This they could achieve with the strength of in built discipline of their societies.

5) It was the Great Andamanese who first gave up their resistance. This proved to be fatal. On account of their contacts their population declined alarmingly and therefore, they could not retain their hunting-gathering self sufficient economy and 'band' organization like the Sentenelese, Angs or even like the Onges. In order to prevent this population from being extinct, they set aside their traditional marriage regulations as among the Angs, and had to establish marriage with non-Andamanese populations with the active support of the Andaman administration. They are now a mixed population. Their specific speeches are no more remembered by most of them.

In other words, under the strange circumstances they could not retain any of the characteristics of the other three Negrito groups and thus have lost the characteristics attributed to the category of an 'ideal tribe'.

The Onges, even after being resettled at two areas in their island refrained from accepting any social/cultural traits of the larger caste based neighbouring societies. Though, they are also losing some major criteria, like inbuilt social discipline and solidarity, self sufficiency in economy and total isolation, unlike the tribes of mainland India, these tribes have not been moving towards any *varna-jati* system of the rehabilitated populations.

The Angs, whose history of direct contact with the outside populations is not very long, also do not show any intension to imbibe any cultural or economic traits of the neighbouring caste based society.

The Sentenelese have still been opposing any type of outside contacts.

#### *Difference in state of mind*

The tribal situations in the mainland India and that in the Andaman Islands clearly indicate the differences in the state of mind of these tribes living in two different levels of contacts. The gradual processes of contacts over a long period, paved the way of the tribes in mainland, in reorienting their 'state of mind' towards accepting traits of Great Tradition. On the other hand, in a situation of sudden unbearable pressures that destabilized the normal way of life of the hunter-gatherers, it is their 'mind set' and 'inbuilt cultural discipline' that have discouraged them establishing any symbiotic and meaningful interaction with the neighbouring caste based societies. This is also supplemented with the 'mind set' of the caste based larger neighbouring societies who also avoid any such meaningful contacts.

The two different sets of mind favoured the two Negrito groups of people of the Andaman Islands to still retain all the primary characteristics attributed to the 'ideal tribe'.

The basic nature of these four population groups, each having different levels of contact, as observed in Andaman Islands and the population groups inhabiting high hills in Arunachal Pradesh who were not completely isolated

from their neighbouring populations, fall short in substantiating the views of Ghurye that in India 'tribes are 'Backward Hindus'.

The Andaman situation establishes that outside mainland India a group of population categorized as 'tribe' can be observed without looking at them in the context of *varna-jati* system of Indian civilization as proposed by Sinha and Beteille.

In fact, in the extremely diverse geographical and human situations, a specific approach in conceiving a population as 'tribe' may not be suitable for application in Indian context.

The recorded history of different levels of contacts of the four small Negrito groups of Andaman Islands provides a scope to the anthropologists in identifying all the characteristics of 'tribe', as defined in anthropology and also to have a deeper understanding on the processes that operate in retaining the anthropologically attributed criteria of 'tribe' in Indian context.

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## **Adiposity and body composition in relation to physical activity status among Muslim adolescents of North 24 Parganas, West Bengal**

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**Abstract :** The purpose of this study was to examine adiposity and body composition in relation with physical activity among Muslim adolescents of North 24 Parganas, West Bengal. One thousand and sixty eight school boys (n=522, PE=282 and NPE=240) and girls (n=546, PE=304 and NPE=242) aged 10 to 17 years participated in this study. The subjects were classified into eight age groups: 10-10.9 years (n = 56, 62), 11-11.9 (n = 63, 73), 12-12.9 (n = 65, 82), 13-13.9 (n = 77, 79), 14-14.9 (n = 84, 78), 15-15.9 (n = 71, 70), 16-16.9 (n = 60, 55), 17-17.9 (46, 47). All anthropometric variables were measured by following standard anthropometric procedure. Body mass index (BMI), skinfold equations were utilized to estimate percent body fat (PBF). Boys, who did not undertake regular physical exercise (NPE), had significantly greater subcutaneous adiposity, PBF, fat mass index (FMI) and sum of 5 skinfolds (S5S) than those who undertook regular physical exercise (PE). However, BMI was similar among PE and NPE boys. Girls who did not undertake regular physical exercise (NPE) had a significantly greater mean body mass index (BMI), PBF, fat mass (FM), fat free mass (FFM), fat mass index (FMI) and sum of 5 skinfolds (S5S) compared with those who undertook regular physical exercise (PE). The mean differences between NPE and PE children (boys and girls separately) of all the measurements in each age group were statistically significant ( $p < 0.05$ ). We conclude that there was a decrease in adiposity, subcutaneous fat content and body composition at almost all ages of PE boys and girls compared with the children who did not undertake regular physical exercise resulting from non sedentary lifestyle.

*Key words :* Bengalee Muslim, adolescent, physical exercise, body mass index, percent body fat, fat mass, fat mass index.

### INTRODUCTION

Overweight and obesity among children and adolescents is a public health concern, both in developed and developing Nations (Reilly, 2006). During adolescence, body size and composition markedly undergo changes. These changes are strongly associated with the development of various physical performance characteristics. At the same time, anthropometry and body composition during adolescence are predictors of risk factors for cardiovascular disease, diabetes and many types of cancer and chronic diseases (Dietz, 1998, Goran et al., 2003) which occur in adults (Guo, 1997; Katzmarzyk et al., 2001, Janssen et al., 2005). Anthropometry is the single most portable, universally applicable, inexpensive, and non-invasive method available to assess the size, proportions, and composition of the human body (WHO, 1995). Anthropometric

data have been extensively used in public health e.g. identification of significant growth retardation in children (Mukhopadhyay et al., 2005; Hop et al., 1997) and adolescents (Pawloski, 2002). Thus, anthropometry during adolescence would also be used to predict performance, health and survival.

The physical activity level (PAL) is a way to express a person's daily physical activity as a number, and is used to estimate a person's total energy expenditure. The physical activity level can also be estimated based on a list of the (physical) activities a person performs from day to day. Each activity is connected to a number, the physical activity ratio. The physical activity level is then the time-weighted average of the physical activity ratios (Swaminathan and Vaz, 2012).

Physical inactivity is now identified as the fourth leading risk factor for global mortality. Physical inactivity levels are rising in many countries with major implications for the prevalence of non communicable diseases (NCDs) and the general health of the population worldwide. The significance of physical activity on public health, the global mandates for the work carried out by WHO in relation to promotion of physical activity and NCDs prevention, and the limited existence of national guidelines on physical activity for health in low- and middle-income countries (LMIC) make evident the need for the development of global recommendations that address the links between the frequency, duration, intensity, type and total amount of physical activity needed for the prevention of NCDs (Ghosh, 2010).

For children and young people, physical activity includes play, games, sports, transportation, chores, recreation, physical education, or planned exercise, in the context of family, school, and community activities (Mukhopadhyay et al., 2005). A study on fat mass and fat-free mass as indicators of body composition among Bengalee Muslim children reported by Sen and Mondal (2013). The findings are important for future investigations in the field and in epidemiological and clinical settings so as to accurately identify risk of lower or higher adiposity and body composition using FM and FFM.

In order to improve cardiorespiratory and muscular fitness, bone health, and cardiovascular and metabolic health biomarkers: firstly, children and youth aged 5–17 years should accumulate at least 60 minutes of moderate- to vigorous-intensity physical activity daily; secondly, the amounts of physical activity greater than 60 minutes provide additional health benefits; thirdly, most of the daily physical activity should be aerobic; lastly, vigorous-intensity activities should be incorporated, including those that strengthen muscle and bone, at least 3 times per week (Swaminathan and Vaz, 2012).

There is a wide range of data on growth, development, and nutritional status of the adolescents from various populations of the world (Eveleth and Tanner, 1990). However, hitherto, to the best of our knowledge there are no studies on adiposity and body composition in relation with physical activity of Muslim children from India.

The aim of this study was to investigate the effect of physical activity on adiposity and body composition variables among Bengali speaking (Bengalee) Muslim adolescents of North 24 Parganas, West Bengal.

#### MATERIALS AND METHODS

The investigation was carried out among the adolescent Muslim boys and girls in three secondary schools in Deganga block, North 24 Parganas, West Bengal. The schools are situated in a rural area approximately 38 km to the east from the heart of the city of Kolkata and approximately 17 km from the Barasat town. Barasat is the administrative headquarters of the district of North 24 Parganas, West Bengal. The studied schools were selected for operational and logistic convenience.

The students were mostly middle-class Muslim Bengalees. One thousand and sixty eight (1068) school going boys ( $n=522$ , PE=282, NPE=240) and girls ( $n=546$ , PE=304, NPE=242) participated in this study. The age range of the subjects was 10 to 17 years. The mean age of boys and girls were 13.44 (SD  $\pm$  2.20) years and 13.29 (SD  $\pm$  2.13) years. Official approval and ethical consent were obtained from the school authorities (Head Master and Secretary of the school Managing Committee) as well as from the parents prior to the commencement of the study. All the students were invited informing the purpose and procedures of this study and, however, a total of 1068 students were spontaneously participated in present field survey.

All anthropometric measurements were taken on each study participant during school hours by a single investigator (AK) following the protocol of Lohman et al. (1988). Body mass index (BMI) – a popular indicator of generalised adiposity was calculated following the formula of World Health Organization (1995). One regional adiposity indices were calculated following standard manner e.g. sum of 5 skinfolds (S5S).

Prediction of percent body fat from skinfold thicknesses is an acceptable method for the assessment of body composition in children and adolescents (Deurenberg et al., 1990; Al-Sendi et al., 2003; Mueller et al., 2003). Skinfold equations of Slaughter et al. (1988) were used to estimate percent body fat (PBF). Four measures of body fat composition viz. fat mass (FM), fat free mass (FFM), fat mass index (FMI) and fat free mass index (FFMI) were estimated using standard formulae (van Itallie et al., 1990; Bose and Das Chaudhuri, 2003).

All the participants were divided into two groups: PE (regular physical exercise undertaken) and NPE (no regular physical exercise undertaken). The frequency per week and duration in minute of physical activity were also noted. A set of detailed questions in the interview-schedule was utilized for this purpose. All the subjects were measured during the working hours of the school.



At the preliminary stage of the present interpretation, intra-observer technical errors of measurements (TEM) were calculated based on replicate measurements on 30 randomly selected subjects. The results fell within acceptable ranges when compared with other previous research (Cameron, 1984; Mueller and Martorell, 1988; Ulijaszek and Lourie, 1994; Ulijaszek and Kerr, 1999). Therefore, TEM was not incorporated in further statistical analyses.

Data are presented as mean, standard deviation (SD), t-test were calculated using the Statistical Package for Social Sciences (SPSS, Version 16).

### RESULTS

Anthropometric and body composition characteristics of the Bengali Muslim adolescents based on physical activity are presented in Table 1. Mean of height, weight, MUAC, BMI, FM, FFM were higher (who undertook physical activity) than the boys who had not undertaken physical activity but mean of all skinfold measurements, percent body fat (PBF) and sum of skinfolds were higher than the boys who had not undertaken physical activity. Mean of all the anthropometric and body composition characteristics were higher among the girls who did not undertake physical activity. The PE boys had significantly greater mean height ( $p < 0.000$ ), weight ( $p < 0.000$ ), MUAC ( $p < 0.001$ ), FFM ( $p < 0.000$ ) compared with the NPE boys. The NPE boys had significant larger values of mean biceps (0.003), medial calf skinfold ( $p < 0.030$ ), PBF ( $p < 0.032$ ),

Table 1: *Anthropometric and body composition characteristics of the two groups (NPE and PE) of Bengalee Muslim adolescents.*

Variables	Boys		Girls		T- value	
	No physical exercise (NPE) n=240	Physical exercise (PE) n=282	No physical exercise (NPE) n=242	Physical exercise (PE) n=304	Boys	Girls
	Height(cm)	141.5(14.0)	147.7(15.6)	146.7(9.1)	141.6(10.5)	4.74*
Weight(kg)	33.4(11.5)	37.2(12.1)	38.4(9.0)	37.1(9.0)	3.72*	6.82*
MUAC(cm)	19.2(3.1)	20.1(3.1)	20.9(2.8)	19.6(2.7)	3.29*	5.15*
BMI(kg/m <sup>2</sup> )	16.2(3.3)	16.6(2.6)	17.6(3.0)	16.2(2.6)	1.24**	5.77*
Biceps(mm)	5.9(3.0)	5.2(2.1)	8.5(3.0)	7.3(2.9)	2.94*	4.54*
Triceps(mm)	9.1(3.5)	8.6(3.0)	13.0(3.9)	12.5(3.8)	1.90**	1.57**
Subscapular(mm)	7.7(3.7)	7.8(3.4)	12.5(5.2)	10.7(4.8)	0.50**	3.98*
Suprailliac (mm)	8.3(4.7)	7.9(3.9)	12.5(4.8)	10.2(4.8)	0.85**	6.42*
Medial calf(mm)	11.0(3.4)	10.4(2.7)	13.8(3.6)	12.6(3.3)	2.17*	3.92*
PBF(%)	15.8(4.8)	14.9(3.9)	20.7(5.2)	19.4(4.9)	2.16*	2.87*
FM(kg)	5.5(3.7)	5.6(2.7)	8.3(3.8)	6.7(3.5)	0.26**	4.98*
FFM(kg)	27.8(8.7)	31.6(10.2)	30.1(5.8)	26.4(6.0)	4.57*	7.32*
FMI(kg/m <sup>2</sup> )	2.7(1.5)	2.5(1.0)	3.8(1.5)	3.3(1.4)	1.38**	4.09*
S5S(mm)	41.9(16.8)	40.0(13.1)	60.5(18.5)	53.4(17.0)	1.48**	4.61*

Standard deviations are presented in parentheses

\*- Significant at the 0.05 level

\* \*- Not Significant at the 0.05 level

compared with the PE boys. The NPE girls had significantly greater mean height ( $p < 0.000$ ), weight ( $p < 0.000$ ), MUAC ( $p < 0.000$ ), BMI ( $p < 0.000$ ), biceps ( $p < 0.000$ ), subscapular ( $p < 0.000$ ), suprailiac ( $p < 0.000$ ), medial calf skinfold ( $p < 0.000$ ), PBF ( $p < 0.004$ ), FM ( $p < 0.000$ ), FFM ( $p < 0.000$ ), FMI ( $p < 0.000$ ), S5S ( $p < 0.000$ ) compared with PE girls. The mean differences between NPE and PE boys of all the measurements in each age group were statistically significant at the 0.05 level. The mean differences between NPE and PE girls of all the measurements in each age group were statistically significant at the 0.05 level.

Comparative evaluation of NPE boys and girls revealed that mean of all anthropometric characteristics, PBF, FM, FFM, FMI, S5S was significantly greater among girls compared to the boys. Comparative evaluation of PE boys and girls revealed that mean values of height, weight, MUAC, BMI were significantly greater among the boys, but the mean values of all skinfold measurements, PBF, FM, FFM, FMI, S5S were significantly greater among girls compared with boys.

Comparative study of anthropometric and body composition characters of present data with earlier studies were attempted. Extensive search of literature revealed that there existed only a single previous study on boys (Mukhopadhyay et al., 2005) using the studied parameters and protocols. The comparative study (Table 2) revealed that the mean values of all the anthropometric and body composition characters except subscapular and suprailiac skinfolds of present data of both the boys who undertook physical exercise as well as those who did not undertake physical exercise were higher than those reported by Mukhopadhyay et al. (2005).

Table 2: Comparative study of anthropometric and body composition characters of boys.

Variables	Present study		Mukhopadhyay et al,2005	
	No physical exercise (NPE) n=240	Physical exercise (PE) n=282	No physical exercise (NPE) n=215	Physical exercise (PE) n=313
Height(cm)	141.5(14.0)	147.7(15.6)	144.0(12.9)	145.3(13.8)
Weight(kg)	33.4(11.5)	37.2(12.1)	36.2(10.5)	35.2(10.2)
BMI(kg/m <sup>2</sup> )	16.2(3.3)	16.6(2.6)	17.1(2.8)	16.3(2.2)
Biceps(mm)	5.9(3.0)	5.2(2.1)	5.5(2.7)	4.4(1.4)
Triceps(mm)	9.1(3.5)	8.6(3.0)	7.8(3.5)	6.7(2.3)
Subscapular(mm)	7.7(3.7)	7.8(3.4)	9.6(6.8)	8.0(3.9)
Suprailiac (mm)	8.3(4.7)	7.9(3.9)	10.4(6.7)	8.3(4.2)
Medial calf(mm)	11.0(3.4)	10.4(2.7)	9.2(4.5)	7.6(2.4)
PBF(%)	15.8(4.8)	14.9(3.9)	13.5(5.8)	11.5(3.2)
FM(kg)	5.5(3.7)	5.6(2.7)	5.3(4.5)	4.2(2.2)
FMI(kg/m <sup>2</sup> )	2.7(1.5)	2.5(1.0)	2.4(1.7)	1.9(0.8)

Standard deviations are presented in parentheses.

## DISCUSSION

It is well known that the athletically inclined are apt to have smaller PBF and FM than sedentary individuals (Benke and Wilmore, 1974). It is a common observation that overweight people tend to be physically inactive (Baecke et al., 1983; Kromhout et al., 1988). Triosi et al (1991) had shown that mean BMI and abdomen-hip ratio were significantly lower, even after controlling for age, among US-American men, who undertook regular physical exercise compared with those who did not. In a large epidemiological study conducted in Finland, Rissanen et al. (1991) demonstrated that the prevalence of obesity was inversely associated with physical activity. Phillippaerts et al. (1999) had observed that physical activity during work was inversely related to adiposity in young middle-aged Belgian men. Guo et al. (1999) had found that physical activity was associated with decreases in BMI, PBF and FM among US-American men. Mukhopadhyay et al. (2005) had observed that boys who did not undertake regular physical exercise (NPE) had a significantly greater mean body mass index (BMI), PBF, FM and FMI compared with those who undertook regular physical exercise (PE).

Mean differences of boys, who undertook regular physical exercise (PE), had significantly less subcutaneous adiposity, PBF, FMI and S5S than those boys who did not undertake regular physical exercise (NPE) but mean of BMI is similar between NPE and PE boys. The mean differences of girls, who undertook regular physical exercise (PE), had significantly less BMI, subcutaneous adiposity, PBF, FM, FFM, FMI and S5S than those girls who did not undertake regular physical exercise (NPE).

It clearly demonstrated that boys (who undertook physical exercise) were taller and heavier than the findings of Mukhopadhyay et al (2005). Boys who did not undertake physical exercise were shorter and lighter than the findings of Mukhopadhyay et al. (2005).

It is evident from the studies cited above that there is an inverse relationship, in developed countries as well as in India, between physical exercise and adiposity. There is scanty information on adiposity and body composition with relation of physical activity of adolescents of West Bengal, India. To the best of our knowledge the present investigation on Muslims may be the first from West Bengal, India. Thus, there is a need to develop a database of adolescent adiposity and body composition in relation to physical activity from different parts of the country.

One of the major limitations of our study was lack of detailed information on the physical activity patterns with respect to energy expenditure. Future studies should consider this very important aspect. Hitherto, such investigations are lacking from India. Since India is a land of vast ethnic heterogeneity, similar studies should be undertaken on the

diverse ethnic populations in the country incorporating adiposity and energy expenditure.

We hereby conclude that there is a decrease in adiposity, subcutaneous fat content and body composition in almost all ages of PE boys and girls compared to the children who did not undertake regular physical exercise resulting from non sedentary lifestyle.

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## **Feeding Gods and Serving Guests –Food as the Expression of Love, Sacrifice and Hospitality in Chamba District, Himachal Pradesh**

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**Abstract:** Food is considered as an integral part of a society and its culture. For anthropologists, food does not just refer to the edible items in general sense of the term, but spans beyond a product that sustains life. Food also has a cultural dimension and thus, anthropologists study food from different perspectives whether it is social, economic or biological. Different cultures bring to foreground different foods. Similarly, a plethora of festivals introduce us to a plethora of unique food items. Due to food's importance in our lives, it has become a part of rituals, especially in India; there is a deep-rooted tradition of offering food to gods. The concept of hospitality and sacrifice also involves food serving, sharing and feasting. The importance of food in religion and its inter-relationship with society and culture is discussed in this paper.

*Key words:* Food offerings, gods, guests, hospitality, sacrifice, religious beliefs, food preparation, food taboos, festivals

### INTRODUCTION

Food is whatever the five senses absorb. Sight and smell, sound and touch that go in through the ears, eyes, nose, mouth and skin, affect body and mind. Food is important because it is visible and vibrant energy that influences us physically, emotionally and spiritually. Food is not only a product that sustains life but has far widening cultural dimensions. There are cultural differences in food owing to the fact that every society has its own beliefs, norms and values associated with its food habits. Due to the centrality of food in our lives, it has become a significant component for rituals. Food is an important part of paying tribute to God. A prayer of thanks to God before eating is an important ritual in Christian homes. *Arya Samajis*, proponents of formless power, offer food to fire as a mark of respect and gratitude. Offering food to fire, cow, crow, dog or a poor person is recommended in scriptures as *bhuta yajna*. Sharing develops cosmic love and a feeling of oneness. Anything offered to God becomes *prasada* and acquires the ability to purify body, mind and spirit (Burman, 2016). In the Indian states, food offerings to God in many forms is a regular practice by a variety of communities practicing different religions. To cite an example, Himachal Pradesh is revered world over as the "Land of Gods", having diverse religious beliefs and practices. Throughout the length and breadth of the state, there is an ancient and deep-rooted tradition of offering food to gods and other deities. The major religion of the land is Hinduism and according to Hindu ritual system, offering to God is a way of thanking Him.

Moreover, Hindu *Shastras* also substantiate this belief by asserting that eating food without offering to God amounts to stealing. Thus, food plays an important role in Hindu religion as shown by Mauss and Evans-Pritchard (1967) who examined the significance of food as a gift in Hindu rituals and that this gift returns in the next life to the donor.

Food is not only symbolic to religions but also marks certain celebrations. Different festivals have their own significance and are associated with peculiar and specific food. These festivals have been in vogue for ages and have been looked forward to with unwavering faith and enthusiasm. The concept of sacrificial food is also associated with these festivals.

Every society possess a unique aspect of hospitality and, in India, it is based on the principle of "*Atithi Devo Bhava*" (meaning the guest is like God). Every society welcomes guests and serves them with all kind of foods, specific to their culture.

A large number of traditional foods and beverages are prepared in rural and tribal areas of Himachal Pradesh. These traditional products are unique to Himachal and some of the traditional foods still form a staple diet of a sizeable population of the state. Some foods and beverages are also prepared during special occasions and constitute an important part of culture and tradition of the state. Cereal and legume based foods and beverages are most popular followed by fruit, vegetable and milk based products. The preparation of most of these foods and beverages involves fermentation of raw materials available in the region. The practice of consuming traditional foods in the state is largely linked with the availability of raw materials, and specific environmental conditions and varies in different ethnic groups. A study done by Sharma et al. (2006) based on NSSO data for the years 1977-78, 1987-88, 1993-94 and 1999-2000; showed that in rural areas, cereals dominated the food expenditure followed by milk and milk products, whereas the non-vegetarian food items had been given the least priority over the years.

#### *Theoretical background of food studies in Anthropology*

The study of food in anthropology involves simultaneous consideration of both culture and biology. Food and culture studies emphasize the social and symbolic dimensions of food to gather insights about gender, class, political economy, power, cultural ideology and cultural identity (Counihan and Van Esterik, 1997). Many early ethnographers paid attention to food habits because food is a central focus of economy in most cultures. Mauss and Evans-Pritchard (1967) directed our attention to the importance of giving, receiving, and repaying in initiating, maintaining, or breaking social and political relationships, and reminded us of how often food is a key substance in exchanges. Food gifts establish obligations of reciprocity in recipients whether they are gods or humans. Richards (1932) was the first anthropologist to do an empirical study centered on food. She took a functionalist approach to food



and examined the interconnectedness of food-centered production, distribution, consumption and beliefs.

Studies in anthropology of food began in the 1960s with the remarkable work of Strauss (1969) who introduced the idea of 'gustatory code', which refers to the predominance of food symbols and metaphors in human expression. Mary Douglas (1966) demonstrated how food ways revealed concepts of purity and pollution and constructed social boundaries in diverse cultural settings, most prominently in her study of Jewish dietary law. Harris (1985) responded to their work by arguing explicitly that food habits exist for utilitarian purposes. 'Preferred foods (good to eat) are benefits over costs than foods that are avoided (bad to eat). Goody (1982) focused explicitly on the role of food ways in constituting class relations by examining the conditions for the emergence of high and low cuisine among some African, European, and Asian cultures. Weismantel (1988) showed how specific food behaviors identify class and race in Highland Ecuador. Counihan (1999) mentioned that food is intimately connected with the definition and assertion of gender identity in many cultures. In all cultures, gender relations are clearly expressed through the attitudes of men and women towards eating, feeding and the body.

Similarly, Babb (1970) studied the practice of food offering to deities, Ferro-Luzzi (1975) studied South Indian system of food preferences and food avoidances in Tamil Nadu, while Khare (1976) analyzed the Hindu system of food consumption. Richards (1932) conducted a study on land, labour, diet and hunger in South Africa in which she examined the role of food in economic and nutritional dimensions along with its importance in social relationships. Malinowski (1935) is of the view that food plays a great role in shaping a society through food production, distribution and utilization.

The objective of this paper is to study the factors influencing the food offerings to God and guests, and to document the taboos related to food practices. The researchers also delved deep into the hierarchy involved in food preparation and food consumption patterns. The traditional and popular food items of the region have also been included in the study. The focus is to study the inter-relationship of food and culture with special reference to festive food coupled with the concepts of sharing, feeding, and hospitality among various groups. The researchers have also made an attempt to find out whether animal sacrifices are still practiced in the region despite hon'ble High Court's ban on animal killing for appeasing gods.

#### RESEARCH METHODOLOGY

In order to understand the cultural significance of food and the concept of feeding and sharing among various communities, interviews were conducted with temple officials and other village people to gather information about deep-rooted traditional religious practices related to the offering of food to gods, before consumption.

### *Area of the study*

Himachal Pradesh is a state in Northern India, which is famous for its scenic beauty. Himachal Pradesh is known as '*Dev Bhoomi*' meaning 'the land of Gods'. The cuisine of the state has been developed keeping in mind the geographical and climatic conditions of the state. The staple foods of the people of Himachal Pradesh are rice, wheat and maize but one can find local variations due to the pattern of food production and altitudinal variation. The traditional meal of Himachal Pradesh is the usual boiled rice, *roti*/chapati, a preparation of vegetables (*sabzi*) and a *dal* (lentil). Special food preparations have been developed for ceremonial occasions as well as for pediatric and other dietary purposes. The local inhabitants are consuming these dishes since time immemorial and these form a part of socio-cultural life of the hill people.

People of hills are generally carefree and happy-go-lucky. The hardships of the region have considerably influenced the social life of hill people. They often have the prospects of having fun as and when, a fair is held or a festival is observed. By attending a fair, and participating in songs and dances in the fair they experience good recreation and can recharge themselves.

There are a number of fairs held throughout the year and one can watch the colorful hill people at their joyous best. Most of these fairs are held in commemoration of some event, the origin of which is lost in the legends. Some main fairs and festivals of Himachal Pradesh are *Minjars*, *Suhi* fair, *lavi* fair, *Brahmaur-Jatra*, *Renuka* fair, *Kullu Dussehra*, *Kangra* fair, *Koti* fair, *Nahr* fair, *Shivratri* fair, *Nalwari* fair, *Jwalamukhi* fair, *natwar* fair, *Phul Yatra* fair.

Various colorful festivals are an important part of the cultural life of the people of Himachal Pradesh. They have a distinct cultural, religious, social and educational identity. Many of these festivals are derived from the sectarian Hinduism of the period after the migration of the Rajput people from the plains to these hills. This led to the introduction of festivals like *Holi*, *Dussehra* and *Diwali*, which are connected with the worship of Shiva and *Shakti* while others are associated with pilgrimage centre, dedicated to a deity or a religious person. Change of seasons has also played an important part in shaping and timing of the festivals of the state. Each season is marked by appropriate festivals in which the ceremonies and celebrations are influenced by the climatic needs or other characteristics of the season. The whole region is full of mystic vibrations and has been mythologically painted as the land of divine spirits.

According to Census 2011, Himachal Pradesh has over 20,118 villages with over 26,500 places of worship. Among several interesting social practices prevalent in the hill society, especially in places of higher altitude, the institution of village Gods is the most remarkable one. Since, long the Himalayas have been considered as the abode of mythological races, gods, spirits and snow. Lord Shiva, Kuber, Narayana and other deities mediate on various peaks of these mountains.

The present study was undertaken in Chamba district of Himachal Pradesh. Since it was not possible to cover the whole area, the study was conducted among people of villages Sarol, Haripur, and Rajpura including Chamba town. For this study, the process of data collection was conducted through interviews, schedule and observations among people of various groups. In-depth interviews of 60 respondents were conducted from caste groups which included Brahman, Rajput, Mahajan, Khatri and Muslims. The selection of these respondents was at random, including both males and females, belonging to several age, caste and religious groups. Through interviews with the selected respondents, the researchers could reach out to other people through snowball sampling, keeping in mind the purpose of the study.

#### RESEARCH FINDINGS

Table 1 shows a profile of food habits of study ethnic groups.

Table 1. *Food habits of ethnic groups under study*

ETHNIC GROUP	VEGETARIAN	NON-VEGETARIAN	DAIRY PRODUCTS	ALCOHOLIC BEVERAGES
Brahman	Mostly vegetarian (rice, wheat, cereals and maize)	Depends on climatic conditions (Meat, Fish)		Alcoholism is not a common practice
Rajput	Wheat, maize, rice, pulses ( <i>mah, moong, rajmah</i> ) and vegetables	Meat, fish, chicken	Milk, <i>Lassi</i> , curd and butter	Drinks are normally purchased from the local market
Khatri	Wheat and rice, maize. Various types of pulses: <i>moong</i> , peas, beans, <i>rajmah</i> and grams	Non- vegetarian foods are not eaten during death pollution.	Milk and milk products i.e. <i>paneer, lassi, kheer</i> , etc., are frequently eaten	Not consumed
Mahajan	Wheat, maize and rice. Various types of pulses are consumed, viz., <i>moong</i> , peas, gram and beans along with different seasonal vegetables	Many of them abstain from non-vegetarian diet and liquor	Milk and milk products are consumed frequently.	Consume liquor purchased from the market, also includes tea and coffee
Muslims	Staple diet consists of maize, chapati, pulses and vegetables	Mostly non-vegetarian	Milk and milk products like <i>lassi</i> and <i>dahi</i> also form a part of their diet	Not consumed

#### 1. Food offered to Gods:

According to Hinduism, food is a gift from God and should be treated with great respect. Hindu devotees offer food to the God and they keep in mind what food is to be offered and what not. According to Vedic scriptures, all food should be offered as a sacrifice to the God before it is eaten, and food offered to the God (*prasada*) is considered to bestow religious merit that helps in purifying body, mind and soul. Not only in Hinduism, nearly in all religions, food is offered to God before consumption.

To show the importance of love and devotion in preparation of *prasadam*, one of the Brahmin informants mentioned verses/ texts from Bhagavad Gita:

*patram puspam phalam toyam yo me bhaktya prayacchati  
tad aham bhaktya -upahrtam asnami prayatatmanah*" (Chapter 9, Text 26)

(If one offers Me with love and devotion a leaf, a flower, a fruit or water, I will accept it.) Further, Sri Krsna explains that the important element, in preparation, in serving and in offering, is to act with love for God.

Mentioning the purpose of food and acceptance of food by the God, the priest of one of the temples quoted the verse of Bhagavad Gita:

*yata-yamam gata-rasam puti paryusitam ca yat  
ucchistam api camedhyam bhojanam tamasa-priyam* (Chapter 17, text 10)

(Food prepared more than three hours before being eaten, food that is tasteless, decomposed and putrid, and food consisting of remnants and untouchable things is dear to those in the mode of darkness.)

The purpose of food is to increase the duration of life, purify the mind and aid bodily strength. In Bhagavad-Gita, the Supreme Lord says that He accepts preparations of vegetables, flour and milk when offered with devotion. Of course, devotion and love are the chief things which the Supreme Personality of Godhead accepts. But it is also mentioned that the *prasadam* should be prepared in a particular way. Any food prepared by the injunctions of the scripture and offered to the Supreme Personality of Godhead can be taken even if prepared long, long ago, because such food is transcendental. Therefore, to make food antiseptic, eatable and palatable for all persons, one should offer food to the Supreme Personality of Godhead.

Preparation of food: Food which is to be offered to deities is prepared by Brahmin priests who are in local language called *boti*. They wear their traditional dress typical of their religion and prepare food in a sacred place. Entry of outsiders is strictly prohibited inside the sacred area by a *Kaar* (a white powdery line). This food is prepared on traditional *Chulhas* (a small earthen or brick hearth) and not on the modern gas stoves. Only males prepare food in this temple. The food is offered to God by Brahmin priests on behalf of the people. Special *puja* (worship) songs are sung and *nagada* and *saila* (musical instruments) are played while offering food. After the food is offered, the door of the temple remains closed for a few hours after which, it is re-opened.

The food for deity is prepared in utensils called *baltoi* and *charuwa* which are huge utensils made of copper and brass. This is the ritualistic way of preparing food in Laxmi Narayan temple. Here, the color of the food is not specific. Both *kaccha* (raw) and *pakka* (cooked) food is offered by devotees along with other items. Onion and garlic form the major taboo as these are not to be included in the food offered to deities in this temple. History of the temples along with the names of the deities present and the list of food and other offerings are given in Table 2 (a thru g).

## 2. Food served to guests

In Indian culture, food comes across as an expression of love. This love is

however, not demonstrated through the quantity in one's plate, but the care, sincerity, purity and love with which it is prepared.

The food that is prepared in the honor of guests commands a lot of host's time, love, energy and efforts. It is the reflection of one's thoughts and attitudes towards those who enter the homes. Therefore, whenever Indian households are encountered with an unexpected guest even at an inopportune time, it is not taken as an inconvenience, but rather as an opportunity to truly lay down respect and whole heartedly welcome the guest. A shared meal is the activity most closely tied to the reality of God's Kingdom, just as it is the most basic expression of hospitality. People of Chamba are very hospitable. They make their guests comfortable and offer variety of foods. There is special attention to the type of utensils used for the guests and they generally vary. The guests are served with a variety of food items. Besides they are also served with liquor based on the guest's demand. The guests are served with both vegetarian and non-vegetarian food products depending upon one's preference. *Dham* which is also known as *Chambeyali Dham* is served nearly on every occasion.

#### *Traditional food of Chamba - Dham*

*Dham* is a full fledged meal which is served on all special occasion like marriage, child birth or festivals. It includes plain rice, fried pulses or *dal*, *rajmah* (spicy vegetable curry of red kidney beans). *Rajmah* (boiled) are cooked in *dahi* (yogurt), which is followed by *khatta* made of tamarind and jaggery. It ends with *kheer* (rice pudding). It is prepared in special utensils called *baltoi* and *charuwa*, which are kept in a straight line and cooked simultaneously in separate utensils which are usually made of brass or copper. This traditional dish is prepared by '*Botis*' who are the Brahmin Chefs of Himachal Pradesh. *Dham* is

#### 2.a. Laxmi Narayan Temple

HISTORY/ ABOUT	NAME OF DEITIES PRESENT IN TEMPLE	LIST OF FOOD AND OTHER OFFERINGS
Most famous temple devoted to God Vishnu and Shiva. Ancient temple built in 10-11th century and is both architectural marvel as well as a place of great historical significance. It consists of a number of small temples inside the temple premises, which form a temple complex or more correctly called sacred complex, a term introduced by Vidyarthi (1961)	Chamunda Champavati Sitaram Bansi Gopal Hanuman Laxmi damodar Chandragupta Radhakrishan Hari rai Gauri shankar Laxmi nath Suhi mata Brijeshwari mata Chandrashekhar Barewali mata Bhalai mata	In the afternoon, deities are offered " <i>Dham</i> ", which is the traditional food of Chamba and consists of rice, split yellow lentils, split black gram, chickpeas, tamarind sauce, followed by rice pudding and then betel nut. At night, <i>poori</i> (deep fried Indian bread made of wheat flour), <i>vadaa</i> (snack either doughnut or disc shaped), <i>rabri</i> (sweet Indian cuisine) are offered to the deity.



Figure 1. Photos showing the preparation of food in Laxmi Narayan temple, Chamba.



Figure 2. Utensils used for preparing food for deities in the temple

## 2.b. Kali Mata Temple

HISTORY/ ABOUT	NAME OF DEITIES PRESENT IN TEMPLE	LIST OF FOOD AND OTHER OFFERINGS
Some years ago, during construction of a road in the village, a <i>trishool</i> (Trident) embedded in a big stone fell down. The people were said to have dreamt and that all miseries and deaths in village were due to the falling down of this <i>trishool</i> . After that, this symbolic <i>trishool</i> was taken to a higher place and a temple was brought to life.	This is a very small temple, on the roadside of village Rajpura in Chamba, less frequently visited by devotees. The Kali, also known as <i>Kalika</i> is the Hindu goddess associated with power or <i>Shakti</i> . Kali is the goddess of time, change, power and destruction. This small temple has walls painted with some pictures of Goddess Kali showing her strength and valour. Animal sacrifice is often associated with Kali <i>puja</i> (worship) but villagers claimed of no such activity in this temple.	Food offerings to the deity include <i>halwa</i> (sweet dish), <i>maah ki dal</i> (Black gram lentils), <i>mithi fullian</i> (packed <i>prasad</i> ), <i>mithe roti</i> (sweetened Chapati), and <i>choorma</i> (sweet dish made of wheat flour, ghee and sugar). Raw rice and maize are also offered.

## 2.c. Shakti Mata Temple

HISTORY/ ABOUT	NAME OF DEITIES PRESENT IN TEMPLE	LIST OF FOOD AND OTHER OFFERINGS
This is an ancient temple that dates back to some thousand years. The inner structure of temple is very traditional and historic with wooden roof at the top (which is seen nearly in all temples, including Laxmi Narayan temple. This could be to facilitate the snow in sliding down).	Shakti Mata	The food offered to deity includes packed <i>prasad</i> , raw rice, sugar and fruits. <i>Poori</i> (Deep fried Indian bread made of wheat flour), and <i>kheer</i> (rice pudding) are first offered to God and thereafter, distributed among devotees. Here also, the food which is to be offered to God is prepared on traditional <i>chulhas</i> .

## 2.d. Shiv Temple

HISTORY/ ABOUT	NAME OF DEITIES PRESENT IN TEMPLE	LIST OF FOOD AND OTHER OFFERINGS
This is a small ancient temple situated in the centre of the village. It possesses marvelous architecture and the walls are sketched with the pictures of Lord Shiva holding <i>damroo</i> (drum) in his hand. Shiva, meaning 'the Auspicious One'- also known as Mahadeva (great God) is one of the main deities of Hinduism.	Lord Shiva. There is a small image of <i>Shivling</i> kept in the temple.	Offerings include coconut, milk, and <i>khichdi</i> (dish of rice and lentils). Maize and wheat are also offered to God after every new harvest and before consumption by the family. No animal sacrifice is practiced in the temple.

## 2.e. Hazrat Syed Data Jamal Shah Dargah

HISTORY/ ABOUT	NAME OF DEITIES PRESENT IN TEMPLE	LIST OF FOOD AND OTHER OFFERINGS
This <i>dargah</i> ( <i>shrine</i> ) is situated in village Rajpura where Data Jamal Shah had once upon a time taken <i>samadhi</i> (a tomb) and was buried alive as per His wish. In the <i>dargah</i> , there is a <i>madrassa</i> where <i>urdu taleem</i> (training) is given to Muslim children.	Data Jamal shah	Here, there is a tradition of animal sacrifice, mainly of sheep and goat, on the fulfillment of <i>mannat</i> (wish). The offerings usually depend on the oaths taken by the individuals or families. There is a separate kitchen to prepare food and there are specific cooks engaged in this work. Besides this, sweet rice with dry fruits are also cooked. <i>Biryani</i> (made with rice) and Chicken Changezi are delicious and spicy mughlai dishes prepared here. The latter is a side dish with rich gravy and full of mughlai aroma. It is very famous across north India. All types of meat are also cooked and distributed among the devotees.



## 2.f. Chamunda Devi Temple

HISTORY/ ABOUT	NAME OF DEITIES PRESENT IN TEMPLE	LIST OF FOOD AND OTHER OFFERINGS
This is situated on the hilltop of Chamba, and consists of about 150 stairs that lead to the main temple. A festival is held every year for 15 days after the culmination of <i>Suhi Mata</i> fair.	Chamunda Devi. The deity Suhi Mata has a sister called ' <i>Bairegarh wali Mata</i> ' who is believed to visit households before arriving at the temple.	Offerings include <i>halwa</i> (Sweet Indian dish made of milk, almonds, sugar, wheat flour and oil), <i>sanjh</i> (sweetened chapati made of wheat flour, jaggery and oil).

## 2.g. Suhi Mata Temple

HISTORY/ ABOUT	NAME OF DEITIES PRESENT IN TEMPLE	LIST OF FOOD AND OTHER OFFERINGS
<i>Suhi Mata</i> temple is situated at the hilltop of Chamba town (without any shelter). This temple was built in the memory of <i>Rani Sunaina</i> , who sacrificed her life for water. During that period, Chamba was experiencing a severe drought and it was felt that perhaps, a sacrifice was needed to break the spell. Therefore, <i>Rani Sunaina</i> was buried at that place from which, according to the belief, showers of finally water emanated.	Suhi Mata	In her remembrance, <i>Suhi Mata Fair</i> is held every year in April for 3 days. Men are restrained from this festival as it is a strictly female endeavour. In this temple, ' <i>Chambeyali dham</i> ', <i>halwa</i> (Sweet Indian dish made of milk, almonds, sugar, wheat flour and oil), <i>sanjh</i> (sweetened chapati made of wheat flour, jaggery and oil) are offered to God. Snacks include <i>khatte pakodu</i> made out of <i>dal</i> (lentils) and <i>imli</i> (tamarind), <i>rajma</i> (red kidney beans), <i>papad</i> , <i>gulab jamun</i> (sweet dish) etc., are prepared during this festival

served firstly to God and thereafter served to all in plates made up of leaves or in plastic plates as preferred today.

*Other food items served to guests*

Guests may include head of the village, temple priests, members of in-law's family, other close family relatives and friends. People hold guests in high esteem and almost revere them as God and thus try their best to serve them with love and affection. Their kindness can be felt from the food they offer to guests. Following are some of the most commonly served food items to guests:

- *Halwa* (sweet Indian dish made of almonds, sugar, wheat flour and oil), *poori* (deep fried Indian bread made of wheat flour), *paneer* (cheese), *makki ki roti* (Chapati made from maize flour), *karhi*, *dal*(lentils), *kheer* (rice pudding), *seviyan* (Vermicelli), etc.
- *Babru and chabru*, which are fried discs made from fermented wheat flour (both sweet and sour) are served to deities as well as to the guests.
- *Saanjh*, also called 'sweetened chapati' made of wheat flour and *jaggary* is offered to deity and thereafter consumed by villagers during *Navratras*.
- *Chamba Jarees, Chukh* and Pickle: Chamba is very famous for its handmade *jarees, chukh* and pickles. These are also served to guests. *Jarees* is a mouth freshener made up of chopped dry coconut, *saunf* (aniseed), *elaichi* (cardamom), *supari* (betel nut) and *misri*(rock sugar). *Chukh* is a handmade pickle made from chilies, lime juice, salt and mustard oil. Chamba honey is also famous and all believed to be good for digestion.

The hosts give the guests a warm send off at the time of departure from the house/village. The hosts either give *Prasad*, that was earlier offered to a God, if they (guests) visited on the occasion of religious activities or eatables, especially prepared for guests, when they visited on special occasions. They escort the guest upto some point (distance) and some have tears of departure in their eyes. The sense of fellow-feeling is imbibed among them.

*'Guests- symbol of God'*

It was observed that people consider guests as symbol of God. When they were asked about why they treat their guests as God, they replied that the belief was rooted in their upbringing. They welcome their guests with honor and respect. They further validated this statement by saying that they prepare food for guests with as much purity and love as they would make for God. They consume food only after the guests have finished their meals. The most important thing to look upon is that they are of belief that to serve food to guests is equivalent to serve food to God.

When someone visits village, especially for the first time or for an occasion, whether relatives or non-relative, they welcome them as guests. Though, all visitors are treated equally, family of son-in-law and brother-in-

law are given special treatment. On enquiring about food preparation and serving differences amongst relatives and non-relatives, interestingly it was found that it depends upon the current economic status of the family. They further explained that in most of the times when guests visit on social gatherings and community feasting, the preparations are done in advance and guests are made to eat with the head priest, village head, etc. If the guests come uninformed, especially the family of son-in-law or affinal kins, money is also borrowed from neighbors so that the guests are treated with love and respect. If it is already known that the guests are visiting, attempts are made that food of their choice is prepared.

#### *Food during different phases of life*

On birth: Child births mark auspicious occasions and are commemorated by distributing sweets and preparing *halwa*. *Panjeeri* (made from wheat flour fried in sugar and ghee, heavily laced with dried fruits) is also prepared on this occasion. *Kheer*, which is a sweet dish made of rice and milk, is brought from famous Laxmi Narayan Temple and fed to the child after 6 months. After the birth of a child, the mother is given sweet and healthy food products for 24 days.

On death: Following a death, the family has to follow few acts of mourning that include not greeting anyone, consuming simple food for first ten days, etc. During death ceremonies, people do not enter the temple and thus no *puja* (worship) is performed for the first 10 days after death. A feast (*dham*) is prepared by the deceased's relatives on the day of final rites.

#### *Food Taboos*

Every food in each culture has a special meaning. Several food items were tabooed on religious grounds. Food stuffs, believed to be spoiled by the sight of an out caste, or by preservation for long, or by coming in contact with an impure thing, or which caused disgust to the heart were also usually forbidden. In some cultures, non-vegetarian foods are restricted from consumption while this practice may or may not exist in another culture. Food is associated with social, religious and cultural beliefs and thus, shapes any society.

For instance, cow slaughter is not practiced among Hindus in India, as in Hinduism cow is considered immensely sacred while in other cultures, beef is consumed without such restrictions.

In Chamba, according to a Hindu believer, meat and eggs are restricted and not to be offered in their village to a deity. Onion and garlic also form food taboos and are never included in foods to be offered to dieties. In certain temples, the food which is offered to God is meant to be consumed by females but not by males. This is a tradition seen in Suhi Mata temple.

Restrictions on entry in the temple: There are taboos associated with men and women, as well. Women were not allowed to visit temple in the past during

the period of menstruation, based on the concept of purity and impurity. There are taboos associated with festivals. For instance, in Suhi Mata fair, although the males may accompany the females during the whole journey but they were not allowed to enter the sacred place. But with time, all these taboos have faded away.

#### *Food during Fairs and Festivals*

The fairs and ceremonies arranged with a view to propitiate the village gods are called *jatras*. *Jatra or Yatra* is indicative of setting off journey to a pilgrimage with specific purpose to express thankfulness to gods on a particular wish fulfillment. *Jatra* festivals are very common in Chamba, Shimla and Sirmaur districts. In Chamba, Minjar fair and Suhi Mata fair are highly famous and celebrated with full faith and enthusiasm. Name of festival, time of celebration, main attraction and food associated with festivals are given in Table 3.

#### *Animal Sacrifice*

Animal Sacrifice has long been practiced in many parts of Himachal Pradesh. In places like Chamba, it is a common practice among people to sacrifice animals in order to appease deities. Animal sacrifices are performed in temples of *Nirmand* and *Anni* in Kullu (Himachal Pradesh). In Mandi (Himachal Pradesh), devotees sacrifice goats on the occasion of *Ashtmi* and at *Shillai*. In Sirmaur district, goats and sheep are slaughtered during the festival season. But recently, in a landmark judgment, the Himachal Pradesh High Court on 1<sup>st</sup> September, 2014 banned the sacrifice of animals in temples in the state asserting:

“No person throughout the state shall sacrifice any animal in any place of public religious worship, including all land and buildings near such places of religious worship which are ordinarily connected to religious purposes.”

As mentioned earlier, Himachal Pradesh spawns over 20,000 villages, with nearly 27,000 places of worship. This reflects people's religious beliefs and such offerings are a common affair on the fulfilment of wishes, and said animals are sacrificed on the orders of deities, as per their belief. Therefore, the impact of such a ban on people's religious beliefs and tradition of animal sacrifice was hardly to be noticed among the people of Chamba.

In Kali Mata temple, sheep and goat are still sacrificed in the name of appeasing gods. However, in *Chamunda* Devi temple, earlier there used to be a deep-rooted tradition of animal sacrifice but it has been discontinued now. Animal sacrifice is mainly seen during festivals and other religious occasions. It remains a fight between faith and law as for some people it is very difficult to give up their ritualistic practice.

Among Muslims, the concept of *bali* or animal sacrifice forms an important part of their rituals. In Chamba also, animal sacrifice is practiced in a *dargah*.

Table 3: Name of festival, time of celebration, main attraction and food associated with festivals

NAME OF FESTIVAL (LOCAL TERMS)	TIME OF CELEBRATION/ DURATION	DESCRIPTION/MAIN ATTRACTIONS	FOOD ASSOCIATED
Suhi Mata festival ( <i>mela</i> )	Suhi Mata Mela is held in the month of April at Suhi Mata Temple. The main festival is of 3 days. However, earlier it used to be of 15 days.	The fair commemorates Suhi Mata, a beloved deity of the region. Women gather and indulge in singing and dancing. There is merry-making everywhere. Gaddi women from Bharmour and other areas also participate in this festival. They wear traditional dresses during the festival. Cultural programmes are also held. Avoidances: Suhi Mata fair is the event which is an all women affair. Hence, men are restrained from gaining entry into the temple. Changes: Earlier <i>Rajas</i> used to be the chief guests of the festival but now VIPs' and other Ministers commemorate this festival.	Snacks like ' <i>khatte pakodu</i> ' (sour fritters), <i>rajma</i> (red kidney beans), <i>sukdi</i> (a sweet made from wheat flour and jaggery in ghee), <i>papad</i> , <i>gulab jamun</i> (milk-solids-based sweet dish) etc., are prepared and served during the festival. Besides these, sweet rice/ <i>pulao</i> cooked at home are carried by people in <i>baltoi</i> (a large utensil made of brass or copper) to the temple (usually by the couple after marriage) marking their belief in the deity.
Minjar festival ( <i>mela</i> )	The second most famous festival of Chamba. Organized in the month of August (on second Sunday of <i>sawan</i> i.e. <i>Bikrami / Sharavan month</i> ) in order to thank the Almighty and seek blessings for a good yield. This festival stretches for a week.	This festival was initially celebrated to mark the return of the victorious King of Chamba. People greeted him with tufts of paddy and maize, as a gift to symbolize prosperity and happiness. The main highlights of the festival are folk dances and singing. These offerings are then immersed into the river along with some food items. The color of the <i>Minjar</i> , consisting of a bunch of paddy plant and golden silk wrapped in red fabric, ranges widely from red, yellow, green but mainly of golden <i>zari</i> .	The food offerings include seasonal fruit, coconut, money, etc. Earlier buffaloes were sacrificed but now this practice has been discontinued after the ban. <i>Babru</i> (fried sweet cakes of wheat flour) is cooked and served during this festival.

Lohri	January	lohri is celebrated differently in accordance with the ancient tradition. Here, people indulge in symbolic battle and capture the bonfire called as 'Marhi' in local language.	On the day of Lohri, people prepare <i>Khichdi</i> and serve it fondly to other people. They also distribute popcorns and other food items
Baisakhi ( <i>basoa</i> )	January	This is an important agrarian festival celebrated all over Chamba.	Food associated with this festival includes <i>Pindri</i> (made of jaggery), <i>Gudiani</i> (somewhat similar to <i>Pindri</i> , also made from jaggery), <i>Kodra</i> (made out of seeds of <i>Kodra</i> plant, usually considered pure to cook on this festive day).
Nawala-sawala		It is the family celebration of people of Chamba. This festival is associated with Lord Shiva, a Hindu deity. Here, <i>Sawala</i> means closing of ceremony of <i>nawala</i> (which is a thanks giving ceremony to Lord Shiva, who is worshipped at the time of misfortune). In this ritual, a necklace (or <i>maala</i> ) is kept in a cloth (so as to tie cloth usually with red cloth surrounded with golden border). This is then tied up to the roof after seeking a wish. In case, the wish is fulfilled then this knotted cloth is brought down and again tied to the roof after seeking another wish. However, in order to discontinue this cycle of ritual, this tied material is brought down and eventually dropped into the river with some food items in the name of the deity which mark the closing of the ceremony	

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Shivratri	Festival associated with Lord Shiva, which is celebrated for 3 days	The day-long fast is opened at night by eating <i>Khichdi</i> , <i>dham</i> , or by drinking <i>chamnamrit</i> (holy water). At night, prayers are held in the name of the deity in the famous Laxmi Narayan temple. Fasting is done simply to express love for God- that He is more important to us than our daily bread. Fasting can be seen as an expression of finding greatest pleasure in God's reverence. It shows that people love God more than food and seeking Him holds dearer to them than eating.
<hr/>		
Chaundi Dehra	April end for 3 days	This is a Mela held at Chamunda Devi temple. Mata's sister is believed to be living in Bairegarh (called <i>Bairen wali</i> ) who comes to the temple with full embellishment ( <i>Dhol Ngaade</i> ) from Chamba located at 90 kms distance, after having short stays and food at different houses.

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### *Food Preparation*

Trends of food preparation shows that 40% of people still use traditional *chulhas* for preparing food while rest of the people either use gas stoves or prefer induction stoves. Pressure cooker is mostly preferred by women for cooking, as it requires less time to prepare, and is easier to handle as compared to traditional utensils.

The process of westernization and modernization has affected the preparation of traditional and famous foods of Chamba. Earlier traditional food items of Chamba were cooked on *chulhas* but now gas stoves are preferred, which, however, lack the traditional and authentic flavor.

### *Caste hierarchy and sharing of food among communities:*

Caste hierarchy is prevalent in Himachal Pradesh. Regarding *dham* (community dining), first food is served to the people of upper caste followed

by lower caste group. Also, when community dining is hosted by lower caste group, upper caste only eats when the food is prepared by their caste group. In other words, lower caste people are not allowed to cook and serve the food to upper caste people.

It is often believed that eating together within the same caste groups in a spirit of love, celebrates oneness of humankind. By sharing *dham* together, they celebrate oneness as a human family, taking another step towards making the world a more peaceful, loving place.

#### IN SUMMING UP

The marvelous architecture of Chamba town is exemplified through the famous Laxmi Narayan Temple. The residents of Chamba are fierce believers in God and highly value their religious beliefs and practices. They worship all deities irrespective of their religion. In every religion, the practice of food offerings to God before eating is well documented. In Chamba, various temples like *Laxmi Narayan* temple and *Suhi* Mata temple, follow a deep rooted tradition of food offerings to God. These offerings often include Chamba's traditional food called *Chambeyali Dham*. This food is prepared in special utensils called *baltoi* and *charuwa*, which are large utensils made of brass and copper. The food for the deity is prepared on traditional *chulhas* rather than modern day gas stoves. These food offerings also include major food taboos, for instance, onion and garlic are never included in the preparations.

The people of Chamba are very hospitable and serve guests with the most delectable food. Close family relatives are preferred over other guests and are served in special plates/utensils. They are spoilt for choices in terms of the number and variety of dishes.

The residents of Chamba are also very fond of festivals and celebrate festivals with great mirth and enthusiasm. Festivals show great integration of food and culture. Specific food products are associated with specific religious ceremonies and occasions. Some offerings are related to harvesting season, for instance, maize is offered to God to thank Him and seeks His blessings for a good yield while *Dham*, is a full-fledged meal is offered to God and served in marriages and other special occasions. Food items made of sugar/ jaggary are mostly offered to gods and goddesses and, used in many religious ceremonies because they are considered holy and have been in vogue since ancient times. Moreover, the consumption of food is regulated by climatic conditions. They harvest maize and consume it in winters. Their diet also includes wheat products such as *babru*, *halwa*, *seviyan*, which are mainly prepared on Baisakhi festival. Besides these, milk made products include *kheer* (a sweet dish) which is served on various occasions including child birth. Their diet also includes various pulses, for example, *moong dal*, *mah dal*, etc. *Khichdi* is prepared



on Lohri festival. From the food classification, it is apparent that wheat based products are more commonly offered to the deities.

The religious tradition of animal sacrifices in festivals and sacred places has been observed since times immemorial and thus in spite of hon'ble High Court's ban, sources revealed that animal sacrifice is still practiced at some places in Chamba including a *Dargah* situated in the village.

The wide array of traditions and practices practiced at Chamba show a marked change with the advent of technology and modernization. Trends of food preparation indicate that 40% of people still use traditional *chulhas* while the rest either use gas stoves or prefer induction stoves because of the ease and less time consumption, and thus the traditional food of Chamba is losing its authentic flavor. Earlier the kings of Chamba used to commemorate festivals from their palaces but now, VIP's and Ministers become the honored guests. Various cultural programmes and fun events are also organized. These fairs and festivals are the backbone of their culture that flourishes without consideration of division of caste and any specific way of worship.

The practices of guest-host relationships, religious beliefs, sharing, feeding and feasting regulate the social and religious relationships among people of Chamba. Further, these practices help them seek peace of mind, prosperity and physical wellbeing along with a valuable prolongation and continuity of heritage; thus enhancing the maintenance of social structure, stability and solidarity in the society.

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## Appendix I: FOOD CLASSIFICATIONS

Table 1.1 *Cereals and legumes based foods of Chamba, Himachal Pradesh*

Item/ Product	Nature of food	Ingredients	Method	Importance
<i>Babru</i>	Cereal based	Wheat flour, salt, jaggery, water, <i>ghee</i>	Fried discs made from fermented wheat flour	Offered to deities and even served to guests
<i>Saarjhi</i>	Cereal based	Wheat flour, jaggery, oil	Sweetened chapati made of wheat flour, jaggery and then fried	Offered to God during fairs and festivals
<i>Poori</i>	Cereal based	Wheat flour, spices, oil	Deep fried and puffed bread made from wheat flour, salt, oil	Consumed during special occasions
<i>Halwa</i>	Cereal based	Wheat flour, sugar, oil, dry fruits	Indian sweet dish made from wheat flour, sugar, oil and adding dry fruits	Mostly offered to God and also made on festive occasions
<i>Panjeeri</i>	Cereal based	Wheat flour, sugar, <i>ghee</i> , dry fruits	Sweet dish made from wheat flour, sugar, <i>ghee</i> , dry fruits	Nutritional supplements for mothers
<i>Sukdi</i>	Cereal based	Wheat flour, jaggery, <i>ghee</i>	Sweet dish made from wheat flour, jaggery, <i>ghee</i>	Food associated with festivals
<i>Makki- ki-roti</i>	Cereal based	corn flour	flat, unleavened bread made from corn flour	Consumed by people and served to guests in winter mostly.
<i>Khichdi</i>	Legume based	rice, lentils, cumin seeds, salt, water	Cooked rice and lentils in <i>ghee</i> and add cumin seeds	Made on Lohri festival
<i>Dham</i>	Legume based	Plain rice, pulses, red kidney beans	Red kidney beans are cooked in yogurt followed by <i>khatta</i> (sauce) made of tamarind and jaagery	Marriage feast, also made special occasions

Table 1.2 *Milk based products of Chamba, Himachal Pradesh*

Item/ Product	Nature of food	Ingredients	Method	Importance
<i>Kheer</i>	Milk based	Rice, milk, sugar, dry fruits	Made by boiling rice with milk and sugar, flavored with cardamom and almonds	Brought from famous temple and is fed to the child after 6 months
<i>Rabri</i>	Milk based	Cream milk, sugar, almonds	Thickened sweetened milk having layers of cream flavored with cardamom, saffron, almonds	Offered to deity in famous Laxmi Narayan temple
<i>Seviyan</i>	Milk based	Vermicelli, milk, sugar, carda- mom powder, almonds	Traditional popular dessert made with milk, vermicelli, sugar, flavored with cardamom and almonds	Served to guests
<i>Paneer</i>	Milk based	Strained curdled milk	Milk is heated with lemon juice /vinegar	Rich source of protein
<i>Dahi</i>	Milk based	Milk, bacteria	By bacterial action	Used in traditional dish <i>dham</i>
<i>Gulab jamun</i>	Milk-solids based	milk-solids, sugar, carda- mom etc.	Sweet dish made from milk based products and sugar	consumed on festivals

## **BOOK REVIEW**

Guha, Abhijit. *Tarak Chandra Das : An Unsung Hero of Indian Anthropology*. New Delhi: Studera Press 2016. ISBN ? pp. 71+ index ; Price INR 345.00

In the history of Indian Anthropology some names have found almost a permanent place, primarily because their contributions have given a much-needed direction to Indian Anthropology enabling it to get the attention it deserves. It's another thing that the initial promises have not quite materialised or are only partially fulfilled, but this in no way belittles their importance. Nirmal Kumar Bose, Surajit Chandra Sinha, D.N. Majumdar, Irawati Karve, Aiyappan, S. C. Dube, L. P. Vidyarthi, S. S. Sarkar, Dharani Sen are remembered because their works are regarded as trendsetters, which could initiate further research works to follow. There are still some others who were no less gifted and who could excel in their respective fields. Then there are forgotten few who had worked out their own course and displayed a rare sense of ingenuity and originality in selecting their areas of research. In their own way they could enrich the tradition of Anthropology in India in no uncertain terms. The tragedy is in any discussion today they rarely find a direct entry, unless they are brought in with a purpose or their contributions need to be acknowledged. Furthermore, not many people are aware of the full implications of their contributions, which manifest itself in the diverse areas of research traversed by them. What is more important, they have not compromised with the basic premises of anthropology to earn quick recognition. They may be different, but the difference lies more in the way they have tried to keep abreast of time. To their understanding, all human problems have an anthropological dimension which is not without application.

Tarak Chandra Das was one such anthropologist who was not particularly bound by a stereotypic and somewhat fixed notion of anthropological concerns. His brand of anthropology would redeem itself in nation building rather than remaining historically bound and structurally limited. Abhijit Guha must be congratulated for bringing Tarak Chandra Das to the limelight and reinstate him to the position he rightly deserves. Guha could correctly assess the role of T.C. Das as an anthropologist. On the other hand, Das was quick to recognise the positive role of anthropology in development, while on the other he strongly felt the need for 'methodological efficiency' at the applied level.

It goes without saying that Tarak Chandra Das has a place of importance among field-based anthropologists in India. With regard to T.C. Das's orientation to field-based research, it may not be wrong to say that the structural-functional tradition of British Social Anthropology had its influence on him as well. The true meaning of ethnography finds representation in Das's works. Das's intention was not to reduce society to a bundle of objects, elements or products which could be decomposed into perceptual attributes. He instead concentrated on the production and processes of social formation, made intelligible through participation in, or observation of those processes of production. This provided epistemological foundation for renewed theoretical orientation. During Das's time "uncontrollable moments" or disturbing trends at the community level rarely manifested. Instead, we get an impression of a nearly perfect internal order and functional logic. Now, collective forms are being reworked and refashioned by individuals who are not completely bound by conventional, normative and collective modes of behaviour. Still, anthropologists are engaged in a symbolic construction of the social world, which is as much a historical compulsion as a type of personal commitment. Implied here is a search as complex and painstaking as the methodological rigour of a fieldworker suggests. The relevance of Tarak Chandra Das in the contemporary world may be sought from this perspective. At a time when the issue of a direct conflict and contest between the positivist scientific tradition and ethnographic representation at the local level has surfaced in the

face of growing political consciousness, Tarak Chandra Das may be taken as an example who has tried to maintain a balanced approach without making compromises. Even after seven or eight decades since Das had undertaken the study of Purum, the basic fabric of the Purum social structure has not changed much. The structure identified by Das is still discernible despite the extension and segregation of ties, intrusion of new political values and economic forces operating from outside. What he could not envisage, nor was it possible for him to do so at that time, is the emergence of a type of political consciousness giving rise to a plethora of voices for self-assertion and identity. This seems to be natural as tribe today could be a meaningful proposition only as a political unit.

There was another aspect of the Purum society, which had eluded Das's attention. That was the impact of the World War II on this region. Das himself was no less aware of it when he had admitted that he was not acquainted with the important changes introduced in the life of the tribal people in the region as his study dates back to 1931–36. As far as Purums are concerned, they were a little away from the main route where war had its direct effect. Unlike the Maring, among whom I had the experience of working, the Purums did not have war memories. At Kharou Khunou, a Maring village just on the Myanmar border, an old man played before me a Japanese tune which he could learn through his contact with the Japanese soldiers. Cultivation of tea was introduced in the area on a limited scale to cater to the needs of the soldiers. I could see overgrown tea plants along the fringes of the village. The point of consideration is the intensity of war did not have the same impact on all tribes. Being small, the Purums were of little consequence because there was not much scope for them to get themselves actively involved. For them, avoiding any direct involvement would be the most logical course of action. Otherwise, the War had a devastating effect on the life and people of the region all along the Indo-Burma Road in terms of loss of life and casualties suffered. My father, whose service as a doctor was requisitioned by the government to treat the critically injured in the war field, once told me how in a make shift house near Kohima they had to perform operations one after another without any break and naturally the success rate was far from satisfactory. Das himself was fully aware of the impact of war as was revealed in his famine study. His book on famine, which was published in 1949, brought out in details its demographic and socio-economic effects on the famine-stricken people who had taken refuge in the Calcutta city. Guha's analysis of T.C. Das's study of Bengal famine has added important insights. Not without logic, he pleads for treating the study of Bengal famine as holistic and true to anthropological tradition. It must be said in all fairness that Das's commitment to anthropology, particularly its methodological rigour and analytical proficiency, is beyond question. Even when eulogising the role of women in Chiru society of Manipur, he did not deviate from the path of serious ethnographic analysis. Of course, the question may be raised whether the practice of marriage by service, whereby the would-be groom had to qualify himself as a husband by serving in the girl's family, could be solely attributed to recognition of values of women in the society. A structural explanation was developed to justify such a practice, which was common among small and medium-sized tribes of the region. Among such tribes of the region, of whom Chiru was no exception, women had substantial contributions in the economic life. They might not be economic partners in the real sense, but their contributions did not go altogether unrecognised. What Das was after, was to find a motive or reason behind such a marriage system. A gender-specific explanation might seem attractive, but it could not fully reveal the inner logic developed at the structural level. At that time, tribes were structurally bound and production-based resource control rested mainly with the community. My visit to a Chiru village overlooking the eastern hills in the early '70s of the last century made me aware of the changing nature of resource control. Individual household ownership was the general practice and community holding had only a token existence. With jhum cultivation being reduced to an

obsolete system of production, cultivation of cash crops like pine apple was introduced at the household level to meet the increasing demands. In the changing pattern of production system women hardly came to the picture, neither as owners nor as producers. At best, they had a supporting role to play. What was significant, the old practice of marriage by service was almost non-existent. Traditionally, a type of complimentary relationship could be worked out between the production system at two levels-economic and social. It is but natural that in such a situation women would have a more meaningful participation in the social production system as was demonstrated by customary practices like marriage by service. But that does not mean automatic gain in status on their part. If there was any gain in status, it was by the concerned family, more specifically, by the father of the girl to be given in marriage. The father had the right to terminate the probationary period of the boy if he was not satisfied with his services.

After reading Guha's book, one cannot but admire the academic brilliance of Tarak Chandra Das, which was reflected in the quality of research he had undertaken. It is amazing how effortlessly he could move from the micro-level setting to a bigger arena signifying macro dimension. There was hardly any flawed vision, any jerky pause or a note of discordance. In the process, he could cover different problem areas bearing the stamp of anthropological concern to humanity. They signify change and continuity in no uncertain terms. I am tempted to call Tarak Chandra Das a humanistic anthropologist, who not only took an abiding interest in human affairs, but made his humanistic pursuit acceptable in terms of his understanding and epistemological position. I take this opportunity to pay my regards to one my great teachers.

Former Professor  
Department of Anthropology  
Vidyasagar University

Rajat Kanti Das

## OBITUARY



### **Professor Indera Paul Singh (1928 – 2017)**

Prof. Dr. Indera P. Singh was born on 20th February, 1928 at Amritsar. He did his schooling from Ramjas Higher Secondary School, Delhi from 1937 to 1943. He studied for his I.Sc. (Medical) from Hindu College, University of Delhi from 1943 to 1944. He did his B. Sc. from Khalsa College, Amritsar, Panjab University from 1944 to 1947 and M.Sc. in Anthropology from The University of Delhi, Delhi from 1948 to 1950. He completed his Ph.D. in Anthropology in 1959 from University of Delhi. He received specialized training in Physical anthropology from Franz Weidenreich Anthropologische Institute, Universität, Frankfurt/Maine Germany from 1950 to 1952.

He was the first student to earn Masters degree in anthropology from the University of Delhi. In addition, he also completed a Certificate of Proficiency in Russian language and literature from Delhi. He joined the Department of Anthropology, Delhi University as a lecturer in 1953, became a Reader in December, 1961, and Professor in May, 1971. He was also a Research Assistant with Ford Foundation for six months from 1952 to 1953.

He was the Head of the Department of Anthropology from 16th June 1968 to 6th June 1979, and from 4th April 1981 to 3rd April 1984. During this period, he built many laboratories in the Department, particularly those of Cytogenetics, Forensics, Physiological, Dermatoglyphics, Biochemical, Archaeological, Museum, Visual Anthropology, Medical Anthropology, Growth and Development, Paleoanthropology and branches of social anthropology. He was instrumental in building up collaborations with scholars in Germany, UK, USA, Poland, Russia, Italy, Hungary, some of whom visited India, helping him in building up laboratories and training the staff members and research students in methods of advanced genetics and dermatoglyphics. As a result of these collaborations, some members of the Department had an opportunity to visit Germany and other European Countries and started joint research projects.

Professor Singh also served the University of Delhi as the Dean of the Faculty of Science from 1971-73, 1973-75, and 1983-84. He was also the Proctor of the University of Delhi from 1973 to 1992; perhaps the only person who served the University in that capacity for the longest period. He was the Chairman of the Delhi University Sports Council from 1981-93. He was also the Chairman of the Board of Residence, Health and Discipline of the University of Delhi, from 1973-93. For many years, he was also the Chairman of the Gwyer Hall Management Committee, Delhi University Sports Council and WUS Health Centre. He also served as a member of the Governing Body of many



colleges affiliated to the University of Delhi, the prominent being Satyawati College, Hamdard College of Pharmacy, Shyam Lal College, St. Stephen's College, Lady Irwin College, and the Institute of Home Economics. He was a member of the Executive Council, from 1973-92, of the University Court, from 1959-93, and of the Academic Council for more than twenty years.

In the academic front, he was the President of the following professional bodies : The Indian Anthropological Association, The Indian Society for Human Ecology, and The Indian Dermatoglyphic Association. He was a Vice-President of the Lucknow-based Ethnographic and Folk Culture Society. He was a Fellow of the Indian Social Science Academy, and a Member of the Asian Association of Bioethics, Tokyo (Japan). He was the Regional Commissioner for South Asia Regional Group of the International Commission on the Anthropology of Food and Food Problems. He was the Associate Secretary General, International Union of Anthropological and ethnological Sciences, and also served as a member of the International Commission of Urban Anthropology. He was also a member of the International Commission on Documentation, Council for Nutritional Anthropology, American Anthropological Association, Indian Academy of Sciences and International Council for Scientific Development. He was also associated as President/ Vice Presidents of various NGO's namely RUCHI, DIVA, Development Promoters, etc.

Professor Singh was also the Director, Sumer Institute, National and International Seminars; he served the Tenth International Congress of Anthropological Sciences as its Secretary General; he was also the General Secretary (Local), Indian Science Congress Association, 1975. He was the Chairman of the Eleventh UNESCO Conference of International Voluntary Work Camp Organizations.

In his long academic life, Professor Singh successfully supervised thirty-three doctoral students and three M.Phil. dissertations, besides guiding an umpteen number of Master's dissertations. He completed eight research projects that different national and international bodies had awarded. He did extensive fieldwork in different parts of north India and north-western Himalayas. He is well known in the world of anthropology as one of the few anthropologists who tried to integrate the different branches of anthropology; and this would explain why he researched different branches of anthropology and why his students worked on a variety of topics. He is often consulted for his writings on a Sikh village in Punjab. After his retirement, he carried out a restudy of this village, and was in the process of writing up a book on it before his sad demise. In total he has published five books; the most well-known is titled *Anthropometry*, and 218 articles. Since he was closely associated with the University Grant Commission, he was instrumental in founding many departments of anthropology in the country.

Professor Singh was not only an institution-builder, but also an institution himself. He taught a variety of courses at graduate, post graduate and M.Phil. level. He was Convenor UGC panel on Anthropology. He was also on SAP Advisory Committee in Universities of Calcutta, Guwahati, Ranchi, Chandigarh, Tirupati for UGC Quality Improvement programme. He was on the committee for Standardization of Anthropological Techniques and Measurements. He was on the committee for Border Area Studies and Planning for Anthropological Research and Studies.

He was also Editor in Chief of Indian Journal of Human Ecology, Member Board of Editor- IJPAHG, Chief Editor of Indian Anthropologist, The Anthropologists and Research Proceedings of Department of Anthropology, Delhi University.

He achieved many academic distinctions and honors like Member, University Grant Commission from May 1989 to 1992; Vice Chairman Advisory Committee of Anthropological Survey of India, Department of Culture, Government of India; Member, National MAB-

Man & Biosphere Committee, Ministry of Environment, Government of India and Member, National Editorial Board, People of India Project. He also delivered Platinum Jubilee Lectures of the Indian Science Congress, Pune 1988; Sarat Chandra Roy Memorial Lecture, Calcutta, 100-, S.S.Sarkar Memorial Lecture, Calcutta, 1991, G.S.Randhawa Oration Award, Guru Nanak Dev University, Amritsar. He attended nearly fifty national and international Conferences, workshops and symposia at national and international level.

Due to his persistent efforts to carry out and promote multidisciplinary research in the field of anthropology, the students of anthropology are now finding employment opportunities in various research Institutes of India and abroad and contributing their anthropological knowledge acquired under his expert guidance.

He had always been a very extra ordinary conscientious and understanding teacher, a teacher to remember not only for his teaching but also for his personality which always impressed the students at different stages of their development. Many of his students are working in different Universities in India and different countries in the world- Germany, U.K., U.S.A. etc. Many of them are working or have worked in Institutes like National Institute of Health and Family Welfare, Anthropological Survey of India, Defence Institute of Physiology and Allied Sciences, National Institute of Nutrition, Indian Council of Medical Research, Indian Statistical Institute, Central Forensic Science Laboratory, Department of Science and Technology and many other private institutions and agencies in India and abroad.

He had left an everlasting effect not only on his students but also on his colleagues in India and abroad. He had always been an encouraging and inspiring person, refusing to accept failures and non-capabilities. His inspirations and encouragements had made many pessimistic persons to have an optimistic attitude.

His long list of research publications on varied issues of anthropology in reputed international and national journals itself speaks of his excellent scientific caliber, devotion and hard work. The scholars of anthropology and allied fields in India and abroad have increased their respective scientific knowledge horizon by reading/counselling his much sought after books on applied and practical aspects of anthropology.

Prof. Singh has always been found willing in giving and has delivered enlightening lectures and talks to the gathering of students and scholars in various universities and Institutes of India and abroad.

For the kind of status, that the Department of Anthropology, Delhi University has today, most of the credit goes to Professor Singh. His persistent efforts to expand the Department in different specialized fields have been very successful and quite commendable.

Professor Singh was an excellent person, committed wholeheartedly to the ethic of equality and justice. Never was a single occasion of ritual performance in the family of a member of the Department where he was not present. He was the longest serving head of the Department after Professor P.C.Biswas, and was an occupant of several administrative positions in the University, but he was less an embodiment of power, more an apotheosis of love, care, concern, and humanism.

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**Paper presented at a meeting or conference**

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**Website**

American Anthropological Association 1998. *Code of Ethics of the American Anthropological Association*. <http://www.aaanet.org/committees/ethics/ethcode.htm>, accessed on March 29, 2017.

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