CHAPTER III

REVIEW OF LITERATURE

Introduction

As preliminary and preparatory part of present research work, the researcher undertook a review of literature on Sahariya related studies and reports of issues and implications on implementing the interventions. Poverty and migration, land, education, Tuberculosis, hepatitis, leprosy, mortality, and nutrition are areas studied for review. The review enabled the researcher to ascertain the contribution made by various experts and scholars in the field and to identify the promising fields awaiting fresh initiatives.

3.1 Poverty and Migration

Sachin Kumar Jain\(^1\) published a report on “Poverty, Migration & National Rural Employment Guarantee Scheme - A case study on Sahariya Primitive tribal group in Madhya Pradesh”. Report says that It has to be clearly admitted that migration is not a voluntarily chosen alternative for the people of Sahariyas tribe for securing employment, but they were rather forced to adopt this out of sheer constant hunger, serious food insecurity and ever increasing mal-nutrition. At the social and political level, leadership of this tribe was never allowed to be encouraged, as a result of which the people of this tribe could not fight for their social, economical and political rights.

On the other hand, the various policies framed by the Government lack long term political commitment and as a result none of the schemes could provide any benefit to the people for whom they were meant for. As a recent example, just consider the National Rural Employment Guarantee Scheme. Going by the various provisions contained in the scheme, there appears to be wide range opportunities, but looking at its ground level implementation, only negative aspects are visible. It may be admitted that during this era of globalization, the public welfare schemes are prepared from the Government point of view and not that of community. For Sahariyas Adivasis, the right
to employment is of prime importance, but in the rules, regulations and process made there under, any serious contradictions were not visible. However, it is not a good sign that even in the initial stages of implementation of this National Rural Employment Guarantee Scheme; people have started losing their faith in the scheme itself. On the one hand, the people of Sahariyas tribe consider the migration as comparatively better alternative and on the other hand, the concerned Officers of the Government admit that it is not expected that due to Employment Guarantee Scheme, the tendency to migrate can be either minimized or eliminated. As per the Act, only 100 days work in a year is to be provided but for the remaining period people had to migrate for their livelihood. Strictly from the legal point of view this argument is a valid one, but does it mean that this Employment Guarantee Scheme shall not be able to (1) promote, at local level, any additional permanent sources of employment; (2) there will be no improvement in the land conditions; and (3) No efforts will be made to conserve water and forests? In case the Government attempts to convert this Employment Guarantee Act into Wages Guarantee Act, then it calls for a confrontation on this issue. The experiences encountered during this study reveal that bureaucracy has completely ignored the social security aspect of the Scheme. At work sites, neither there is any arrangement for drinking water nor any provision for shelter or protection for the children. In other words, the very objectives of this Act, enacted out of people’s movement, are being attempted to be scuttled just because of glaring anomalies / contradictions at the implementation stage of the Scheme.

3.2 Hunger and Starvation

Harsh Mander\textsuperscript{2} wrote titled Denying Starvation about the Sahariyas of Baran district, Rajasthan. He says that It is dishonest to apportion the entire blame for this unconscionable state of affairs at the door of the present government in Rajasthan because the one that was voted out of the power had also done little to reverse the dispossession and oppression of the Sahariya people.

The knee-jerk official denial of starvation deaths follows a beaten, but utterly discredited path. In its press briefings and also a sworn affidavit to the Supreme Court,
the state government claims that the deaths reported in newspapers ‘were not due to starvation, but were the result of non-treatment or inadequate treatment of disease’. It goes on to blame the Sahariyas themselves for succumbing to seasonal illnesses stating that the Sahariyas ‘do not bother to undergo any treatment at the initial stages of sickness.’

However, to even a lay observer, it is clear that there is an extremely grave persisting nutritional emergency among the Sahariya tribal community in Baran. It is both pointless and heartless to debate whether deaths are due to hunger, chronic malnutrition or disease. There is no doubt that there is long term unaddressed hunger and that even if people succumb to disease, their minimal resistance is the outcome of precisely this chronic food crisis. As it happens, even official studies confirm that Sahariyas spend the greatest part of their niggardly incomes on curative health mainly in a predatory private sector.

In conditions of such stark and extreme impoverishment, it is ironical that the overwhelmingly large majority of Sahariya households had APL cards or in other words, according to the government survey they were not poor and therefore not entitled to subsidized grain. Even for those with cards, ration shops do not function; therefore most villagers were compelled to purchase wheat from open market as Rs. 8 a kilogram. In May 2003, the Supreme Court had directed that all primitive tribal families should be given antyodaya cards. These instructions were ignored, as also directions that all tribal hamlets should be covered by ICDS anganwadi centers.

The only food scheme that seemed to have worked for these threatened and forgotten people was mid-day meals for school children, but that too only where schools actually opened. In Brahmapura village, children remained deprived of their daily food entitlements because the teacher came to school only twice a month. However, in Asnawar, we found that children were indeed given a ladle each of ghoogri or dry wheat porridge each day.
It is noticed, however, that many Sahariya children did not eat their ghoogri. Instead, they carefully wrapped it in a sheet of paper and held it aloft even as they swam across a stream to reach their villages.

3.3 Land

K.L. Vishwakarma (2010) In a case study titled “Saharia Tribes under threat to lose their land rights” Ukayela village is situated in tehsil Karera of district Shivpuri in Madhya Pradesh. It is located at the periphery of forested Amulpatha area. There are about 20-25 Saharia tribe families, 40-50 Thakur families and 1 Brahmin family in this village. About 50 years ago, a Saharia tribal, Mr. Jugru’s sons, Shyama Adivasi, Khairu Adivasi and Bhagu Adivasi suffered a lot due to poverty and starvation like situations. There were severe problems in terms of livelihoods as neither was any source of employment nor was any land in possession. They all were landless. Due to all this unfavourable conditions, they began to cultivate the revenue land which was lying barren. After this, they dug a well on the occupied land and with the help of this well, about 8-10 bighas land was irrigated. In the survey report, various kinds of grains were shown grown on certain areas but the total encroachment by the tribal was not mentioned properly on the government record. On 2nd December 1987, Mr. Khalku, Ramcharan, Kishanlal, Kamal Singh, all sons of Khairu and Khairu s/o Jugru Adivasi were penalised to pay Rs. 225. On 7th January 1991, Khalku, Ramcharan, Kishanlal, Kamal Singh, all sons of Khairu and Khairu s/o Jugru Adivasi were again penalised with Rs. 500. On 17th September 1991, Khalku, Ramcharan, Kishanlal, Kamal Singh, the sons of Khairu and Khairu s/o Jugru Adivasi were penalized to pay Rs. 300. This information was collected from the photocopies of the penalty receipts. Therefore, it was proved that these all four tribal were still recorded as encroachers of the land even after 1987-88.

Due to the continuous possession of these tribals on the occupied land the government began to distribute land entitlement to above mentioned tribal. Under this process, land distribution was done by Nayab Tahsildar/Tahsildar, subdivision- Karera, and District- Shivpuri to following tribal: namely Mr. Ramcharan s/o Khairu, Khalku s/o
Khairu, Kishanlal s/o Khairu, Kamal Singh s/o Khairu and Bhagru s/o Jugru Adivasi have the evidence of their land entitlement. It is recorded on page -11 of Khasra (a land record of government) of village Ukayela, Halka-Ukayela, revenue inspector zone no-01, Karera, Tehsil Karera, District-Shivpuri in the year 2007-08 date-2nd April 2008 and the photocopy of this document is available. Inhabitant of village Ukayela and their families have got the land entitlement and no one can throw them from their land.

It has also come to be known that the Patwari (lowest rung revenue staff) of this revenue circle (Halka) has not followed the instructions mentioned in the land entitlement paper. The Patwari has not demarcated the land. He has neither given any kind of support to the tribes rather they are threatened by the Patwari every now and then to vacate the land. It has come to be known that the Patwari is helping rich people to encroach the land. It is also acknowledged that Bhagru s/o Jugru is no more and entitlement of this land has been given to the other outsider people although he has two minor sons and a married daughter.

The present situation is such that some influential people and officers are trying to take away the land of these tribal but Ekta Parishad is alert in this case. It has been encouraging them for many years through which they have got their confidence and awareness built. In recent times, they have got the plot numbers and maps of their land with the help of Ekta Parishad. Therefore, besides all the threats and troubles, these tribal are able to continue occupying their land and it is their conviction that they would not leave the land. Ekta Parishad is also firmly determined to help them.

### 3.4 Plantation

Jyoti Nair (2013) present a report on “Planting orchards to support tribal families in India to cope with climate change”. Bhaiyalal belongs to the Sahariya tribe which is most commonly found in the drought prone region of Bundelkhand in Central India. These tribals have traditionally depended on forests and livestock for their sustenance. In the last few years, these Sahariyas have been the beneficiaries of the National Bank for Agriculture and Rural Development’s (NABARD’s) ‘wadi model’ of agro forestry. As of June 2012, NABARD has sanctioned more than 400 wadi projects under its Tribal
Development fund targeting three lakh tribal families across India. ‘Wadi’ means a small orchard covering one or two acres of land. In the wadi model, along with crops, fruit trees suitable to the area are grown. The fruits can be harvested within 3 to 4 years of planting. This model emphasizes on soil and water conservation measures and organic farming techniques. These wadis have helped rejuvenate large tracts of unproductive land across India.

“Earlier, we used to go to the forest to fetch wood or go to the cities to work as labourers. We barely earned enough to clothe and feed our children. Now on these wadis, we grow vegetable and grain crops and also tend to lemon, guava and gooseberry trees. We sell the fruits in the weekly market and earn around Rs.1000-1500”, says Bhaiyalal proudly. The wadi model has been recognised nationally and internationally for strengthening agrarian livelihoods and increasing food and nutritional security of poor tribal families.

3.5 Non timber forest products

Vijayalakshmi Kalagnanam (2012) make an attempt to study entitled Land Cover/Land Use Change: Exploring the Impacts on the Sahariya Tribe of Rajasthan explored the changes in forest cover in one tribal region, village of Khanda Sharol, within the state of Rajasthan, India; and examined how these changes have affected access to and the use of Non-timber Forest Products (NTFP) by Sahariya tribal households. The study also examined the implications of changes in the access to and use of NTFP on the livelihood of tribal members and the feasibility of continuing a community-based management system for the sustainable production of NTFPs. This was a descriptive study. Historical, as well as current data was collected through surveys and interviews. A family information report survey covering various dimensions was administered to each of 365 households of the Khanda Sharol village. Individual interviews and focus groups with tribal members were conducted to gather information regarding NTFP collection patterns (past and present) and details of forest proximity. This collective study indicates that there was a decline in forest cover which resulted in a loss of compilation of NTFP. Furthermore, there was a decline in the livelihoods
of the residents of the village, although a direct and unequivocal link between
t change in forest cover and livelihood patterns cannot be established. These
relationships are complex and simple causal relationships cannot easily be drawn.
Nonetheless, this research has been able to identify how changes in the forest cover
over the past 50 years have affected access and use of NTFP of the tribal households
in the village. In turn these changes suggest shifts in household economic
production which then can be tied to poverty, health and education of tribal members.

3.6 Education

Kulsum Mustafa (2007)\textsuperscript{6} A success story titled “An ‘outcast’ tops class, heralding
a social change – 15 UP village kids from socially excluded strata return to mainstream
school” - Jamalpur Village, Lalitpur District, Uttar Pradesh: Seven year old Kamlesh
wears a permanent smile today. But this was not the case last year when, subjected to
repeated humiliation and teasing at the hands of their upper-caste classmates, he and
fourteen other children were forced to drop out of their primary school. Today Kamlesh
and all his friends are back at the school, and what more – Kamlesh has topped the
class what started as a nightmare for these children unfolds like a fairy tale today.
These children succeeded through sheer hard work and perseverance believing that in
order to cope with adversities one has to be the best. Ever since Kamlesh topped the
third standard he is looked up to by his classmates. He is the blue-eyed boy of the
teachers; his classmates vie with each other to be his friend. “They all take turns to sit
next to me,” says Kamlesh, basking in his new found popularity. Kamlesh has turned
into a hero overnight at the Jamalpur hamlet where Kamlesh’s family lives along with 33
other families hailing from the socially excluded Sahariya tribe. Eldest of the four
children born to a stone crusher, Kamlesh was among the fourteen children who
stopped going to the primary school last year because of the harassment faced from the
children of the so-called higher castes. “I hated it all. These kids would waylay us and
snatch our bags, tear our books and run off with our slates. They frightened us and one
day I decided just not to go to school anymore,” says Kamlesh recalling his trauma.
This “dropping off” triggered a wave of concern among the village elders. The menfolk
among the tribe generally break stones for a living while the women collect and sell
wood or gather medicinal herbs. Most of them have never seen the inside of a school, but for their children they had big dreams. So with the help of a local NGO supported by UNICEF, the villagers set up a makeshift evening school. Here volunteer teenage teachers like Sonia and Sewakumari helped the students not just with studies but in developing a positive mindset. “We told them to be strong and fight out this battle themselves. We empowered them with knowledge and strengthened their will before readmitting them into the same school. Initially older boys would take turns to escort the children to and from school. Once inside the school, the fact that they knew more than their classmates built up their reputation,” Sonia explains.

3.7 Community Radio

Aakanksha Arora & Aparna Moitra (2011) RADIO DHADKAN - A community radio connecting, educating and entertaining the Sahariyas in Shivpuri district, Madhya Pradesh. To help for addressing the development gaps in meeting the needs of the Sahariyas and other marginalised communities residing in the villages and urban slums in Shivpuri District, UNICEF collaborated with Sambhav Social Service Organisation (Sambhav), a non-governmental organisation (NGO) based in Madhya Pradesh to set up a Community Radio (CR) Station. Known as Radio Dhadkan, its aim has been to empower Shivpuri’s underprivileged communities, especially the Sahariya Tribe women, by helping them to create, access, and utilize information relevant to their local development needs.

The present study was undertaken to document the role communication via the medium of a CR has played in entertaining, educating and empowering Sahariya Tribe of Shivpuri District in Madhya Pradesh. For the study, ten villages were purposely sampled based on the distribution of the Sahariyas and Non Sahariyas in the population. An important additional criterion was the distance of the village from Shivpuri which, based on the (transmission) reach of the CR, had to remain within the maximum limit of 13 kilometres. For the purpose of documentation, and to gain qualitative insights, the study primarily utilised Focus Group Discussions (FGDs) and key informant interviews. Other techniques such as direct observation, eliciting stories
of change from the CR staff, and Content Analysis of radio programmes were also employed. In all, 15 FGDs were held with the women, adolescent girls and volunteers from the village community, 29 interviews were conducted with various stakeholders, and the content of ten radio programmes was analysed for the purpose of the study. Desk research included both external and internal sources. To promote the mainstreaming of the marginalised in development processes, Radio Dhadkan’s key strategy has been to use communication as a tool for generating information and awareness in the community, and to make Radio Dhadkan a community-led enterprise by recruiting, training and capacity building of the members of the local community to handle its operations. Relying on such activities as narrowcasting, broadcasting, podcasting, along with capacity building and training of radio staff and village volunteers, Radio Dhadkan is translating its objectives into reality.

Findings from the present study clearly indicate Radio Dhadkan’s impact on Sahariya women’s increased awareness and practice of various life saving behaviours such as hand washing with soap, exclusive breastfeeding, immunization and their willingness to utilise Radio Dhadkan (RD) as a platform for social change. Sustainability of a CR initiative is essential for the best interests of the community. To be successful, it must be socially, institutionally, and financially sustainable. Although RD has taken some steps to generate revenue such as identification of clients for monetary support and charging fees for making Public Service Announcements, it can consider additional revenue generating measures including seeking commercial radio advertisements and airing them for a fee, and applying for a franchise for conducting training courses on Radio Jockeying, Commercial radio production, Editing and Advertising. RD’s efforts to forge alliances with various local, national and international agencies for improved and diversified broadcasting, along with its greater focus on volunteer capacity building are likely to give a major boost to its sustainability.

### 3.8 Tuberculosis

Sharma PR, Tiwari PK (2007) A study was conducted in the year 2005-2006 as an initial screening for TB prevalence in the three most populated tribal villages (Kalmi,
Kakerdha and Daingda, MP). A researcher and staff of the Revised National Tuberculosis Control Program (RNTCP) conducted a village-to-village survey and collected sputum and blood samples from 355 randomly selected individuals, after obtaining informed consent. Sputum smears were prepared and subsequently participants were divided into groups: sputum three positive, two positive, one positive and sputum negative, as per standard RNTCP protocol. Sputum-positive participants were investigated by chest X-ray. The study revealed 46% samples (n = 164) to be positive for acid fast bacilli (AFB; Fig 3); 53.8% was negative (n = 191). Of the AFB-positive cases, 42.8% and 31.7% were taking TB chemotherapy categories I and II, respectively.

Serum levels of certain pathologically important isozymes, such as LDH, were estimated (Fig 4; serum LDH level has been reported to be elevated in the presence of tissue injury and damage). In sputum-positive cases, the total serum LDH was found to be significantly elevated (p<0.0001), with mean values of 304.31 ± 252.1 IU in sputum two-positive individuals, and 365.63 ± 262 IU in sputum three-positive individuals, compared with the sputum-negative sample of 232 ± 155.91 IU. There was no association of disease with sex.

None of the other tribal groups in the state has been reported to have such a high prevalence of tuberculosis. Attention was drawn to this from the unusually high number of Sahariya TB patients reported by the district hospital, and a published report which compared the Sahariya disease prevalence with a neighboring tribal community. The situation of the Sahariya tribe is alarming and requires serious medical attention, and further extensive research on the possible role of environment, ethnicity and genetics in their increased susceptibility to TB.

Vikas G. Rao et al (2011) conducted a study on “Selected risk factors associated with pulmonary tuberculosis among Saharia tribe of Madhya Pradesh, central India”. The study found a significantly higher prevalence of tobacco smoking and consumption of alcohol among this ethnic group as compared with the prevalence in the general population of MP [tobacco smoking: 34.3 vs. 11.9% (P < 0.001); alcohol consumption: 12.9 vs. 10.3% (P < 0.001)].
Previous studies in India have shown clearly that the prevalence of pulmonary TB disease is significantly higher among males than females, and that disease prevalence increases with age. The findings of this study are consistent with those of these earlier studies. The significantly higher prevalence observed in males could be due to the fact that men are more exposed to the wider world as compared with women (especially in rural areas), with resultant greater social interactions with other people and greater risk of exposure to persons with TB disease, and thus having a higher chance of becoming infected with TB. The higher prevalence of tobacco smoking and alcohol consumption among males, as observed in this study, could also be additional factors for the higher risk of TB disease observed among males. Our study shows that smokers have a higher risk of developing TB disease than non-smokers, and is in agreement with the studies conducted in varying areas of the world. The mechanisms are likely to involve both structural changes affecting lung function and altered immune response. The present study also found that persons with a history of consuming alcohol in the preceding year had a 1.7 times higher risk of developing TB disease than those who had not consumed alcohol during the preceding year. Other researchers have also reported similar findings in different settings. This may be explained by the significant inhibitory effect of alcohol on cell-mediated immunity. Tobacco smoking and alcohol consumption appear to be significantly associated with the development of pulmonary TB disease in this marginalized population. There is an urgent need to develop and implement culturally appropriate targeted awareness raising activities in order to support efforts to control TB in the population.

3.9 Hepatitis

VG Rao et al (2012)\(^9\) studied to assess the prevalence of hepatitis viruses in Saharia tribal community of central Indian state of Madhya Pradesh. A cross sectional study was carried out to determine the point prevalence of different hepatitis viruses amongst Saharia primitive tribal community of Madhya Pradesh, central India. After obtaining the informed consent, blood samples (5 ml each) were collected from them. Serum was separated on site, aliquotted and transported to the laboratory maintaining
the cold chain. The markers of various hepatitis viruses were detected using commercial ELISA kits. The specimens found positive for HBsAg were tested for HBV DNA by Polymerase Chain Reaction (PCR).

A total of 173 blood samples were collected. The prevalence of HBsAg and anti HBs was found to be 5% and 33% respectively. The prevalence of anti HCV was 1%. Anti HAV antibodies were present in 165 samples (99%). The prevalence of anti HEV was found to be 40%. 4 samples were found positive for HBV DNA by real time PCR.

The findings of the study indicate that viral hepatitis infection is an important problem in Saharia primitive tribal community. Control measures including IEC strategies are necessary among them.

3.10 Leprosy

S.K. Singh analysed the Perceptions and Practices of Sahariya Community towards Leprosy. The Sahariya tribe inhabits the Chambal area in Madhya Pradesh and parts of Bundelkhand in UP. The main aims of the study were: 1. To assess the knowledge-levels, customs, beliefs and attitudes towards leprosy of the Sahariya community. 2. To assess knowledge-levels concerning the Government Leprosy Eradication Programme. 3. To identify and implement necessary interventions on the basis of the above information. The four tribal districts of Gwalior, Sheopur, Shivpuri and Guna were identified for the study. Five selection criteria were used for the choice of three villages from each of the four districts. The criteria were: predominance of Sahariya tribals in the population; presence of leprosy patients; continuous reporting of leprosy cases during the past couple of years; half of the villages should be adjacent to a main road; half of the villages should be situated two or more km. from a main road. Participatory rural appraisal techniques were used to study people’s understanding and perceptions about leprosy.

In an analysis of health care service utilisation of leprosy patients in Karahal village of Sheopur district, 20% of the patients used traditional (desi) medicines, 25% went to private doctors, 20% went to government doctors, 10% opted for some
magical-religious rituals, 10% had a puja performed, and 5% were too poor to spend money on any form of treatment. In addition to the barrier to access posed by the distance factor, the discussions revealed that people, by and large, did not have a favorable attitude to the government health facilities. Some of the reasons for not approaching the PHC were:

1. It remains closed;
2. The staff has a negative attitude;
3. Medicine is not available; and
4. There are long waiting periods.

Some participants pointed out that the government health worker did not conduct leprosy surveys in their villages. Even when cases were identified, there was no follow-up of treatment by the health workers after the first dose of medication. They did not visit the villages regularly, if at all. Furthermore, since patients were not informed about the side effects of MDT, many patients stopped taking drugs when they experienced loss of appetite and nausea.

While indigenous beliefs and practices may result in delayed treatment for leprosy, the role of other deterrent factors from the providers’ side should not be underestimated. For instance, in some of the sample villages where a SAPEL had recently been conducted, two new patients were found, who had apparently been missed out during the SAPEL campaign. From a social-psychological perspective, the most interesting finding of this study is that leprosy patients are not subject to any overt discrimination in the family or community among the Sahariyas. The absence of social stigma qualitatively alters the experience of leprosy at both individual and community levels. Unfortunately, this study fails to provide any further information on this crucial theme beyond the simple statements that the patients lead normal lives. Based on the above research results and intervention activities, a number of action points have been identified for future activities for leprosy elimination among the Sahariya community:
1. A culture-sensitive campaign for building awareness on leprosy should be carried out,

2. Improving the capacity of the Sahariya community by organising

3. Awareness programmes;

4. Organising group meetings regularly to raise the knowledge-level regarding leprosy;

5. Training the local voluntary groups at community-level and preparing them as leprosy elimination workers. Workers should help in dissemination of the information on leprosy;

6. Organising orientation and cooperation camps among government health workers, anganwadi workers, village health workers;

7. Organising school health program;

8. Making use of theatre and other effective communication media for reaching the Sahariya village.

It is hoped that the above action points may also be useful for leprosy and other health related interventions in tribal communities beyond the Sahariyas of Madhya Pradesh

3.11 Mortality

Ranjan Kumar Biswas and A.K. Kapoor (2003) study entitled, “A Study on Mortality among Saharia – Primitive Tribe of Madhya Pradesh”. It has been noticed that the tribal mortality is quite distressing, especially when seen in the context of Indian national population. The present study has been conducted among 333 households of six Saharia inhabitat villages under Barai block in Gird sub-division, Gwalior district of Madhya Pradesh. Barai is a multi-ethnic block but the inhabitation of Saharia has been found dominantly. Taking into consideration the distribution of Saharia in various areas, the Barai block was selected purposively. In the second
stage of the study, the adjoining close distance and far villages under this block were also selected by the use of random sampling technique.

“Crude death rate (CDR) may be defined as the ratio of the number of deaths which occur within a given population during a specified year, to the size of death population at midyear”. Crude death rate among Saharia has been found to be 25.77. Keeping in view the comparison, Saharia crude death rate has been found to be comparatively higher than Bhil, Gond, Abujhmaria and others.

Age specific mortality rate (ASMR) is another method of finding out death rate. The mortality risks faced by human beings vary sharply with age. In comparison to the various population groups, the pattern of age specific mortality rates among Saharia has been found almost similar.

Still birth is a term which is accounted in reproductive wastage. In the present study among Saharia, still birth rate (SBR) has been found to be 26.66. Taking into consideration in a comparative account, it has been found that still birth rate among Saharia is comparatively higher than population of Madhya Pradesh.

Early neo-natal deaths (death of infant within first week of life), late foetal deaths (after 28 weeks of gestation) and still births together constitute pre-natal mortality. Pre-natal mortality rate among Saharia has been found to be 54.79 which presents comparatively higher than population of Madhya Pradesh.

Infant mortality consists of neo-natal mortality (infant death upto 28 days of life). In this study, 54.79 has been found as the neonatal mortality rate among Saharia. In comparison with other studies, it has been found that neo-natal mortality rate among Saharia is comparatively higher than Juhar and others.

Post neo-natal mortality refers to the deaths which occurred between four weeks and one year of child age. In the present study, post neo-natal mortality rate (PNMR) among Saharia has been found to be 68.49 which presents high as compared to Kamar and others.
Infant mortality rate (IMR) is one of the most important measures of mortality, as it estimates the mortality in that segment of the population, where it is usually extremely high. In this study, infant mortality rate among Saharia has been noticed comparatively higher than Jaunsaria and others.

Under five mortality considers all deaths from 0 to under five years of age. It has been noticed that under five mortality rate among Saharia is high (82.35) as compared to Marcha, Khasi, Garo and others.

Child mortality takes into consideration the children death from one year to less than five years. It has been found that child mortality rate (CMR) among Saharia is higher (62.82) than Marcha, Khasi, Garo and others.

In this review, it has been found that the maximum death were occurred due to pneumonia (20.9 percent), malaria (13.8 percent), tuberculosis (11.6 percent), gastric (9.3 percent), and diarrhea (9.3 percent) among Sahariya.

Poor socio-economic status, malnutrition, impure drinking water, high extent of illiteracy, early age at marriage and frequent child births, non-acceptance of family planning methods, unawareness on immunization, paucity of modern medical facility and worst environment are they attributed reasons of sharing various diseases which influence frequent deaths.

As a result, Saharia crude birth rate, age specific death rate, still birth rate, pre-natal, neo-natal and post neo-natal mortality rates, infant mortality rate, under five mortality rate and child mortality rate are quite distressing, specifically when compared to the context of most of the tribal and non-tribal population of India. Finally, it is suggested that urgently a long-time multi-stages development scheme should be implemented among this tribal inhabitant area. Under this scheme, first priority should be given to improve their financial condition, educational status, availability and quality of drinking water and medical facility. Implementing such development scheme, occasionally demographic, biological as well as socio-economic and medical investigation should also be conducted with a view to review and understand
and then an expectation may be furnished about socio-economically as well as demographically advanced Saharia.

3.12 Nutrition

Meena Radhakrishna (2009)\textsuperscript{12} Hunger among PTG and non-PTG nomadic communities, this article will discuss how nutritional resources of people on the move might be gravely endangered through institution of new laws and policies by the government of India. It must be made clear that these categories of people are overlapping ones, since nomadic communities are multi-skilled and multi-resourced, and seldom engage in just one or two livelihood activities. For the purposes of policy conceptualization, the occupational categories discussed here have been treated as discrete.

The incidence of “unnatural deaths among the PTGs” has become sufficient grave that it has been recently officially recognized by the Ministry of Tribal Affairs. New forest laws have led to a large number of such communities being subjected to intense hunger for the following reasons:

a) Lack of access to small game like fowl, rabbits, deer, monkeys which used to be staple for a large number of hunting communities

b) Lack of access to bark, roots, tubers, corns, leaves, flowers, seeds, fruits, sap, honey, toddy and other forest produce which was a regular source of nutrition for gathering communities.

c) Lack of access to fish in ponds and streams in the forest which used to be a traditional source of food for forest dwelling nomadic communities.

Case study: Research on the Sahariya tribe shows that they used to be semi nomadic hunter gatherers as well as shifting cultivators. In fact, it is clear that in spite of belonging to the government recognized category of Primitive Tribal Groups (PTGs), they are dying out because of starvation. The consequence of being deprived of multiple traditional sources of food was that in 2005 there were widespread deaths
of Sahariya villagers in MP. “Two year old Suresh Sahariya of Patalgarh village has just been discharged from the district hospital in Sheopur, Madhya Pradesh. With his distended stomach, hollow eyes, and decaying and falling teeth, it seems a miracle that he has survived, when his brother and 12 other children from the predominantly tribal village died due to post-measles complications compounded by malnutrition, in February. Eighty children had been hospitalized. Doctors studying the deaths have stated that malnutrition led to measles, even in those children who had been vaccinated against the disease. Dr. P.C. Mahajan, head of the Department of Preventive and Social Medicine at the Gwalior Medical College, said: In cases of severe malnutrition, vaccination is not effective. In the absence of other sources of nutrition, a mid-day meal provided at the village school would have been a lifesaver for children. However, though there is a school building, there is no schoolmaster.

The average working year for members of his tribal community lasts only four months in the summer during which they collect forest produce. When there is nothing else, they eat sama, seeds of a wild grass which look like very fine rice but have little nutritive quality. Reports appear almost daily in local newspapers of grain allotted through the public distribution system (PDS) being smuggled out to neighboring States and sold in the black market. At least 200 quintals of grain has been caught in raids in Sheorpur and Shivpuri districts.” All the above forest dependent communities – shifting cultivators, hunter gatherers and pastoralists are also engaged in trade in the forest products with outlying villages, and earn a cash income which has been cut off, resulting in shortage of food buying capacity.

Satwanti Kapoor et al (2009)\textsuperscript{13} conducted study entitled “Nutritional Profile and Socio-Economic Status of Saharia, a Primitive Tribe of India”, to assess the nutritional profile and associated socio-economic factors. The study has been conducted among Saharias of seven villages in Shivpuri and Gwalior districts of Madhya Pradesh, namely Bhattapur, Ghategaon, Kalotra, Mandopur, Sonipura, Dulara and Bhojpura. A cross sectional sample of 364 adult males and females aged 18-60 years was studied. Stature, body weight, skin fold thickness, circumferences, fat percent, grip strength and blood pressure were measured on
each subject. Body mass index, Trunk extremity ratio and Grand mean thickness were computed statistically. The impact of low socio-economic status is clearly evident in the prevalence of chronic energy deficient (CED) among males (48.8%) and females (37.2%). As per World Health Organization (WHO), a CED of 40% or more exhibits a critical public health problem, and that between 20-39% exhibits a serious public health situation. A higher prevalence of CED as well as overweight among males in comparison to their counterpart females reflects the higher sensitivity in terms BMI to their environment. The finding in the study opens a debatable point about the role of different indices of nutritional status assessment. The prevalence of malnutrition on the basis of MUAC was more among Saharia females as compared to prevalence obtained by use of Body mass index (BMI) standards. On comparing the socio-cultural norms and traditions among Saharias, it was found that the males are given preferential treatment for food and other necessities over females. More number of males is in contact with the mainstream population of the country. In light of these conditions we feel that MUAC is a relatively more sensitive index of assessing nutritional status. The Saharia males were found to be under critical situation and females under serious situation as per prevalence of CED classified as Public Health Problem by WHO. Whatever index is taken it is clear that Saharias are malnourished, which is severely affecting their wage earning, thereby perpetuating a vicious cycle. A few overweight males were also found. All the subjects were found to have normal blood pressure with the exception of a few hypertensive cases among males in overweight category. An influence of changing life style among Saharia males was more noticeable. The income and literacy were found to be directly related and both were found to influence the nutritional status.

Suparna Ghosh-Jerath et al (2013) carried out a study on ‘Assessment of Women and Children in Sahariya Tribal Community of Madhya Pradesh in India’. The objective of this study was to assess the nutritional status of Sahariya tribes of Madhya Pradesh (MP), India. It is a cross-sectional study was conducted in villages inhabited by Sahariya tribal community (specifically women in reproductive age group and children under 5 years) in three districts of MP. Dietary surveys, anthropometric and biochemical

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assessments were carried out and descriptive statistics on the socio-economic and nutritional profile were reported. Association between household (HH) food security and nutritional status of children was carried out using the logistic regression. Strength of effects was summarized by odds ratio. Chronic energy deficiency and anemia was observed in 42.40% and 90.1% of women respectively. Underweight, stunting and wasting among fewer than five children were 59.1%, 57.3% and 27.7% respectively. Low food security was found in 90% of HHs and the odds of children being underweight and stunted when belonging to HHs with low and very low food security was found to be significant (P = 0.01 and 0.04 respectively). Calorie, fat, vitamin A, riboflavin, vitamin C and folic acid intake among women was lower than recommended dietary allowance. Infant and young child feeding practices were suboptimal. Awareness on nutritional disorders and utilization of nutrition and health services was poor. A high prevalence of under nutrition and dietary deficiency exists among Sahariyas. System strengthening, community empowerment and nutrition education may play a pivotal role in addressing this.

The above reviews report discussed about the existed problems of Sarariya tribal especially about the poverty and migration, health, land, nutrition, education related problems and Government schemes and its implications in implementation level. Research gap find with this report is that, “The need of the above mentioned problem is to be studied in scientific manner with statistical analysis to find the proportion of sahariya people affected by the said problems like their food security, migration, availability of Government schemes like MNRGEA, PDS and functioning level of Anganwadi centre and other interventions. It will give the clear understanding to frame the intervention strategies with possible suggestions.
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