



Women Workers and their Health and Healthcare Facilities in the Tea Gardens of Terai, Darjeeling District, West Bengal, India.

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Abstract

The district of Darjeeling, West Bengal is famous in the World for its tea, one of the excellent beverages since the colonial period. Tea is a labour-intensive industry that mainly depends on women workers. The 'terai' plain lies in the foothills of the Himalayas situated in the Siliguri subdivision. It is distinguished for its tea cultivation from the hill areas of the district. As women are the main sources of labour in the tea plantations, the health condition of the women workers is the primary concern in every social aspect. Health and healthcare facilities are provided mainly by the tea garden authorities. Well and optimum healthcare facilities have the potential to increase the number of workers having good health, thus, the absentees will be reduced in a tea garden and consequently, production will be increased. But in the Terai area, adverse situations are observed in terms of health and healthcare facilities. Adequate healthcare facilities are needed in the tea gardens of the Terai region for the betterment of the level of production along with its quality.

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Introduction

Tea is the most celebrated beverage in the world. India is the second-largest tea producing country in the world and constitutes 31% of world tea production. Tea plantation needs a large number of human forces to plant, pluck, produce and finally package the product. In the Darjeeling tea industry, about 55,000 people are engaged in gardens as permanent workers and more than 16,000 people are added to the plucking season. The tea industry is a labour-intensive activity where women workers play a pivotal role. The running condition of the tea garden depends upon the healthy and skilled women workers. The present study is focused on the women workers of the tea gardens of the Terai region relating to their health status and rendering health care services.

The health and healthcare facilities depend upon the social determinants of health, and the economic and social conditions that shape the health of individuals, communities and jurisdictions as a whole (Bambra, et al. 2010). Thus the variety of health and healthcare facilities is important for the environment of the tea gardens in the Terai region of Darjeeling

district. Health issues of women workers are not only determined by the clinical statement but it ranges from daily living conditions, hygiene to quality as well as the distribution of income, working conditions and social services (Raphael, 2010). The plantation history of North Bengal shows that since independence, the health conditions of plantation women workers are influenced by a set of key indicators (Table - 1).

The Study Area

The physiographic plains to the south of Darjeeling foothills is known as the Terai that extends almost from the foot of the mountains to the northern border of the Dinajpur district. It lies between 26° 30' 48" and 26° 49' 45" N latitudes and between 88° 8' 51" and 88° 29' E longitudes. The Terai region of Darjeeling belongs to the Siliguri subdivision and is bounded on the north by the hills, south by Dinajpur district, east by Jalpaiguri district and west by the State of Nepal. Geographically, its dimension is almost 18 miles (N-S) and 16 miles (E - W), covering a total area of 229.95 square miles. The average annual production of tea in Terai is about 125.34 million kg (2013-14) and 49.70 thousand



ha area is under tea cultivation (2014). There are about 45 tea estates in the Terai region, of which 15 Tea Gardens have been taken into consideration, viz., Atal, Sanyashithan, Kamalpur, Bagdogra, Tarrinnaha, Ord, Nuxalbari, Merry View, Lohagarh, Putinbari, Sukna, Mohurganj, Kamala, Gaya Ganga, and Hanstwua (Fig-1).

Objectives

- To provide a comprehensive and integrated speculation regarding women's health on community-based settings.
- To measure the inequity in health care facilities covering the fifteen tea gardens of the Terai region.
- To formulate recommendations for promotions and prevention of health and healthcare issues.

Methodology

Emphasis has been given on primary data to get improved knowledge and a better understanding of the changes regarding the social determinants of health in tea gardens. A set of fifteen tea gardens of the Terai region have been surveyed especially on the women plantation labourers to acquire insights into their health issues using a detailed structured questionnaire between September 2014 and August 2015. Several interviews under special consideration was taken during this period. Collected data have been tabulated, analyzed, correlated and interpreted according to the objectives. For the presentation of the data, conventional cartographic techniques have been used.

Discussions

Tea gardens operate under a unique socio-economic milieu. Apart from the civic society, the living conditions of plantation workers directly get shaped by the outlook of tea garden management (Bhowmik, 1980). Their life and livelihood are especially conducted by the Plantation Labour Act, 1951 and Plantations Labour (Amendment) Act, 2010. The main factor that control their living standard is the rate of daily wages that gets ascertained by the Minimum Wages Act, 1948.

The identification of the controlling factors that shapes their health is important to determine the prevention programmes. Social determinants of health show the relative association between inequalities and gradient of socio-economic parameters. Health and healthcare facilities in the Tea Gardens are subjected to the underlying socio-economic and political conditions. Social determinants of healthcare get fair political interventions and the fate of plantation women workers of the Terai region are subjugated to the downfall because of the political interplay (Basu, 1977).

The health and healthcare improvement in Tea Gardens through state sponsored programmes is ensured by legislative measures and integrated policy implementation (Misra, 1986). It is important because the condition of the health of women workers has a direct bearing upon the running of the tea gardens. Labour-intensive industries like tea having more than 60% of women labourers include the surplus amount of temporary women workers during the peak season of April to October. From plucking the tea leaves to the packaging of tea is mostly done by the experienced women working force. Hence excessive workload at both working place and home exert huge physical

and mental stress on women workers. A physically demanding job like the plucking of tea leaves badly affects the health condition of women workers. On the other hand, evidence shows that a greater burden on women's health eventually declines production. These occupational health hazards need an integrated and strategically valid measures for their wellbeing. Hence, a multidimensional database is necessary to address the parameters of social determinants of health (Rasanathan, et al. 2011). The present study has brought out various alarming issues regarding health conditions and inequities in healthcare facilities.

a) Health Issues of the Women Workers

Adequate healthcare infrastructure are the basic demand that should be secured for the plantation women workers under the Plantation Labour Act, 1951. It is found that among the surveyed women 32.16% of workers have pale health status because they cannot afford a nutritional diet due to low wages. Those women workers who reported normal health status also experienced stress at working place and suffered from fatigue, anxiety, irritability and headache.

Symptoms of hypertension in plantation women workers are mainly due to the carrying of heavy load, long duration of work and improper diet. In the study area, about 19.43% women workers have registered complaints of headaches due to strain. Hypertension is prevalent among about 18.09% of women aged above 35 years. Doctors from the gardens reported an increasing trend of hypertension among women with increasing age. In the study area, about 16.08% of the respondents are reported sick. But being the only earning member of their family, they had to go to work for daily wages.

Socio-economic status, living conditions and percentage of anaemia affected persons are interrelated with each other. Study shows that women are more vulnerable than the man in the case of anemia (Kumar, 2014). Body mass index shows that the prevalence of underweight is more among those who belong to lower-income groups in India and don't get a proper daily diet. (Chabbra and Chabbra, 2007). In the Terai region, women have lower body mass index with widely prevalent anaemia. Interviews of doctors reveal that nutritional problems like underweight, thinness are frequent which adversely affect the livelihood of the Terai people and percentage sharing of anaemia (26.13%) is the most alarming issue because of its rapidly increasing rate. Most of the gardens in Terai are anaemia-prone and data reveals that the burden of anaemia is widespread among the women workers than their male counterparts.

Plantation women workers are exposed to hazardous conditions regarding health, works and sustenance. They are bound to carry a huge weight during the plucking period for eight long hours (Pande, 1996). Apart from the daily household activities, women workers have to fulfill their tasks (daily assignment of plucking leaves) of 25-27 kg and even more than that. Thus back and neck pain are the most commonly reported ailment. It is registered by about 22.11% of the individuals in every age, due to carrying a heavy burden. These musculoskeletal disorders are the emerging major cause of human resource degradation in the Terai tea gardens during the recent past. The authors found a very remarkable negative gesture in this regard. Skin diseases are common among the plantation women workers due to the



use of pesticides in tea bushes. Protective clothes and gloves should be provided to the workers according to the Plantation Labour Act, but ground truth reveals a considerable amount of skin diseases (12.06%).

b) Reproductive Health of the Women Workers

Mothers and infants are experiencing increased tissue mass which needs adequate nutrition and integrated strategies to improve nutrition during pregnancy and in infancy (Scott, et al. 2008). Reproductive health and wellbeing of women workers considerably depend upon the facilities provided by the garden authorities. Reproductive health and healthcare facilities secured by the maternity benefits are received under the Maternity Benefit Act, 1961. According to this, garden authorities are liable to provide pre and post-delivery leave with wages and basic medical facilities but in reality, field survey brings out a different picture. Most of the women workers reported that they plucked leaves during the pregnancy period to earn the wages for their family. Awareness regarding the maternity benefits is remarkably absent among the women workers so they are vulnerable to the exploitation in terms of maternity leave, wages during this period and nutritional measures that should be given to the garden authorities (Fig-3). It has been seen that out of total respondents only first two age groups together hold 67% of the women workers, which shows the fact that the majority of the tea garden women workers give birth at an early age. This increases the maternal mortality rate and infant mortality rate in the study area. On the other hand percentage share of women workers having more than three children is high but with the low-income level, it is not possible to provide good nutritional food, education and livelihood to all.

C) Healthcare Facilities in the Terai Region

Plantation women workers are experiencing hazardous health status. To prevent them from vulnerable health conditions comprehensive and strategic health policies should be assured. Preventive measures are not only the necessary requirement to achieve health welfares but also curative and promotive measures should be implemented in Tea gardens (Medhi, et al. 2006). Terai tea gardens of the Darjeeling district are more convenient in terms of geographical location; most of the gardens are well connected with the other parts of Siliguri subdivision. North Bengal Medical College is the nearest convenient destination and the key medical institution that provides service to these gardeners. But apart from that according to the Plantation Labour Act, all gardens are liable to provide medical facilities to the workers. The survey brings some major characteristics regarding medical facilities which are given bellow

Terai Tea Gardens have 23 PHCs. Five Tea Gardens have hospital while others have dispensaries. Garden dwellers often visit Outdoor Private Clinics and North Bengal Medical College but to go there in an emergency only 26.67% Tea Gardens provide ambulance.

Only four tea gardens have full-time residential doctors. While other gardens depend on visiting doctors. Medical camps are not regular in the study area.

The pulse polio vaccination in Terai is cent percent (100%).

Most of the nurses and compounder don't have any degrees or

proper training.

Mostly, medicines for fever, pain, dysentery, tuberculosis and iron tablets are distributed. Large numbers of pain killer tablets are also distributed to the women workers (Fig-4).

The health condition of women workers in the terai region is shaped by the following different parameters:

i) Working Conditions: Public distribution system provides food grains, tea, and firewood to the permanent workers. But it is reported that they have to compromise with the quality of these grains. *Sajal Dhara* Project is found in four surveyed Tea Gardens but at *Mela* (Plucking area), workers have to depend upon traditional *Paniwala* (carries water for workers). Sanitation facility is very poor at the working place, 13.34% gardens have temporary kutchha bathroom at the *Mela* (plucking area) for women workers. In the study area, 53.36% gardens have a crèche facility but many of them are not functional.

ii) Conditions of House: The housing condition of labour line is not up to the mark. About 58.24% respondents have a separate kitchen but a large number of them do not use them as a kitchen. They use it according to their necessity to store firewood and cook in an open place or in the living room which is unhealthy. Another important observation is that 64.32% responder's households do not have any drainage facility. And the most alarming issue in the study area is 48.91% women workers do not have a separate bathroom in their households. Those who get bathrooms from the garden authority or panchayat, use it for animal husbandry or to store firewood.

iii) Family Structure: In the study area, highest 47.33% of respondents have a household size of 4 - 8 persons. Most of the households depend on the women earning members. Male workers in Terai TGs are more interested to work outside of the garden. However, male plantation workers are vulnerable to addiction. So, women workers play a major role both in their households and working place. But due to insufficient health care and negligence to health, women workers are in a more vulnerable situation which negatively affects production level and well-being.

iv) Income Level: This survey is conducted at the crucial period of wage increment from Rs.112.50 to Rs.122.50 after prolonged demand by all trade unions which is still much less than Kerala and many other plantations. All garden authorities follow this new daily wage rate in Terai and pay women workers fortnightly. Data reveals that 32% of women workers are the only earning member in their family. Most of the respondents are (78%) live in a joint family. Data also reveals that 67.76% of women workers have their average monthly family income below Rs.5000 (Fig-5).

Key Findings

1) Women workers in tea gardens like Mohurganj, Atal, Sukna, Hanstwua get better health facilities from the authority and render better service for growth and development of the respective gardens. Similarly, lack of facilities and bad healthcare service depresses the workers to render their



- duty to full extent like in Gaya Ganga, Tarrinnaha, Putinbari, Lohagarh and Merry View Tea Garden.
- 2) Health inequities are significant among the different tea gardens of the Terai region.
 - 3) Production of tea in the Terai region has declined in the last few years, because of the undergoing situation of the garden facilities that should be offered to the labourers.
 - 4) It is mentioned earlier that women workers are very much habituated to take painkiller pills, as carrying weight is responsible for back and neck pain. Women workers of the Terai region face the most adverse consequences because of consumption of the pain killers that results in various unpleasant side effects like nausea, vomiting, diarrhea, headache and hypertension.
 - 5) The role of trade unions is very much confined within the male workers who dominate the illiterate and unaware women workers about their rights and facilities.
 - 6) Putinbari tea estate does not have a road connectivity and use the river bed of Rakti for transport during dry season (winter). They do not have any hospital or health center in the garden also. For emergency, they have to cover more than 18km instead of 3km to reach the nearest health center. Lohagarh also suffers from the absence of PHCs and poor communication systems.

Conclusion

In recent times, the North Bengal Tea gardens are going through a crisis regarding the plight of workers. The Terai tea gardens are experiencing better conditions than the tea gardens of Dooars. But strategies should be implemented in a scientific manner to enhance the good running condition of the tea gardens. Followings are some of the recommendations that can ensure the livelihood and health conditions of women workers in the Terai region:

- a) The plantation Labour Act should be reviewed and modified under changing considerations.
- b) For enhancing the production level basic facilities should be offered at an optimum level. Equal distribution of Education, Nutrition, Medical amenities should be secured.
- c) For the betterment of the housing condition, the local governing body should take more initiatives. Management should be more flexible to give NOC for the Indira Abashan Yojana.
- d) Management and the government should organize health camps at a regular interval. Community awareness programme should be enhanced by NGOs.

References

1. Afshar, H. (1991). *Women Development and Survival in the Third World*. London, E: Longman.
2. Bambra, C. et al (2010). *Tacking the wider social determinants of health and health inequalities: evidence from systematic reviews*. Journal of Epidemiology and Community Health, 64(4), pp284-291.
3. Basu, T. (1977). *A Rupee a Day Keeps Politics Away*. Economic and Political Weekly, 12(40), pp1692-1693.
4. Bhowmik, S. K. (1980). *The Plantation as a Social System*. Economic and Political Weekly, 15(36), pp1524-1527.
5. Chapman, A.R. (2010). *The Social determinants of health, health equity, and human rights*. Health and Human Rights,

- Social conditions of Health: Convergences and disjunctures, 12(2), pp17-30.
6. DasGupta, M. (1999). *Labour in Tea Gardens*. New Delhi, ND: Gyan Sagar Publication.
7. Chen, L. C. & Dasgupta, M. (1998). *Women's Health in India, Risk and Vulnerability*. New Delhi, ND: Oxford University Press.
8. Chhabra, P. & Chhabra, S. K. (2007). *Distribution and Determination of Body Mass Index of Non-smoking Adults in Delhi India*. Journal of Health Population and Nutrition, 25(3), 294-301.
9. Jhonston, R.J., Gregory, D., Pratt, G., Watts, M. (2005). *The Dictionary of Human Geography*. New Delhi, ND: Blackwell Publication.
10. Kumar, R. (2014). *Anemia: A Common Health Problem, Consequence and Diet Management among Young Children and Pregnant Women*. Journal of Biological Forum An International Journal, 6(1), pp27-32.
11. Kundu, A. (Ed.), (2006). *India Social Development Report, Council for Social Development*. New Delhi, ND: Oxford University Press.
12. Lawrence, M. & Worsley, T. (2008). *Public Health Nutrition from Principles to Practice*. Australia, NSW: Allen & Unwin.
13. Medhi, G. K. et al (2006). *Study of health problems and nutritional status of tea garden population of Assam*. Indian Journal of Medical Sciences, 60(12), pp496-505.
14. Misra, S.R. (1986). *Tea Industry in India*, New Delhi, ND: Asish Publishing House.
15. Nandy, V. (2005). *Tea Industry Wage Agreement in West Bengal*. Economic and Political Weekly, 40(48), pp5129-5131.
16. Pande, P.N. (1996). *Drudgery of the Hill Women*. New Delhi, ND: Indus Publication Company.
17. Plantation Laborur Act. (1956). Retrieved from <http://teaboard.gov.in/pdf/policy/Plantations%20Labour%20Act%20amended.pdf>
18. The Plantations Labour (Amendment) Act. (2010). Retrieved from [http://www.prsindia.org/uploads/media/Acts/The%20Plantations%20Labour%20\(Amendment\)%20Act,%202010.pdf](http://www.prsindia.org/uploads/media/Acts/The%20Plantations%20Labour%20(Amendment)%20Act,%202010.pdf)
19. Qadeer, I., Sen, K., Nayer, K.R., (Ed.) (2001). *Public Health and the Poverty of reform the South Asian predicament*. New Delhi, ND: SAGE Publication.
20. Raju, S., & Bagchi, D. (Ed.) (1994). *Women and work in south Asia regional patterns and perspective*. New York, NY: Routledge.
21. Raphael, D. (2010). Review of the Book *History of the Social Determinants of Health: Global Histories, Contemporary Debates*, By Cook, H. J., Bhattacharya, s., Hardy, A. (Ed.). Isis, 110(3), pp625-626.
22. Rasanathan, K. et al. (2011). *Primary health care and the social determinants of health: essential and complementary approaches for reducing inequalities in health*. Journal of Epidemiology and Community Health, 65(8), 656-660.
23. Regidor, E. (2006). *Theory and Methods: Social Determinants of Health: a veil that hides socioeconomic position and its relation with health*. Journal of Epidemiology and Community Health, 60(10), pp896-901. doi: 10.1136/jech.2005.044859
24. Sadana, R. & Harper, S. (2011). *Data Systems Linking Social Determinants of Health with Health Outcomes: Advancing Public Goods to Support Research and*



- Evidence-Based Policy and Programs*. Public Health Reports, 126(3), pp 6-13.
25. Scott, J., Campbell, D. & Davies, M. (2008). *Public Health Nutrition from Principles to Practice*. In Lawrence, M. & Worsley, T. (Eds.), *Mothers and infants* (pp. 74-99). Australia, NSW: Allen & Unwin.
26. Tugwell, P. et al. (2010). *Assessing equity in systematic reviews: realising the recommendations of the Commission on Social Determinants of Health*. British Medical Journal, 341(7778), pp873-877.
27. Watson, E. A. (1936). *The Tea Industry in India*. Journal of the Royal Society of Arts, 84(4346), pp445-465.

Table -1: Indicators of health conditions

Category	Indicators
DISTAL	Historic Perspective
	Cultural Background
	Physical Environment
	Socio-Cultural Environment
INTERMEDIATE	Community Infrastructures
	Resources
	System & Capacities
PROXIMAL	Health Behaviours
	Daily Living Conditions
	Political Endeavors
	Socio-Economic Intervention

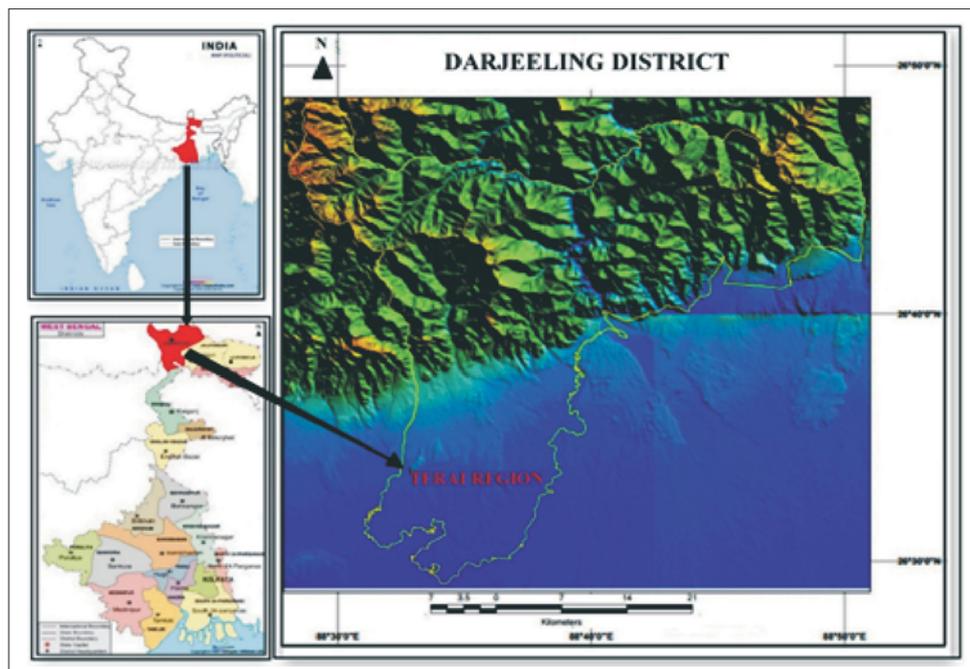


Fig. 1: Location of the Study Area

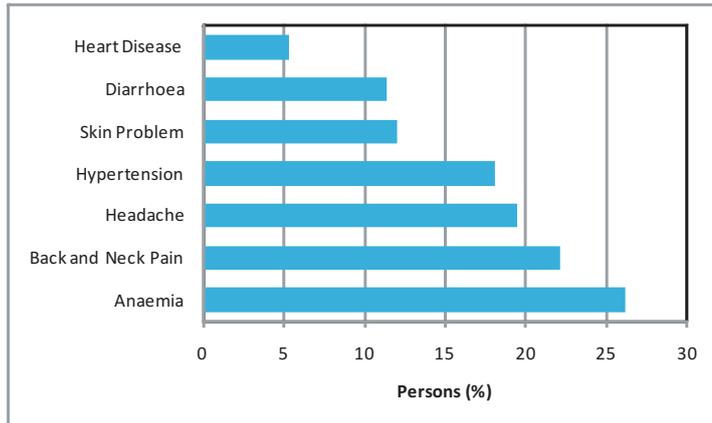


Fig. 2: Types of Ailments prevalent among the Women Workers in the Tea Gardens of Terai Region

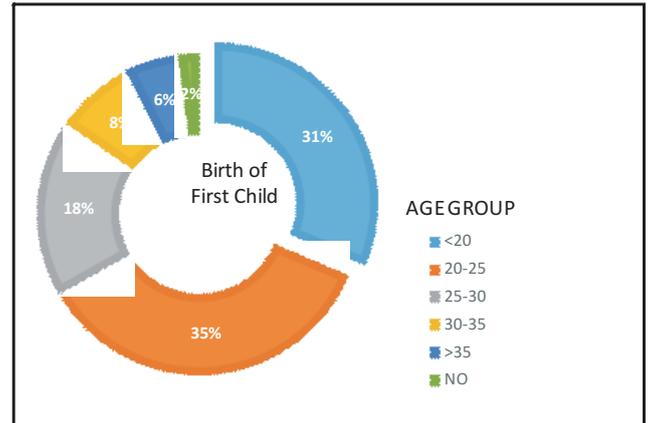


Fig. 3: Age-specific Birth Rates of first Child among the Women Workers in the Tea Gardens of Terai Region

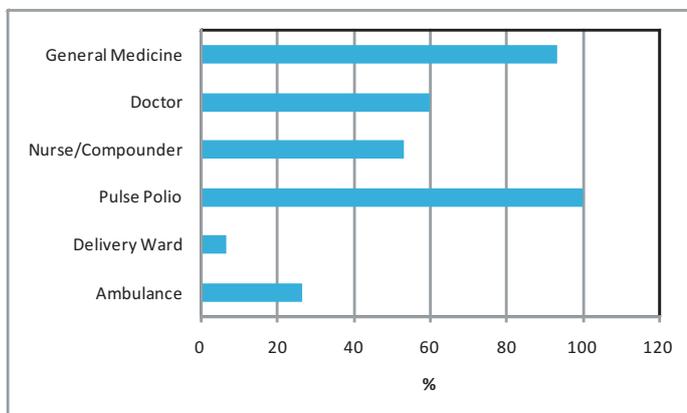


Fig. 4: Medical Facilities in the Study Area

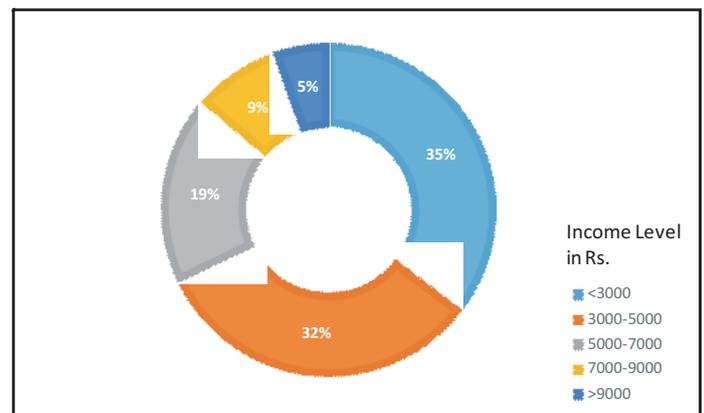


Fig. 5: Family Income Level of the Respondents



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