

## EXECUTIVE SUMMARY

**In R/o Minor Research Project entitled: “Nutritional Pattern and Deficiency Diseases in Scheduled Caste and Scheduled Tribe Population of Jalgaon District, (M.S.)”sanctioned by UGC, WRO Pune File No: 23-770/13(WRO) to Dr. Prakash D. Patil**

---

The relationship between man and environment has always been major concern of the subject geography and geographers. Environmental factors determine physical and mental health of human being. Physiography plays an important role on landuse and productivity of land. Jalgaon district belongs to the *Deccan* uplands of the Maharashtra State. It has distinguished characteristic from the rest of the upland districts due to its westward aspect. The study region include large hills in the northern part known as Satpuda mountain covered with thick forest, stretches of barren plain and bad land topography along the major river banks. Tapi trough is well known rift system occurring between Satpuda range to the north and steep rising Satmala Ajanta range to the south. The Satmala-Ajanta range demarcates the southern boundary of the Tapi basin as well of Jalgaon district.

During the decade 2001-11 the total population of the study region has increased by 14.86 percent. Agriculture is the main sector of the economic activities in the study region. The main cultivators and main agricultural labourers altogether constitute more than 71 percent of the total main workers in the district. The proportion of agricultural labourers to total workers varies between 79.50 percent in Vaijapur tribal PHC region of Chopda tehsil and 37.58 percent in Varangaon PHC region of Bhusawal tehsil.

Scheduled caste population in the district has registered 35.74 percent growth during 2001-11 decade against the growth of total population 14.86 percent. Scheduled tribe population in the district has registered 38.63 percent growth during 2001-11.

Jowar, bajra, corn and wheat are the major cereals grown in the study region. Cereals altogether occupied 216202.72 hectare of gross cropped area, which accounts 27.58 percent during the study period.

Nutritional deficiency diseases may cause due to the partial or complex absence of one or more nutrients in the diet of the person. Nutritional deficiency is the major concern among the backward communities like scheduled caste and scheduled

tribes. There are nine deficiency diseases are reported in the study region which include anemia, teeth and gum diseases, eye diseases, night blindness, malnutrition, stunted growth, goiter, pellagra, kwashiorkor etc.

Anemia ranks first among all the nutritional deficiency diseases reported to the PHC. Average intensity rate of anaemia for all PHC regions is recorded 8.78 patients per 1000 population. Highest intensity rate of anaemia is observed in Khedgaon PHC region (73.92, highest morbidity index is found in Kanalda PHC region (776.13). In Kanalda PHC region totally 47.80 percent population is from scheduled caste (10.89 percent) and scheduled tribe (36.92 percent) community. It is concluded that more number of morbidity cases of anaemia are identified in the areas of higher concentration of scheduled caste and scheduled tribe population.

Eye diseases rank second among the deficiency diseases. The intensity rate for eye diseases is 3.27 cases per 1000 population. The highest morbidity pattern (above 200) for eye diseases is observed in Nashirabad PHC region (658.05), followed by Ainpur, Kurha, Sakli, Talegaon, Shendurni, Nimbhora, Talai and Bhalod. In these nine PHC regions about 12 percent of scheduled caste and scheduled tribe population is settled.

Teeth and gum diseases are observed at an average rate of 2.55 cases per 1000 population. There are sixteen PHC regions of the district have shown high morbidity index (above 150) for teeth and gum diseases. In these PHC regions about 20 percent of scheduled caste and scheduled tribe population is concentrated. The highest morbidity index is observed in Kurha (570.26) PHC region from eastern tehsil Muktainager.

Malnutrition patients are observed at the average rate of 0.74 cases per 1000 population. High morbidity index (above 200) for malnutrition is observed in eleven PHC regions. Out of these eleven, six PHC regions are located in the northern part of the study region in Chopda, Yawal and Raver tehsils. These PHC regions are mainly dominated by scheduled tribe population.

In the study region goiter cases are reported in twelve PHC's. The goiter intensity rate in the study region is 1.65 cases per 100000 population. The concentration of goiter is observed high (above 500 morbidity index) in Adawad, Chahardi, Vaijapur, Dhanora, Kasoda and Garkhede PHC regions. Around 30.18 percent scheduled caste and scheduled tribe population is settled in these twelve PHC regions.

Stunted growth cases are observed in thirteen PHC regions of the district where 16.04 percent population from scheduled caste and scheduled tribe settled. Maximum intensity is observed in Girad PHC region (37.61 cases/100000 population). While the maximum morbidity index for stunted growth is observed in Talegaon PHC region.

In twenty-one PHC regions of the district night blindness cases are reported. In these PHC regions 23.50 percent population from scheduled caste and scheduled tribe is settled. Highest intensity rate and morbidity index for night blindness is found at Umbarkhed (Chalisingaon) and Adawad (Chopda) PHC regions respectively.

The overall intensity rate of pellagra for the region is 1.71 cases per 100000 persons. The highest intensity occurred in Ranjangaon PHC region (82.4 cases per 100000 persons). The areas of high morbidity index of pellagra are extended over Vaijapur, Lohara (Raver), Kinhi, Ranjangaon, Talegaon, Wakli PHC regions of the district. It is concluded that the incidence of pellagra is very high in the tribal population of the region.

There are seven PHC regions in the district which have recorded kwashiorkor cases. All these seven PHC regions have totally 8.11 percent population concentration of scheduled caste (6.07%) and scheduled tribe (9.14%) communities.

To assess the dietary pattern and food habits of the population village survey has been conducted. After extensive field survey following conclusion have been pointed out. Most of the families from scheduled caste and scheduled tribe population are economically poor and have to incur larger expenditure on food items like cereals and pulses other than nutritive dietary components. Use of milk and milk products and green leafy vegetables are negligible in the daily diet of the families. Very few families can afford milk and milk products throughout the year in their diet. Majority of the families are lacking in sufficient nutrients like protein, carbohydrates, calcium etc. Most of the nutritional diseases are observed in low income groups i.e. landless agricultural labourers.

It is found that except sugar all food items in the diet of the scheduled caste and scheduled tribe population are deficit. Average consumption of cereals by scheduled caste and scheduled tribe population in the study region is only 289.34 gm per head per day which is less by 35.70 percent. In the same way pulses, leafy vegetable, other vegetable, milk, meat and eggs are less in by 58.99, 81.39, 84.38, 59.87 and 50.98 percent respectively in the daily diet of the scheduled caste and

scheduled tribe population of the study region. From the sample study of various PHC regions, it is found that nutritional status of the scheduled caste and scheduled tribe people in study region is very poor.

As the result of poor or insufficient diet of the scheduled caste and scheduled tribe population of the study region various nutrients are found deficit in the diet of the people. Calories are found deficit in all sample PHC regions. The maximum deficiency of calories is found by 45.47 percent in Vaijapur PHC region and the least deficiency is observed at Varangaon PHC region by 10.69 percent. Among the other nutrients Carbohydrates, niacin, riboflavin and vitamin 'C' are found deficit in all the sample PHC regions. Protein deficiency is observed in three sample PHC regions while remaining has very little excess of protein in the daily diet.

The calorie and carbohydrate deficiency produced some cases of marasmus in the study village. In the sample PHC regions, calories and carbohydrates deficiencies are acute. Therefore, the symptoms of marasmus are commonly observed among the scheduled caste and scheduled tribe people. Calcium deficiency in the diet of the people in this region is also less from the standard requirement. Because of calcium deficiency tooth decay patients are mostly observed during the field survey. The proportion of tooth decay is more among the school going children. Vitamin 'C' is also deficient in the sample PHC regions. Because of high deficiency of vitamin 'C', a symptom of scurvy disease is observed in surveyed PHC region.

It is concluded that the overall nutritional status of the scheduled caste and scheduled tribe in the district is found to be poor. The socio economic condition of the population has decided the health status of the people. Among the various reasons of under nutrition and malnutrition factors like low productivity, low purchasing power and lack of knowledge about the proper diet are the causes of poor health and deficiency diseases. In view of above conclusions, the objectives and hypotheses mentioned at the beginning are tested positively.