



## ECONOMIC STATUS & MALNUTRITION IN SATPURA REGION OF NANDURBAR DIS. (M.S.)

Suryawanshi D.S.

Gavit C.S.

Kate A.M.

### *Abstract*

*Malnutrition is major public health issue in the society. It is more serious for the developing countries like India. Rural part of India is very prone to malnutrition. National family health survey III revealed shocking data regarding the health status of Indian children. Various studies have thrown the light on the different factors involved in causing of malnutrition. The present study focuses on economic status causing malnutrition. The economic causes of malnutrition are various and are multidimensional. The data related with 2001 and 2011 have been obtained from primary as well as secondary sources. . Auto cad, Arc GIS, Arc view and Illwis have been used for mapping and interpret it. They include total population, total workers, non workers, cultivators and other workers etc. The study is to find out the impacts of economic causes on the health to the Malnourished people living in rural area of Satpura Region. They are household, food in security, illiteracy especially in women, poor access to health services, early marriages of girls, poor breast feeding practices, unemployment among workers and cultivators etc.*

**Keywords:** Malnutrition, Illiteracy, GIS, Satpura Region Unemployment Cultivators.

### **Introduction:**

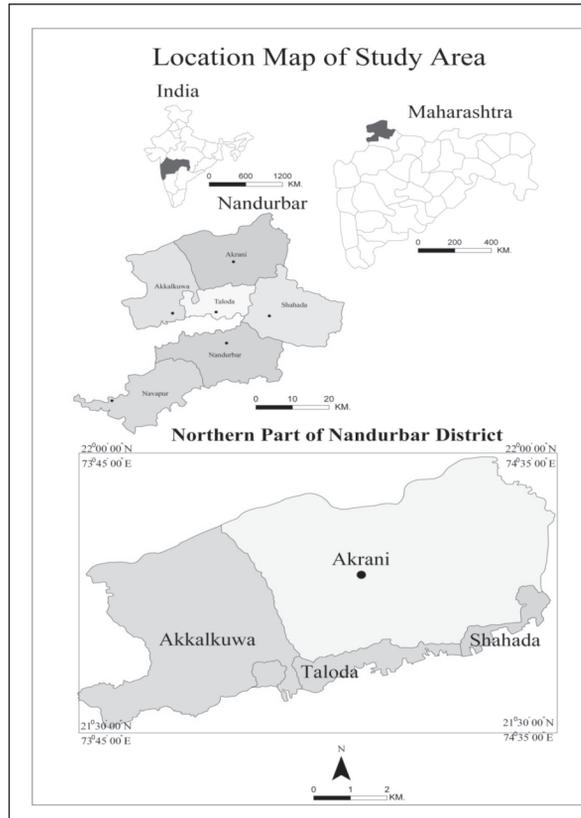
*Human being is a social animal. It is compulsory for every human being to survive as long as it is possible. Development of any region depends upon the availability of manpower in the form of workers. For the sole purpose of survival, human being undertakes economic activities. The activity, which brings money or money's worth to the human being. This is called either capital or wealth or earnings. This provides the human being with required commodities and services. Earning of human being depends upon many factors. Such as education profession ancestral business, ability to do hard work etc. Apart from this factors, geographical condition of the residence of the people also impact the economic condition of the people. The study area like Satpura region may not be as conducive for providing economic benefits as the other area. Satpura region is hilly area. This region has number of difficulties e.g. lack of transport facilities, lack of industries, lack of education etc.*

### **Study Region:**

Study area covered up for knowing the economic impact of malnutrition in Satpura region. It consists of whole part of Akrani, northern part of Akkalkuwa, Taloda and north western small part of Shahada Tahsil. Northern boundary of study area is occupied by Narmada. The latitudinal extent of the study area is 21° 03' 11" N to 22° 01' 01" N and longitudinal extent is 73° 04' 51" E to 71° 03' 51" E. Climate on the whole is hot and dry, light soil has been common. The average rainfall of the area has been 792.75 mm. The lightest temperature recorded has been 73°C according to 2011 census area of study has been 29707 sq km. The total population of the study area has been 720433. (Fig. No. 1)

**Objectives:** The objectives of this research paper are as follows:

- 1.) To search the economic status of causing malnutrition in Satpura region.
- 2.) To examine the economic factors prevailing in rural area of the study region.
- 3.) To acquire the knowledge with regard to the factors which have caused the present economic condition of the people?



**Hypothesis:**

Lack of economic perspective influenced a lot in creating the malnutrition among the people.

**Methods & Materials:**

This research paper is prepared to realize the above mentioned objectives. The data related with 2010 and 2011 have been obtained from primary as well as secondary sources. The gathered data are analyzed with Statistical method and arithmetical calculations have been made. Various tables and Maps are prepared with Computer. Geographical information systems such as Auto cad, Arc GIS, Arc view and Illwis have been used for mapping and interpret it.

**Findings & Results**

Agriculture is main economic activity of many people living in study. A study area belongs to tribal population. Economic activities of the people of this area are agriculture and forestry doing physical work in the farms. On account of crops grown in the study area few industries have been established like cotton, sugar industry, and oil mills. Many people work their and they help the person who don't earn anything e.g. children, old people and non working people etc.

**Total Workers**

Development of any region depends upon the availability of manpower in the form of workers. Researcher got the data of total workers of the study area which has been shown in the Fig. No. 2. Pertaining to the year 2001 and 2011. In the study area the total workers in 2001 were 49.27% and 45.25% in 2011. Both the figures make it clear that number of total workers has decreased in study area by 4.12%, which is matter of serious concern.

northern and western parts are covered by hills and mountains, Agriculture of this area is dependent on rainy season. All labour force does not get work throughout the year. This is because of large number of non workers. It includes females and Males migrated from other area. The areas which have been characterized by higher proportion of working population are concentrated in the irrigated region.

Over all scenario of the study area is not far encouraging so far as the development of the study area is concerned. The number of steps is still required to be taken for the development of the study region. It should be by government as well as by NGOs. So far as the condition of malnutrition is concerned, it prevails there because of non availability of nutritional food in required quantity and good health facilities.

### **Cultivators**

Agriculture is possessing dominant position in the study region. Cultivators are very significant in this regard. Figure. 4 exhibit the percentage of the cultivators to total workers for 2001 and 2011. The cultivators are 48.58% in 2001 and 35.18% in 2011. This Figure. 4 shows decrease in the number of cultivators by 13.4% during the year i.e. 2001 to 2011. The cultivators include Tenants and owners of the total workers.

The spatial distribution of cultivators in 2001 has been shown in table No. 3 The eastern and southern part has less number of percentages of cultivators to total workers. More percentage of cultivators is found in northern central and western part of the study region. The high percentage of cultivators are found in the circles namely Khuntamadi (63.64%), Molgi (57.97%) Dab (54.29%) Chulwad (53.45%) Toranmal (46.56%) Somawal BK (45.90%) Roshmal BK (43.90%). These circles are covered in northern part except Chulwad circle, which is in central part. Low percentage of cultivators are found in Wadfali (38.240%) Akkalkuwa (31.86%) Mhasavad (57.65%) Moramba (22.25%) Borad (15.24%) and the lowest percentage of cultivators are in Taloda circle (3.99%)

The above figure No. 4 also displays the spatial distribution of percentage of cultivators in 2011 in the study region. There was 48.58 % of working population as cultivators that counts 35.18% of total workers in the study region. In the above table, it is seen that barring some circles such as Taloda (5.48%) Borad (20.01%), Wadfali (54.28%) Moramba (14.26%) and Toranmal (42.99%), all these circles have witnessed decrease in number of cultivators. Decrease in percentage of cultivators has been observed in Molgi (35.65) Dab (37.70%), Akkalkuwa (10.60%), Khuntamodi (35.61%), and Chulwad (31.48%) Roshmal BK (32.37%) and Mhasavad (5.34%). Overall study region has witnessed decrease in percentage of cultivators by 13.4%.

The said figure No. 4 also exhibits temporal variation in percentage. So far as increase in number of cultivators is concerned, it is Wadfali which has recorded highest percentage of cultivators to total workers (54.28%) with positive variation of 16.04%. Other circles are Taloda (5.48%) with positive variation of 149 and Borad 20.01% with positive variation of 4.77. So far as decrease in the number of cultivators in percentage is concerned, it is Khuntamadi circle which has recorded negative variation of 28.03%. Other circles have recorded negative variation with marginal to large difference. They are Somawal BK (28.16%) with negative variation of 17.74% Molgi (34.65%) with negative variation 23.32% Dab 38.70% with negative variation of 15.59%, Moramba 14.26 with -7.99%, Akkalkuwa 10.60% with negative variation of 21.26%, Chulwad 31.48 with negative variation of 21.97, Roshmal BK 32.57% with negative variation of 11.53, Toranmal 42.99% with negative variation of 3.57% and Mhasavad 5.34% with negative variation of 22.31%.

The circles where high percentages of cultivators are recorded, it is because quality of agricultural land is poor and farmers suffering from poverty can't afford to provide irrigation facilities to their land. The circles where total number of cultivators have decreased it is because of tribal farmers have sold out their land to non tribal people and these nontribal people have purchased the land not for cultivation but for the purpose of investment and other activities, Except cultivation. However

It is observed that working population keeps on increasing from the southern part to western part and forwards towards eastern part of the study area. Maximum percentage of total workers is in Dab circle (57.91%), Somawal BK is just below it (57.85%). The lowest percentage of working population is in Wadfali circle 47.63%, the other circles such as Taloda (53.64%), Borad (53.03%), Molgi 49.58, Moramba (49.64), Akkalkuwa (56.11%), Khuntamodi (47.04%), and Chulwad (52.01%) Roshmal BK (51.50%), Toranmal (45.48%) and Mhasavad (50.90%) are having reasonable working population.

The circles having more than 50 % of total population as working population viz, Somawal BK, Taloda, Borad, Dab, Akkalkuwa, Chulwad, Roshmal BK and Mhasavad, during research, it is observed that these circles have ample opportunities for development. The persons willing to get job, can get it after some efforts but because of certain environmental limitation and lack of nutritional diet, they can't mention their health in good conditions. So some of the workers become victims of malnutrition.

The circles having less than 50% of the total population as working population are Wadfali, Molgi, Khuntamodi, Toranmal and Moramba. In these circles job opportunities are comparatively less, because of severe unemployment people accept any job offered to them but earning is too less. Naturally these people can't afford nutritional diet with such less earning and suffer from malnutrition, so far as the data of 2011 is concerned, it shows that percentage of working population to total population has decreased from 49.37% to 45.25% making it negative variation of 4.12%. It means in the entire study area increased population have not been able to get the job. The overall scenario of each circle is not encouraging in this respect except the circles Borad which shows increase in working population (57.30%) with positive variance of 4.27%. Moramba circle where working population is 56.22 of total population with positive variance of 6.58% and working population of Wadfali is 41.45% in 2011. Showing positive variation of 3.82%. It has been observed during survey that certain government scheme like Pradhan Mantri Gram Sadak Yojana and employment guarantee schemes have provided jobs to the people. However these jobs are of physical nature, workers are required to take nutritional food to compensate their exhausted energy but they can't, because of low income, so they are bound to suffer from malnutrition.

Other circles of this study area are showing negative variation viz Somawal BK (-1.03), Taloda (-4.59), Molgi (-4.28), Dab (-11.11), Akkalkuwa (-8.12), Khuntamodi (-2.22) Chulwad (-6.58), Roshmal BK (-6.84), Toranmal (-1.22) and Mhasavad (-3.14). The severe variation is observed in Dab circle. This is negative variation of 11.11. It is because of tremendous increase in total population of Dab i.e. 48.62. Naturally this population could not get the job.

#### Non Workers

The following Fig. No. 3 gives the comparative data of spatial distribution of non workers to total population in the form of percentage for 2001 and 2011 of the study area. The Non workers in 2001 were 50.63% and 54.75% in 2011. These figure show increase in non-working population under the study area. It constitutes 4.12 increases in the non working population under the study area.

The proportion of non working population is quite high in Wadfali, Toranmal, Molgi, Moramba & Khuntamodi circles. In all these circles, it is more than 50 %. In other circles, it is less than 50%. The maximum proportion of non working population is recorded at Wadfali circle (62.37%). While minimum is observed at Somawal BK circle, it is 42.15%. The percentage of non workers in the circles of the study area is Taloda (46.36%), Borad (46.97%), Molgi (50.42%), Dab (42.09%), Moramba (50.30%), Akkalkuwa (43.89%), Kuntamodi (52.96%), Chulwad (47.99%), Roshmal BK (48.56%), Toranmal (54.52%) and Mhasavad (49.10%). The percentage of non working population keep increasing towards Moramba, Molgi, Khuntamodi, Toranmal and Wadfali, it is due to low fertility of soil and lack of required irrigation facilities. The study area has been hot and dry and its

on account of this, the state government has made some legal provision for prohibiting the spell of tribal land to the nontribal.

**Other Workers**

In the category of other workers, persons engaged in manufacturing and processing activities are included. It also includes the persons engaged in repairing, in household industries. The following figure exhibits the percentage of other workers to total workers for 2001 and 2011 of the study region. The percentage of other workers 29.16% in 2011 under the study area. This figure shows two times increases in number of other workers to total workers.

The spatial distribution of other workers to total workers in 2001 has been shown in Figure No 5. The highest percentage of other workers have been recorded in Moramba circle (62.78%) i.e. in the western part of the study area while lowest percentage of other workers have been recorded at Khuntamadi circle i.e. in the central part of the study region (3.43%). The other circles are having the percentage of other workers to total workers namely Somawal BK (16.21%), Taloda (30.18%), Borad (30.63%), Wadfali (10.55%), Molgi (5.46%), Dab (5.64%), Akkalkuwa (35.31%), Chulwad (8.54), Roshmal BK (6.23%), Toranmal (24.32%) and Mhasavad (23.03%) in 2001 under the study area. The table also exhibits the percentage of other workers of 2011. Moramba maintains its first rank in 2011 also, but percentage has decreased to 39.99% with negative variation of 22.79%. Lowest percentage of other workers to total has been recorded in Dab circle (16.36%) with positive variance of 10.72. Moramba is situated in western part of study region and Dab is also located in western part of the study region. The other circles have recorded the percentage of other workers to total workers namely Somawal BK 22.88%, Taloda (21.92%) Borad (35.42%), Wadfali (19.77%), Molgi (28.36%), Akkalkuwa (33.33%) Khuntamodi (31.80%), Chulwad (39.17%), Roshmal BK (35.82%), Toranmal (29.83%) and Mhasavad (19.78%)

Fig. No. : 2

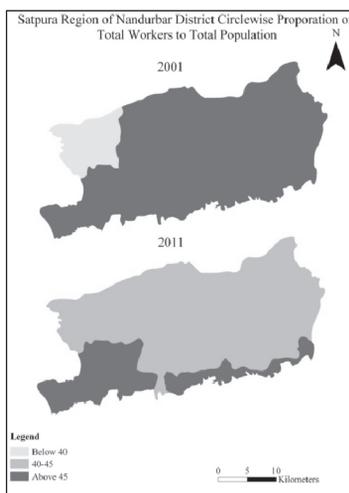


Fig No. 3

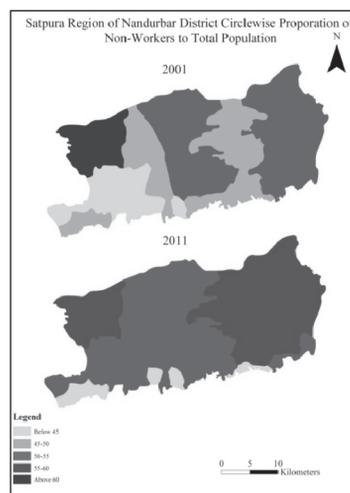


Fig No. 4

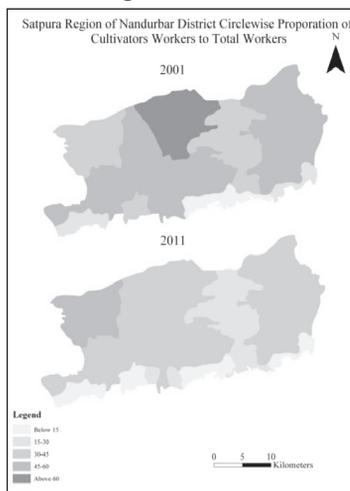
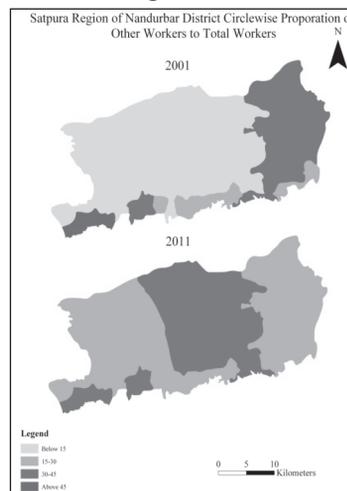


Fig No.5



The said figure gives spatial distribution and temporal distribution with regard to other workers in 2001 and 2011 under the study area. The total other workers percentage is 14.12% in 2001 while 29.16%, in 2011. There is increase of 15.04% in other workers. The circle wise records are Somawal BK 22.88% with positive variation 6.67%, Taloda 21.92% with negative variation of 8.26%, Borad 35.42% with positive variation of 4.79%, Wadfali 19.77% with positive variation of 9.22%, Molgi 28.36% with positive variation of 22.9%, Dab 16.36% with positive variation of 10.72%, Moramba 39.99% with negative variation of 22.79%, Akkalkuwa 33.33% with negative variation of 1.98%, Khuntamadi 31.80% with positive variation of 28.37% Chulwad 39.17% with positive variation of 30.63%, Roshmal BK 35.82% with positive variation of 29.59%, Toranmal 29.83% with negative variation of 14.49% and Mhasavad 19.78% with negative variance of 3.25%.

The percentage of other workers to total workers have increased in the circles namely Somawal BK, Borad, Wadfali, Molgi, Dab, Khuntamadi, Chulwad & Roshmal Bk. It is because of sale of agricultural land to non tribals. This land has been purchased by the non tribals for the purpose of investment with the intention of price hike in the future and to make huge profit. The circle namely Taloda Moramba, Akkalkuwa, Toranmal and Mhasavad have shown decrease in percentage of other workers to total workers that is because number of persons have migrated to these circles and engaged themselves into other activities such as repairing black smith's activities etc.

**Conclusions:**

- 1) Working population has increased from the southern part to western part and forwards towards eastern part of the study area.
- 2) It shows that percentage of working population has decreased from 49.37% to 45.25% making it negative variation of 4.12%.
- 3) The negative variation viz Somawal BK (-1.03), Taloda (- 4.59), Molgi (- 4.28), Dab (- 11.11), Akkalkuwa (- 8.12), Khuntamadi (- 2.22) Chulwad (-6.58), Roshmal BK (-6.84), Toranmal (-1.22) and Mhasavad (- 3.14).
- 4) The Non workers in 2001 were 50.63% and 54.75% in 2011.
- 5) The non working population keep increasing towards Moramba, Molgi, Khuntamadi, Toranmal and Wadfali
- 6) The cultivators are 48.58% in 2001 and 35.18% in 2011; it is decrease in the number of

Suryawanshi D.S., Gavit C.S., Kate A.M.

cultivators by 13.4%.

7) Other workers are 14.12% in 2001 while 29.16%, in 2011. There is increase of 15.04% in other workers.

**References:**

- 1) District census hand book of Nandurbar District 2001, 2011
- 2) Food and Agriculture organization of the United Nations (1950) report of the committee on calorie Requirements F.A.O. nutre stud no.5 Rome.
- 3) Government of India, Director General of Health Services Health Information of India. 2009 & 2011,
- 4) Misra R. P. (1978). Nutrition and Health in India. A.D. 1950-2000, Journal of Human Evolution, Pp. 85,93
- 5) Pigementel David and Pigementel Marcia (2003): Sustainability of meat based and plant based diets and the environment.
- 6) Pillai Vijayan K. Jeyle Ortiz, Roadriquez, Child malnutrition and Gender preference in India: The Role of culture.
- 7) Registrar General of India, Survey of Causes of Death (Rural) 2008.
- 8) Sundaram K. V. and Moni (-2003): Sustainable Development and Sustainable life styles, New Delhi, Bhoovigyan Vikas foundation
- 9) Visaria Pravin (1976)” in D.J. lakdawala (1976): Employment: A Survey of Research in Economics. Macro Economics Vol 2, Bombay Allied publishers, Pp-160

**\*Dr Suryawanshi D.S.**

Principal, & Research Supervisor  
V.W.S. College, Dhule (M.S.)

**\*\*Gavit C.S.**

Research Scholar & Assistant Professor,  
Arts, Commerce & Science College,  
Nawapur,

**\*\*\*Kate A.M.**

Assistant Professor,  
Department of Geography  
V.W.S. College, Dhule (M.S.)