

Seasonality of Births in Piedmont Plain of Jalgaon District: A Comparative, Geographical Analysis

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Abstract

Seasonal patterns determine the number of births and conceptions in the group of population those are living and enjoying natural environment. Whenever planners are not finding the problem villages, time period and causes, they are unable to implement the planning programmer to control the population. Keeping this view in mind researcher would like to display the high seasonal birth villages, in different social and cultural groups along with different geographical location.

KEYWORDS:- Seasonality, Births, Piedmont Plain, Rural, Patterns

Introduction:-

Seasonality of births means number of births reported in a specific season. India is a country having large population in the world. Every year population is increasing with provisional check. Government of India has declared separate population planning commission. Maximum weightage of the 5th plan period was given to control the population, to maintain the health of people and to enhance nutritional status. Government has also declared the rules and regulations to control the population. However, population is increasing. Most of the researchers and planners are working in this direction.

In this research work an attempt is made to highlight the seasonality of births for the planning purpose.

Objectives:-

1. To study the seasonal patterns determination of the number of births and conceptions in the group of population those are living and enjoying natural environment.
2. To find out the villages having high births not only in a year but also during the span of 6 years. The main intention of this objective is to suggest some concrete and pinpoint micro level planning for the villages having high births.
3. To find out the specific cause (season) behind such high birth rate. Whenever planners are not finding the problem villages, time period and causes, they are unable to implement the planning programmer to control the population. Keeping this view in mind researcher would like to display the high seasonal birth villages, in different social and cultural groups along with different geographical location.

RESEARCH METHODS AND TECHNIQUES USED TO DISPLAY SEASONALITY OF BIRTHS:

Jalgaon district comprises 1480 villages out of which 318 villages are located in piedmont plain. This region has three fold physiographic characteristics. Culturally this

region has also three fold cultural Characteristics. Economy of all these folds is slight different from each other.

Data Collection:-

1. Village wise monthly data of births are obtained from panchayat offices of three tehsils of Chopda, Yawal and Raver. This data is collected for the period from 2001 to 2006.

2. From the government of India, census CD of 2001 is obtained. From this CD, data regarding total population is extracted.

Data Analysis Techniques:

This data is analyzed systematically cited as below. Numbers of births in every month for six year of 318 villages are systematically fed in excel work sheet. For the analysis following steps are taken into consideration.

Step No.1:- To analyze such data following equation is used to get average monthly births.

$$\text{Sum of monthly births in a year} / 12 \text{ months.}$$

With help of this equation monthly average of births is obtained.

Step No.2:- Month wise percentage of births is calculated for each month.

Season wise number of births is calculated. By considering the span of each season, number of births is grouped as below.

1. June to September - Rainy Season
2. October to January - Winter Season
3. February to May - Summer Season

Then percentage of births is grouped in three seasons with the help of following equation.

100 % births

$$\frac{\text{-----}}{3 \text{ season}} = 33.33. \text{ It is expected that every season should have at least } 33.33\% \text{ of the total births in a year.}$$

Step 3:- The monthly percentage of number of births is grouped according to seasons.

Step 4:- If the sum of the births in a season is more than 33.33%, that village has seasonality of births. Such villages are extracted from the list of villages.

Step 5:- Categories of seasonality of births are designed to find out the villages having low to very high seasonality of births cited as below.

- Very high seasonality = More than 88.33%
- High seasonality = 88.33% to 66.66%
- Medium seasonality = 66.66% to 49.99%
- Low seasonality = 49.99% to 33.33%
- No seasonality (Normal) = Less than 33.33%

Considering the above categories, villages having more than 33.33% births are considered as seasonality of births. Those villages have more than 88.33% births in a specific season, these villages fall in very high seasonality group. In this way an attempt is made to display spatial distribution of high to low seasonality of births (village wise) in the map. Number of Charts showing monthly, yearly, seasonally birth percentages are also prepared.

SEASONALITY OF BIRTHS:

A) MONTH WISE NUMBER OF BIRTHS REPORTED IN THE TEHSILS OF PIEDMONT PLAIN:-

To find out the seasonality of births data obtained from Panchayat offices have been compiled. Table No.1 display number of births in piedmont plain of Jalgaon district for year 2001 to 2006.

With the help of this table, Fig.1 showing number of births in the months during 2001 to 2006 is prepared. Table No. 1 clears that number of births is more in the months of June, July August and September. This Fig. also clears the fact that Chopda and Raver tehsils have highest number of births in the months of June (412) and July (420) during 2001. While in Yawal tehsil number of births is comparatively low.

Table No.1 Seasonal Births in Piedmont Plain of Jalgaon District.

Season	Total No of Births Reported During 2001 To 2006	Annual Average Births	% of Annual Ave. Births	% Difference in Expected Births & Actual Births
Rainy Season	18151	3630	38.22	4.89
Winter Season	15764	3153	33.20	-0.13
Summer Season	13574	2715	28.58	-4.75
Total	47489	9498	100.00	

Expected births in individual season is 33.33%
 100% divided by 3 Seasons = 33.33%

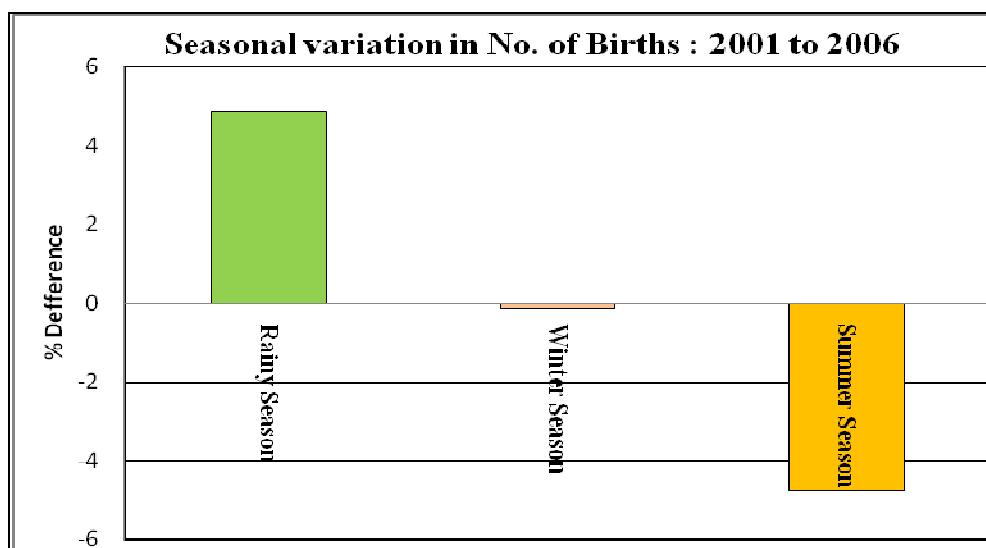


Fig. 1

Findings: - Fig.1 clearly displaying that in all tehsils highest number of births is reported during the rainy season. (2001 to 2006)

1) General Scenario of number of births during 2001 to 2003: -

Fig. 2 also displays the monthly number of births in three tehsils. As compare to the year 2002 & 2003 it is clear that in Chopda tehsil highest number of births is reported during

the months of June, July and August. In Yawal tehsil highest number of births is also reported from June to November.

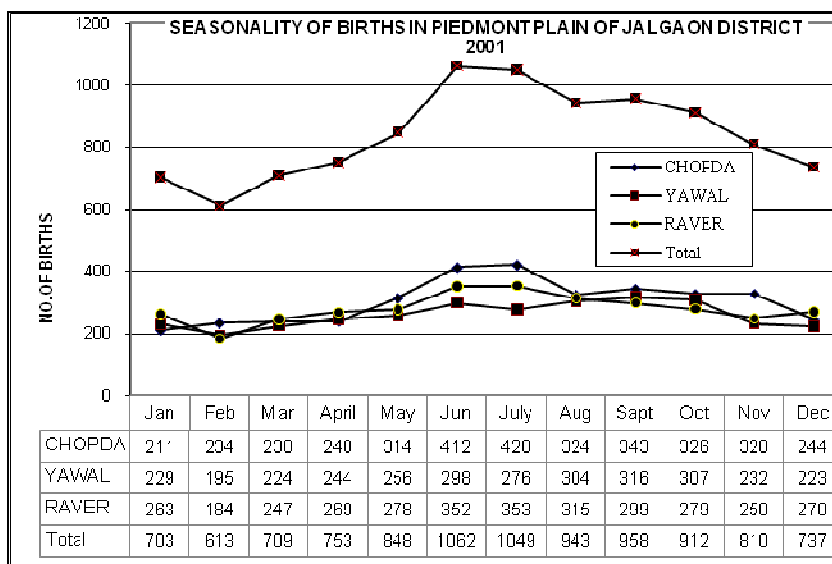


Fig .2

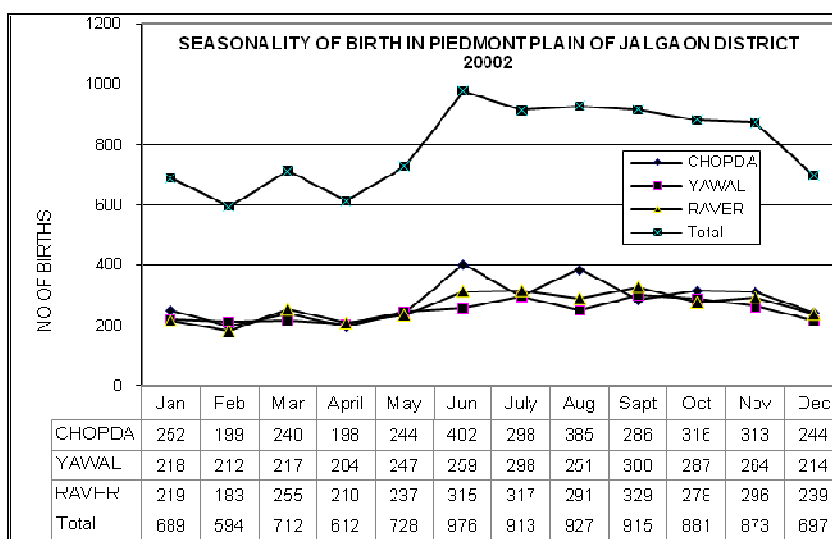


Fig.3

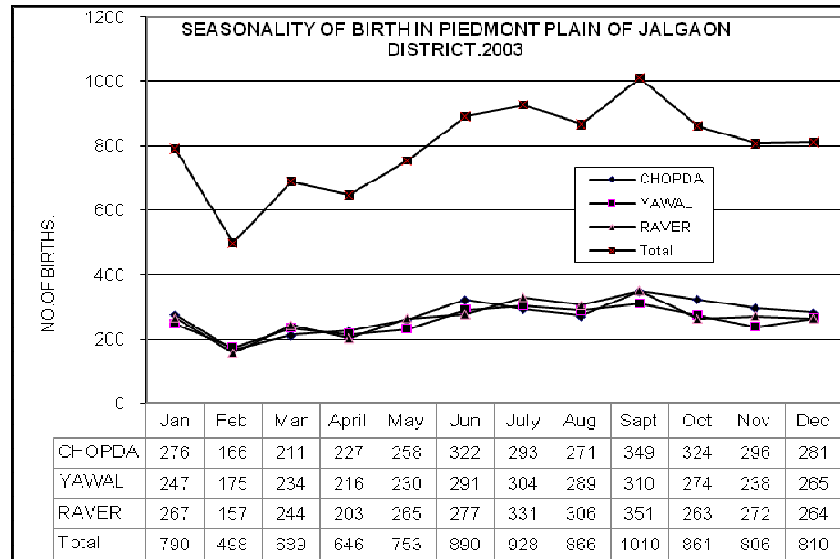


Fig.4

Findings: - Fig.4 clears the fact that in the months of June, July and August highest number of births are pronounced.

2) General Scenario of number of births during 2004 to 2006:

It is interesting to say that in all tehsils number of births are more in the months of June, July, August and September. September has highest peak during the 2005 and 2006 (Fig.6&7).

Findings: - From this explanation and reading of Fig. it is concluded that in the months of June to September maximum number of births are reported as compare with the remaining months.

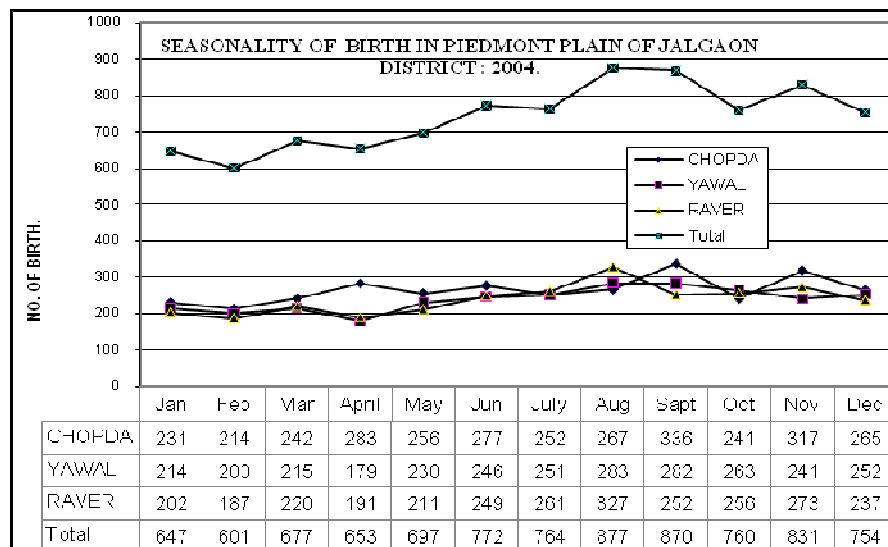


Fig.5

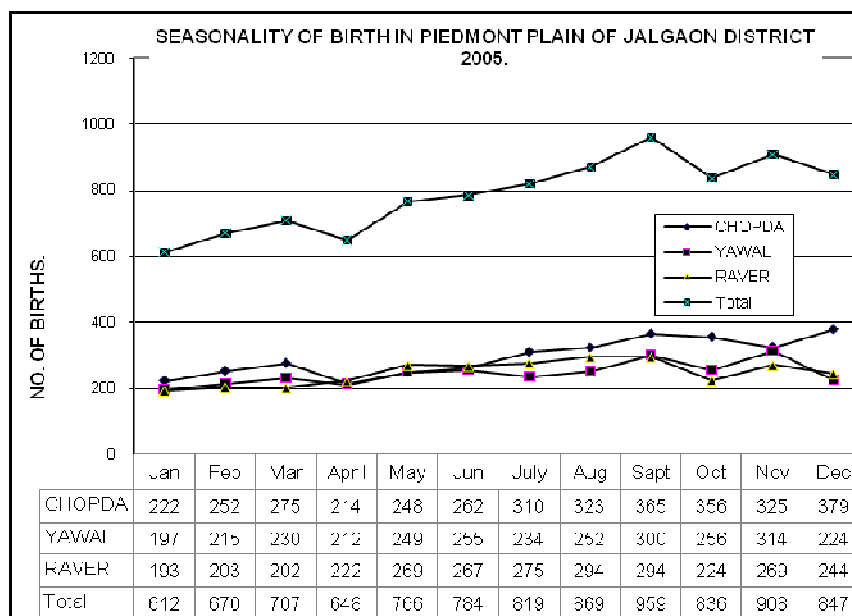


Fig .6

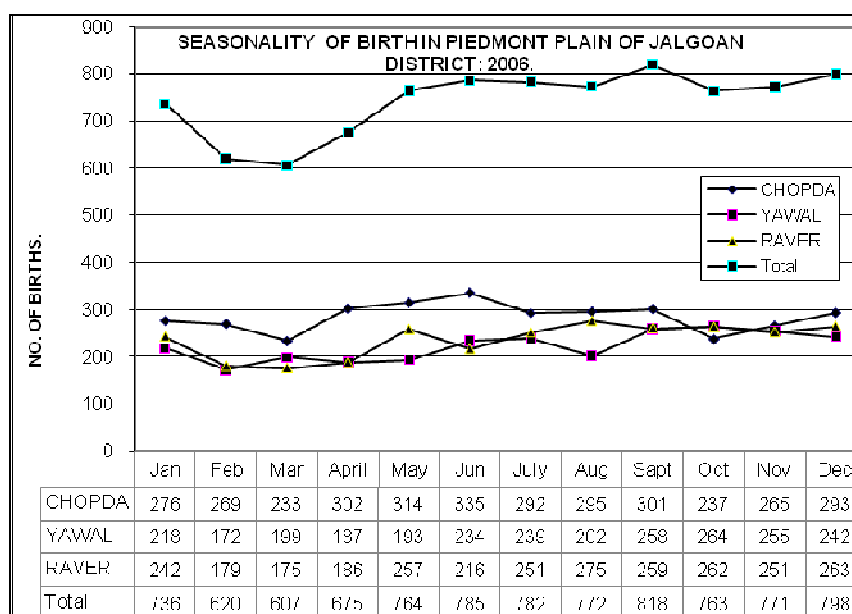


Fig .7

This is tehsil wise general scenario of number of births from the year 2001 – 2006. For the detail study of seasonality of births, micro level study is essential. In the study region from the year 2001 to 2006 researcher found seasonality of births during rainy season (June to September).

Conclusion:-

- 1) Table No.1 displaying that the highest number of births is reported in the months of July to September.

- 2) During 2002 highest number of births is reported in the months of July to September.
- 3) During 2003 in the months of June, July, August and September number of births are more.
- 4) The trend of seasonality is found in all years. (2001-2006)
- 5) Thus it is concluded that the proportion of births is more in rainy season.
- 6) People living in such villages and having high proportion of births in rainy season should be conscious. If social volunteers and researchers jointly organize social camps together at village level especially in those villages having frequently high seasonality of births in rainy season. Obviously it will have positive effect on population planning.

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