### **INFANT MORTALITY ESTIMATION BY RELIGION IN INDIA:**



## A DISTRICT LEVEL STUDY



# Rajan Sarma<sup>(1)</sup>, Arnab Sarmah<sup>(2)</sup> and Labananda Choudhury<sup>(3)</sup>

(1), (2) Darrang College, Tezpur, (3) Gauhati University, Guwahati

Table 1: Number of districts classified by religion in different intervals of IMR





Infant Mortality Rate (IMR) is an indicator of socio-economic development and health status of a population. The IMR is regarded as a very sensitive index of the health conditions of a community or a country and reflects if there is any change in the health standards.

Due to incomplete death registration in India IMRs cannot be directly calculated. Sample Registration System (SRS) regularly provides estimates of IMR at the national and state level. However, SRS does not provide IMR at the district level and by religion. An attempt has been made in this paper to estimate IMR by religion at the district level of India.

### Data:

- 2001 and 2011 census data of female population in the age group 15-34 years classified by religion and five years age interval for the states and districts.
- 2. 2001 and 2011 census data of children ever born (CEB) and

IMR	Number of districts							
	2001				2011			
	ALL	HINDU	MUSLIM	CHRISTIAN	ALL	HINDU	MUSLIM	CHRISTIAN
10-20				2			3	4
20-30			9	21	10	9	18	19
30-40	19	24	39	37	31	36	41	50
40-50	49	51	82	74	89	99	103	90
50-60	83	97	98	70	139	128	15	106
60-70	115	110	91	81	122	121	104	93
70-80	82	74	91	56	96	91	77	55
80-90	85	73	72	44	48	46	43	46
90-100	57	58	45	30	26	29	17	17
Above 100	83	79	27	56	12	8	5	36

children surviving (CS) of both sexes classified by religion and five years age interval of women in the age group 15-34 years for the states and districts.

The number of districts in India has increased from 593 in 2001 to 640 in 2011. For comparison, we have retained the districts of 2001. For this, we have adjusted the data of the parent districts from which areas were carved out to form the new districts between 2001 and 2011.

### **Methodology:**

For methodology, please see Sarma and Choudhury, 2012. (Online Link: http://www.jds-online.com/files/JDS-1072.pdf)

### **Results:**

- In seven states, Christians have higher IMRs than Hindus and Muslims both 2001 and 2011.
- In two states, Christian IMRs were higher than the Hindus in 2001 but in 2011 Christian IMR was higher than those of Muslims as well.



- In four states IMRs of all the religions have increased from 2001 to 2011.
- Out of the 573 districts that we have considered, Hindus have higher IMR than the Muslims in 453 (351) districts in 2001 (2011).
- Further, Hindus have higher IMR than the Christians in 397 (320) districts in 2001 (2011).



#### **References:**

Guillot, Michel and Allendorf, Keera (2010): "Hindu-Muslim differentials in child mortality in India," Genus, Vol 66, No 2, pp 43-68.

Registrar General of the India and Census Commissioner (2011). Religion Census 2011, retrieved from <a href="https://www.census2011.co.in/religion.php">https://www.census2011.co.in/religion.php</a> on 2<sup>nd</sup> April 2019).

Sachar, R., Hamid, S., Ooman, T. K., Basith, M. A., Basant, R., Majeed, A., Shariff, A. B. (2006). Social, economic and educational status of the Muslim community of India, New Delhi, Government of India.

Sarma, Rajan and Choudhury, Labananda (2012): "A critique of infant mortality estimates in India," *Journal of Data Science*, Vol 10, pp 563–578.