

DEMOGRAPHIC INSTITUTE

Gedung A, Lantai 2 & 3, Kampus UI, Depok 16424, Indonesia
Tel: (62-21) 787 2911-Hunting. Fax: (62-21) 787 2909
E-mail: biduk@ldfeui.org

Website: www.ldfeui.org



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COMMUNITY WELL-BEING AND INFANT MORTALITY IN ORISSA, INDIA

Barsharani Maharana Laishram Ladusingh

Abstract. Infant mortality in Orissa has started showing signs of decline as evident from the National Family Health Survey – III (2005-06) after a period of long spell of persistently high infant mortality rate. In this paper we have tested two main hypotheses, one pertaining to the overall community well-being and the other relating to the inequality in the well-being in the community. Decomposition analysis reveals that it is the inequality in the community well-being which contributes significantly over time to the decline in infant mortality in the case of Orissa while the overall community well-being though has inverse association with infant mortality it significance seems to be receding over time. The favorable influence of community well-being on enhancing survival of infanthood is being explained by the fact that households which are in better off communities benefits in terms of diffusion of knowledge and practice of newborn caring.

Keywords: infant mortality, community well-being, decomposition, Orissa, India.

1. INTRODUCTION

The community where a child is born is important for childhood growth and survival particularly in the Indian scenario. This notion comes from the fact that many communities in the country share common amenities, such as sanitation and drainage, source of drinking water, educational and health facilities, and even toilet facilities in few instances. Community well-being is one of the crucial factors which can encourage to

have better basic amenities in the community and as such have strong bearing on infant mortality. Infant mortality is a health outcome which is closely link with community's success in providing its newest and most vulnerable members with basic nutrition and healthcare (Finch, and Hummer, 2000).

Furthermore children born from literate women are found to have higher chances of surviving infanthood than of non-literate women. Beside other child care factors, the other backgrounds which are usually found to support survival of infanthood are household well being, urban resident, number of preceding children a women had given birth, whether women worked outside the household, preceding birth interval, and sex of the child. Studies which support one or the other these propositions are found in Whitworth & Stephenson (2002), Kishore (1993), Jatrana (2004), Pebley et al. (1996), Sear et al. (2002), Das Gupta (1990), Basu & Basu (1991), Pradhan (2003), and Tarai (2007). There are also studies which emphasize on community level backgrounds, such as education (Kravdal, 2004; Ladusingh & Singh, 2006), poor community water and sanitation (Sastry, 1996), family and community (Bolstad & Manda, 2001), proximity to urban centers, and distance to coast (Balk et al., 2004).

Orissa is one of the economically backward eastern states of India (Deolalikar, 2005). Infant mortality is very high in Orissa as compared to other states. According to the results of series of National Family Health Surveys (NFHS), NFHS-I (1992-93), NFHS-II (1998-99), and NFHS-III (2005-06), infant mortality rates in Orissa from these surveys were 112, 81, and 64.7 per 1000 live births respectively and corresponding figures for all India were 79, 68, and 57 per 1000 live births. It is evident that over the year, the infant mortality rate (IMR) in Orissa has declined appreciably but the pace of decline lagged behind the national rate of decline which further lagged behind the global trend. For the world as whole the IMR were 57 per 1000 live births during 2000-2005 as against 157 during 1950-55, registering a reduction of 100 points in a span of about 50 years.

To reduce the present national level of infant mortality rate by two-third at 2015 is one of the agendas of Millennium Development Goals (MDGs) and for Orissa reduction to 41 is under the purview of national MDG (Deolalikar, 2005). To draw feasible intervention programmes to enhance further reduction in infant mortality rate in Orissa it is most important to understand the magnitude and direction of community, socio-economic and demographic factors that are affecting IMR in Orissa.

This paper proposed to study the effect of community well-being on infant mortality in the context of Orissa. Human beings are considered as social animals as their food habit, child and health care practices, way of life, and socio-cultural practices are framed by the community to which they belong. Individual factors which may vary from individual to individual are overshadowed by community background. Keeping this in view, it is felt important to incorporate community background along with other individual factors in this study.

Objectives of the Study Specifically the study objectives are

- 1. to study the effect of community well being on infant mortality over time, NFHS-II and NFHS-III;
- 2. to decompose change in infant mortality over time and examine contributions of rates and compositional changes.

Hypotheses Based on the above literatur review, the hypotheses of this study are

- Community well-being has association with the incidence of infant mortality;
- 2. inequalities in community well-being affect the incidence of infant mortality.

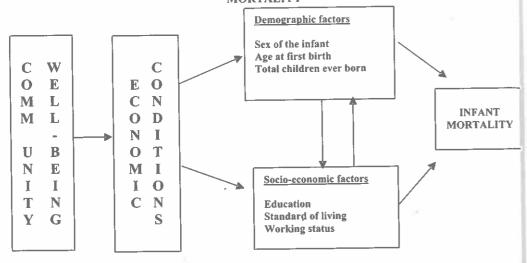
2. LITERATURE REVIEW: COMMUNITY WELL-BEING AND INFANT MORTALITY

In underdeveloped societies, community well-being plays a crucial role not only for moulding the economic prosperities of individuals but also is vital for diffusion and sharing of knowledge for the progress of the society itself. For in such society economic-being can bring about a favourable change in social norms of early marriage, early child-bearing, discrimination towards female child, considering household chores as women's responsibility, considering women value in terms of their reproductive potential only, and stigmatization of women going outside home for education. It is also expected that economically forward community would make collective arrangement for making provision for education and healthcare facilities, besides keeping potable water and drainage for the community. All of the foregoing factors associated with community well-being are expected to have strong bearing on ensuring survival of new born in

the community. We have conceptualized this discussion on the link between community well-being, associated intermediate factors, and infant mortality in Figure 1.

In the proposed conceptual framework we have three broad intermediate factors, namely, household standard of living by community well-being. Household standard of living in turn, to a large extend shapes demographic factors, such as total children ever born, age at birth of first child and partly sex of the new born in the present age of technology, and also remould socio-economic background of women, including education, working status, and individual economic condition. Besides, the demographic and socio-economic intermediate factors mutually controlling each other would collectively have strong bearing on infant mortality.

Figure 1
CONCEPTUAL FRAMEWORK SHOWING THE LINKAGE BETWEEN
COMMUNITY WELL-BEING, INTERMEDIATE FACTORS, AND INFANT
MORTALITY



Butz et al. (1982) studied biological and behavioral influences on the mortality of Malaysian infants. They found the influence of breast-feeding on infant mortality. Mosley and Chen (1984) proposed a framework for studying determinants of child survival in developing countries, which considered the five proximate determinants, namely, maternal factors (age, parity, and birth interval), environmental contamination (air, food, and water), nutrient deficiency, injury (accidental, and intentional) and personal illness. Gandotra and Das Gupta (1984) studied the levels and trends, correlates, causes, and

interrelationship between infant mortality and fertility. Along with other factors they found that inadequate supply of safe drinking water, unsatisfactory housing conditions, poor environmental sanitation, poor nutrition, and low level of medical facilities are some other factors responsible for high infant mortality in the country.

In the study on the determinants of child mortality in rural Punjab, found the existence of death clustering in child mortality (Das Gupta, 1990). Ashraf (1990) have studied infant mortality in rural India and found that socio-economic, demographic, and risk factors effecting infant mortality. Basu and Basu (1991) have provided evidence that women's work, inspite of its other benefits, has one crucial adverse consequence of higher level of child mortality than amongst women who do not undertake heavy agricultural work. Martin and Njogu (1994) have done a multivariate decomposition analysis on a decade of change in contraceptive behaviour in Latin America. Sastry (1996) studied the differential in child survival between the North East and South East of Brazil in poor communities. He studied the water supply, sanitation, and health facilities in the community and found that child mortality was affected by community level of education. Pebley et al. (1996) studied prenatal and delivery care and childhood immunization relating to family and community matter. Shajy (1999) has done a comparative study in infant mortality between Kerala and Orissa on the basis of socio-economic and demographic factors and found that short spaced births particularly seems to have determined a low survival to the children. Finch et al. (2000) studied the role of behavioral factors on racial ethnic disparities infant mortality. Bolstad and Manda (2001) studied the sociological and biological factors affecting infant mortality. They found that the variation in child mortality is largely due to family and community effect. Whitworth and Stephenson (2002) studied association of birth spacing, sibling rivalry, and child mortality in India. They found that the likelihood of child mortality is higher for children with a good number of siblings. Dwivedi (2002) has done a multivariate decomposition of covariates of contraceptive use in Uttar Pradesh. Pradhan (2003) found low birth weight and premature delivery as the determinant factors of child mortality in Orissa. Rao et al. (2004) found that giving food supplementation in the right time is important for child's nutrition and childhood survival in north east India. Jatrana (2004) studied the effect of socio-cultural practices on infant mortality in rural north India and found that colostrums is an important nutrient for child survival and survival chances of children of women who did not squeeze out breast milk in first time feeding is more. Balk et al. (2004) studied spatial variation in child mortality in ten countries in West Africa and came up with findings suggesting that places closer to coastal areas and urban centers negates child 30

survival. Ladusingh and Singh (2006) have found significant positive effect of community education on child mortality in north eastern India. It is found that there is no significant difference between sexes in case of child mortality. The study unfolds that community education effect is more than maternal factors on child mortality.

3. THE HYPOTHESIS OF THE STUDY

Infant mortality in Orissa is one of the highest in the country. Many studies try to integrate community background in conceptualization and in the right perspectives with these deaths. Most of the existing studies give over emphasis on maternal background and child related factors. As any intervention programme, the aims are towards providing cushion to child survival can not be individual by oriented. There seems not much relevance of the findings of the existing studies of infant mortality in Orissa. We have no idea on how community well-being and inequality in living standard effect infant mortality.

Taking the aforesaid discussion and also consideration the fact that intervention programmes for ensuring child survival are targeted towards the community at large and also recognizing that there is a large population of different castes and tribes who are identified by distinct community characteristics, we strongly felt the need for looking into the contribution of community level factors on infant mortality, particularly for the state of Orissa. This study could not only fill the gap in research at least in the context of Orissa but could provide a vital direction for policy formulation and implementation.

We are also not aware of any study which was designed to test the significance of community factors on infant mortality. In most of the available studies, social groups are usually considered in place of community factors and this is not the ideal way of dealing community background.

3. RESEARCH METHODS

3.1. Data Sources

This study used unit level data from NFHS-II (1998-99) and NFHS-III (2005-06). Details are available in IIPS-ORC Macro (2000, 2007).

In NFHS-III, primary sampling unit (PSU) for rural areas is a village or part of a village, whereas for urban areas it is a census enumeration block (CEB) which formed a compact part of an urban ward. In terms of number of residents, there were around 300 households. In most instances, residents of a PSU shared common amenities and social-cultural bonding. Considering these aspects we have treated PSUs as communities for the purpose of this study.

For constructing community well-being, household standard of living index (SLI), both NFHS-II and III were computed considering the same set of assets and the same set of weights for corresponding assets. Community well-being was then taken as the mean of SLI within the same primary sampling unit (PSU), while inequality in community well-being was operationalized as the coefficient of variation of SLI's of household in the same PSU. For PSU the percentage of households which belong to scheduled castes (SC), scheduled tribes (ST), and other backward classes (OBC) were computed and included in the analysis.

The response variable is the incidence of infant mortality to children born in the last five years and is coded as 1 for infant death and 0 otherwise. Caste, working status, place of residence, educational attainment, and total children ever born are the covariates considered in this study. Descriptions of these covariates are provided in Table 1.

Table 1
DEFINITION AND CLASSIFICATION OF VARIABLES USED IN THE ANALYSIS

Variables	Response Categories	Description of variables Coefficient of variation in SLI for each PSU is computed		
Coefficient of variation in standard of living index (SLI)	PSU level measurement			
Mean of SLI	PSU level measurement	Mean of SLI for each PSU is computed		
Percentage of SC, ST, and OBC	PSU level measurement	Percentage of SC, ST and OBC population for each PSU is computed		
Caste	SC, ST, OBC General & others	Cast of the women at the time of the survey		
Sex	Male Female	Sex of the baby		
Education	No education Primary Secondary Higher	Educational qualification of the respondent at the time of survey		

Continued

Continued Table 1

Continued Table I	Response Categories	Description of variables Preceding birth interval		
Variables				
Preceding birth interval	0			
	<12			
	12-18			
	18+ months	real transfelo		
Working status	Not working	Working status of the		
WOIKING Status	Working	women whether she was		
	***************************************	working in any sector or no		
0 11	Urban	Place of residence of the		
Place of residence	Rural	respondent		
		Age of the women at first		
Age at first birth	< 18	birth		
	18-30	V		
	31-42	Total number of children o		
Total children ever born	1	the women at the time of		
10001	2			
	3+	the survey		

3.2. Methods of Analysis

NFHS-II

The data in this study were analysed using three approaches.

- 1. Univariate analysis was applied to ascertain the frequency of the covariates.
- 2. Bivariate analysis was applied to obtain the percentage distribution of covariates according to the status of infant mortality.
- 3. For multivariate analysis binary logistic regression was employed.

A multivariate decomposition analysis was also used to study the composition rates and interaction of covariates (Martin and Njogu, 1994). The decomposition procedure applied in this study was based on the logit models estimated for the two surveys. The difference $\ln(p/(1-p))$ (ii) $-\ln(p/(1-p))$ (iii) was decomposed as follows.

 $\begin{array}{lll} \text{logit (NFHS_2)-logit (NFHS_3)} \\ = (b0_2 \text{-} b0_3) + \sum \text{pij}_3 \ (bij_2 \text{-} bij_3) + \sum \text{bij}_3 \ (\text{pij}_2 \text{-} \text{pij}_3) + (\text{pij}_2 \text{-} \text{pij}_3) \ (bij_2 \text{-} \text{bij}_3) \\ \text{where } \begin{array}{lll} \text{pij}_2 &=& \text{the proportion of } j^{th} \ \text{category in } i^{th} \ \text{covariate in NFHS-II} \\ \text{pij}_3 &=& \text{the proportion of } j^{th} \ \text{category in the } i^{th} \ \text{covariate in } \\ \text{NFHS-III} \\ \text{bij}_2 &=& \text{the coefficient of } j^{th} \ \text{category of the } i^{th} \ \text{covariate in } \end{array}$

 bij_3 = the coefficient of j^{th} category of the i^{th} covariate in NFHS-III

 $b0_2$ = the regression constant of NFHS-II $b0_3$ = the regression constant of NFHS-III

This procedure gives three components, rate component, composition component and interaction component.

4. RESULTS

4.1. Trends, Differentials, and Patterns of Infant Mortality in Orissa

Results of bivariate analysis are shown in Table 2 for both NFHS-II (1998-99) and NFHS- II (2005-06). For both periods, the incidence of infant mortality among ST/SC/OBC in Orissa remained more or less the same, in the five years periods preceding the surveys, about 11.5 percent of children died before they reached their first birthdays, though there was a decline for general and others from 11 to 8.5 percent. Infant mortality cases among male infants declined from 11.7 to 10.8 percent while the corresponding decline among female infants was from 10.4 to 10.2 percent. Marginally, more female infants survived than male infants and the scenario did not change. When the level of education increased, the incidence of infant mortality decreased. An educated mother is perceived to be able to provide proper care of her health and her child. The results for NFHS-II indicates that infant mortality in case of uneducated women was higher (13.0%) as compared to the women who had taken primary education (10.2%). Infant mortality was higher among women with primary education as compared to women with secondary education (6.3%). Infant mortality were lower for women with higher education (2.6%) as compared to the women with secondary education. For the corresponding levels of educational attainment of women, the figures of infant deaths were 13, 9.7, 6.5, and 1 percent respectively, showing sign of decline in the incidence of infant deaths in NFHS-III by educational attainment. Infant mortality in NFHS-II were higher for mothers under 18 years old at the time of first birth (12.8%) as compared to women with age at first birth at 18-30 years old (9.9%) and infant mortality decreased when women's age at first birth was above 31 years old (7.9%).

Table 2
PERCENTAGE OF INFANT SURVIVAL AND DEATH IN ORISSA BY SOCIO-ECONOMIC BACKGROUNDS

Background characteristics	NFHS-II Response variable			NF	NFHS-III		
				Response variable			
	Infant survival	Infant death	n	Infant survival	Infant death	n	
Caste				20.6	11.4	6,284	
SC/ST/OBC	88.5	11.5	8,868	88.6	8.5	2.816	
Others	90.0	10.0	3,658	91.5	6.5	2,010	
Sex of infant				20.0	10.8	4,799	
Male	88.3	11.7	6,494	89.2	10.0	4,301	
Female	89.6	10.4	6,035	89.8	10.2	4,301	
Education					12.0	4,757	
No education	87.0	13.0	7,465	87.0	13.0	2,012	
Primary	89.8	10.2	2,692	90.3	9.7	2,124	
Secondary	93.7	6.3	2,089	93.5	6.5		
Higher	97.2	2.8	283	99.0	1.0	207	
Preceding birth inter	val (months)				10.1	2 121	
0	87.8	12.2	3,965	87.9	12.1	3,121	
<12	74.9	25.1	331	78.1	21.9	288	
12-18	81.9	18.1	1,098	82.7	17.3	727	
18+	91.3	8.7	7,135	92.2	7.8	4,964	
Working status						C 455	
Not working	89.4	10.6	8,670	90.7	9.3	5,457	
Working	87.8	12.2	3,859	87.7	12.3	3,64	
Place of residence						0.45	
Urban	90.5	- 9.5	2,454	92.2	7.8	2,47	
Rural	88.5	11.5	10,075	88.5	11.5	6,62	
Age at first birth (ye	ears)						
<18	87.2	12.8	5,204		12.6	3,25	
18-30	90.1	9.9	7,287	90.6		5,80	
31-42	92.1	7.9	38	97.1	2.9	3	
Total children ever	born						
1	93.9	6.1	665	95.0			
2	94.5	5.5	1,936	95.1			
3+	87.5	12.5	9,938	87.6			
Total	88.9	11.1	12,529	89.5	10.5	9,1	

In Orissa unadjusted infant mortality in NFHS-II were higher among the working women (12.2%) as compared to non working women (10.65%).

Most of these women were engaged in agricultural related occupation. NFHS-III witnessed marginal decline in infant mortality among those who were non-working (9.3%), while for working women it did not change (12.4%). Infant mortality in both NFHS-II and NFHS-III was higher in case of birth interval less than 12 months as compared to first birth and birth intervals longer than 12 months. Infant mortality in NFHS-II were lower (9.5%) among the urban residents as compared to their rural counterparts (11.5%), which may be due to the availability of health facilities, good source of drinking water, better toilet facility, and electricity in urban areas The corresponding infant mortality figures for urban and rural areas in NFHS-III were 7.8% and 11.5% respectively, improvement for urban residents but not so for rural residents.

Further, observing caste, findings for SC, ST, and OBC show there was 0.1% change from NFHS-II to NFHS-III. Meanwhile, for general and others caste category there was a decrease of 1.5% in the incidence of infant mortality. So, it can be inferred that development factors provide more benefit to general and others than to ST, SC, and OBC. Male infant death decreased by 0.9% from NFHS-II to NFHS-III and female infant death decreased by 0.2%. There was no change in the percentage in infant deaths for the women who were not educated. Infant death decreased by 0.5% from NFHS-II to NFHS-III among women who completed primary education, it was almost the same among women who had completed secondary education and 1.8% decrease for women who had completed higher education. Percentage of infant death decreased by 3.6% from NFHS-II to NFHS-III, among women who were not working, infant death remained same in both time periods. There was a decrease of 1.7% infant deaths for urban areas from NFHS-II to NFHS-III and no change in rural areas for both time periods.

4.2 Factor Influencing Infant Mortality in Orissa

The results of multivariate analysis are shown in Table 3 in terms of odds ratios of infant death for specified categories of covariates in comparison to specified categories for the respective covariates included in this study. Most interesting findings were related to the two hypotheses set up for testing in this study. Interestingly, both for NFHS-II and NHS-III the higher the mean standard of living indent of a community the lower the likelihood of infant death. However, the relationship had weaken over time as the association was found to be significant only in NFHS-II. The plausible explanation was that with development and modernization community ties might be also weakening. Finding related to the second hypothesis was that the higher the inequality in community well-being the lower the likelihood of

mutual benefit in terms of sharing knowledge and facilities. With regard to caste in both NFHS, it was observed that there was no differential in infant mortality by caste. It was also noted that female infants were 13.6% less likely to experience infant deaths as compared to male infants and this differential at 5% level of significance. As regard to differential by educational attainment of women, infants born to women who had completed primary education were 20.3% less likely to face infant deaths as compared to women who were not educated and this was significant at 5% level of significance. For infants born to women who were educated up to secondary level, the odds of infant death is 46.1% lower as compared to the women who were not educated and it is significant at 1% level of significance. The women who had completed their higher education were 66.9% less likely in infant mortality as compared to the women who were not educated. In addition, for an increase by one child in total children ever born, the odds of infant death increased by 87.2% and this increase was statistically significant at 1%. If preceding birth interval was less than 12 months then the odds of infant death increased by 78.4% as compared to first birth at 1% level of significance. If preceding birth interval was between 12 to 18 months then the odds of infant death increased by 18.7% and it decreased by 47.4% if preceding birth interval was more than 18 months and this was significant at 1% level of significance. Work status had no significant effect on infant mortality. One point increase in the percentage of SC/ST/OBC population in the community decreased in the odds of infant death by 0.4% at 5% level of significance. Also, age at first birth were not

statistically significant on infant mortality.

infant deaths. This positive association between inequality in community well-being and survival chance of infants was statistically significant both for NFHS-II and NFHS-III. This could be due to the fact that in communities where both poor and non-poor households live together there would be always

	NFHS-II			NFHS-III		
Independent Variables	Parameter estimate β	Standard error	exp (β)	Parameter estimate β	Standard error	exp (β)
Coefficient of variation (SLI)	-0.004*	0.002	0.996	-0.003*	0.001	0.997
Mean (SLI)	-0.022**	0.006	0.979	-0.002	0.003	0.998
Percentage of SC/ST/OBC	-0.005*	0.002	0.995	0.002	0.002	1.002
Caste						
SC/ST/OBC®						
General & Others	-0.050*	0.079	0.951	-0.074	0.101	0.928
Sex of infant						
Male®						
Female	-0.146*	0.058	0.864	-0.113	0.07	0.893
Education						
No education®						
Primary	-0.226*	0.077	0.797	-0.246*	0.093	0.782
Secondary	-0.618**	0.106	0.539	-0.473**	0.111	0.623
Higher	-1.106*	0.372	0.331	-1.944*	0.721	0.143
Preceding birth interval						
0®						
<12	0.579**	0.139	1.784	0.281	0.156	1.324
12-18	0.171	0.095	1.187	0.053	0.116	1.055
18+	-0.643**	0.067	0.526	-0.848**	0.08	0.428
Work Status						
Not working®						
Working	0.019	0.066	1.019	0.024	0.079	1.024
Place of residence						
Urban®						
Rural	0.042	0.083	1.042	0.22*	0.091	1.247
Age at first birth						
<18®						
18-30	-0.110	0.061	0.896	-0.124	0.073	0.88
31-42	0.130	0.621	1.138	-0.784	1.033	0.45
Total children ever born	0.627**	0.074	1.872	0.741**	0.087	2.09
Constant	-2.487	0.298	0.083	-3.606	0.299	0.02

Note: ** P<0.01 and * p<0.05.

As regard to some of the relationships in NFHS-III, caste and sex of the child had no significant effect on infant mortality. When it comes to adjusted association between infant mortality and educational attainment of women and preceding birth interval, we had found similar results and significance as in NFHS-II with slight improvement in the values of odds of infant mortality. The women's working status was not statistically significant on infant mortality. For infants of rural areas, the odds of facing infant deaths was 24.7% higher as compared to infants in urban areas and was significant at 5% level of significance. Age at first birth had no significant effect on infant mortality. As regard to the controlled association between children ever born we found similar results for NFHS-III.

4.3. Results of Decomposition Analysis

The results of decomposition analysis are presented in Table 4 in terms of magnitude and directions of change associated with the covariates included in the study: the sex of the infant, education of mother, age at the time of birth and place of residence, preceding birth interval, caste, working status, and community well-being. The change in the direction in the rates shows a declining trend among different subgroups with respect to the respective reference categories. We found that the direction of rate in community well-being and inequality in community well-being was negative. It shows that infant mortality decreased with the increase of community wellbeing and if the inequality in community well-being was higher then infant mortality decreased. In case of sex of infant, working status, and place of residence, the direction of rate was negative. It means the infant mortality experienced by female was lower than by male; infant mortality in case of working women was lower than infant mortality of nonworking women; and infant mortality in rural were lower areas than in urban areas. While rate and composition in a population decreased then infant mortality also decreased. Change in the composition referred to structural change in the population of Orissa like the increase in the percentage of urban population, and increase in the percentage of female's education, and increase in the percentage of working women. It may be noted that in the initial stage of transition compositional change may not be associated with favorable change in infant mortality and this also comes to light from this study in the case of Orissa.

Table 4
DECOMPOSITION OF CHANGE IN INFANT MORTALITY, ORISSA,
1998-99 & 2005-06

Variables	Rates	Composition	Interaction
Coefficient of variation (SLI)	-0.0007	1.1194	0.0001
Mean (SLI)	-0.0141	1.1192	0.0018
Caste	0.0020	1.1179	0.0004
Sex of infant	-0.0034	1.1188	-0.0001
Education	0.0009	1.0837	0.0155
Preceding birth interval	0.1017	1.1208	0.0123
Working status	-0.0006	1.1190	0.0000
Place of residence	-0.0205	1.1190	0.0000
Age at first birth	0.0278	1.0792	0.0458
Total	0.0932	9.9969	0.0757

5. SUMMARY AND CONCLUSIONS

The study shows that there was an effect of community wellbeing on infant mortality for both the time periods, NFHS-II and NFHS-III in Orissa. Though infant mortality rate had declined over time still it was high as compared to the national level. During the period 1998-1999 to 2005-2006 there was a decrease of just 0.6 percent in infant mortality. The study also shows that infant mortality decreased with increased in community well-being and inequality in community well-being was found to have unfavourable influence on infant mortality. Educational attainment of women had negative association with infant mortality. Total number of children ever born had a positive association with infant mortality. Working status was also positively associated with infant mortality, because in rural areas most of the women were engaged in agriculture related works. Apart from these demographic and economic factors, variation in household standard of living had also negative association with infant mortality. So, policy makers should emphasize intervention strategies for underdeveloped communities ensuring infant survival in Orissa. This consideration was crucial more so in the context of Orissa as survival of an infant also depend upon the community environment and living conditions.

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Barsharani Maharana, International Institute for Population Sciences, Deonar, Mumbai – 400088.

Email: barsha.iips@gmail.com

Laishram Ladusingh, International Institute for Population Sciences, Deonar, Mumbai – 400088.

Email: lslaishram@iips.net / Tel: 022-25571037, Fax: 022-25573257

INDONESIAN LABOR MARKET TOWARD THE ASIAN DECENT WORK DECADE

Suahasil Nazara

Abstract. The ILO-promoted concept of decent work has been a global goal. During the 14th ILO Asian Meeting in Busan, South Korea, in 2006, representatives of governments and employer's and worker's organization declared the Asian Decent Work Decade. In the next decade of 2006-2015, concerted and sustained effort would be carried out to realize decent work in all countries of diverse Asian continent. The successful implementation of the Asian Decent Work Decade would hinge on three things: regional cooperation, national commitment on interconnected priorities to realize the decent work and poverty reduction, and the ILO actions to assist countries in formulating national policies on labor inspection, dispute prevention, and settlement and employment services. However, it is important right from the beginning to translate the decent work concept to fit in the Indonesian context. In that respect, three main areas are of importance: (i) promoting growth and jobs in the formal sector, (ii) improving occupational safety and health, (iii) and enhancing industrial relation. This paper frames the decent work in to Indonesian medium-term macroeconomic reviews, projected changes in demographic characteristics in Indonesia, and followed by the analysis of issues in wages, productivity, and hours of works. This paper also links decent work with the achievement of the Millennium Development Goals. The paper closes with some thoughts on the institutional capacity building required in the implementation of the Decent Work Decade in Indonesia.

Keyword: decent work, asian decent work decade, Indonesia.