The Impact of Migration from Rural Areas on Measures of Fertility in India

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It has been hypothesized that slum and pavement dwellers in India are overwhelmingly poor rural migrants, from lower castes or disadvantaged communities who migrate to cities, drawn by the promise of better economic opportunities (Mitra 1988). The growth in the slum population over time could be due to increasing rural spillover or to natural increase. Mitra (1988) found evidence that the proportion of migrant households to total households was significant in the slums of all Indian cities studied except Delhi. The percentage was highest in Bombay (87%) and averaged about 50% in Calcutta and Madras, supporting the hypothesis that slum dwellers tend to be rural migrants and contribute to increased population growth in slum areas. The theoretical underpinnings for this current study are drawn from assimilation studies. The assimilation model suggests that couples who migrate from a high fertility area to a low fertility area initially follow the high fertility patterns of the sending country but over time adjust to lower fertility in the destination country (Mayer & Riphahn 2000).

Slums in developing countries are the loci of concentrated urban poverty (Brockerhoff & Brennan 1998). Due to the rapid urbanization in developing nations, cities are faced with a surge of migrants from rural areas in search of better job prospects. The massive migration from rural areas results in the formation of slums, shantytowns, and squatter settlements in big cities, whose residents face significant health disadvantages, resource constraints and limited economic opportunities (Brockerhoff & Brennan 1998). An elaboration of the determinants of rural-urban migration and its implications for the migrants and the receiving populations is beyond the scope of the current paper. However, the aforementioned characteristics of slums in developing countries make them particularly salient for a study of the assimilation hypothesis. We expect the assimilation theory to hold with regard to slum fertility as a result of rural migration in India, and expect the differential between urban and slum fertility to decrease over time as a result of the process of assimilation. Our analysis of the fertility differentials across time due to rural migration in a country that is not adequately researched but has several mega-

cities with more than 5 million inhabitants will extend the assimilation theory in a different setting and contribute to the literature on internal migration.

We plan to use Waves 2 and 3 of the National Family Health Survey (NFHS), 2005-06, conducted by the Government of India, with technical support provided at all stages by ORC Macro. The NFHS collects data on fertility, family planning, reproductive and child health and other health measures for women aged 15-49 years across India. A nationally representative survey, it uses standardized questionnaires, sample designs and field procedures developed by ORC Macro to collect data. Wave 3 of NFHS covered 124, 385 women; and Wave 2 covered 89,199 women (See Table 1 for Descriptive Statistics for Wave 3). We will be restricting the sample to women who are either married, living apart, divorced/separated and widowed. Never-married women will not be included in this sample because only a miniscule proportion of the never-married sample has had children.

We will analyze the impact of transitions from rural to urban (slum and non-slum) areas on selected measures of fertility, including mean age at childbearing (at first birth), total children ever born and number of living children. Preliminary ANOVA tests indicated significant differences between each of the migration transitions for the fertility measures (See Table 2). Future analyses will compare trends in the composition of rural, urban and slum dwellers for the years 1998-1999 and 2005-2006. Then, we will estimate multivariate models assessing the extent to which various social and economic factors affect fertility measures among rural migrants in the different time periods.

REFERENCES

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Table 1: Descriptive Statistics for Urban, Rural and Slum-Dwelling Women of Childbearing Age, DHS 2005-2006.

	Urban	Rural	Slum
Respondent's Characteristics:			
Age (avg)	33.15	31.72	32.59
Education (avg years)	7.49	3.84	5.55
Occupational Status: (%)			
Unemployed	0.70	0.50	0.67
Professional/ technical	0.06	0.02	0.03
Clerical	0.06	0.02	0.04
Agricultural	0.04	0.36	0.01
Services	0.06	0.02	0.13
Skilled & Unskilled manual	0.09	0.09	0.11
Marital Status: (%)			
Married	0.94	0.94	0.92
Widowed	0.04	0.04	0.06
Divorced	0.01	0.01	0.00
Not Living Together	0.02	0.01	0.02
Religion: (%)			
Hindu	0.73	0.76	0.70
Muslim	0.15	0.11	0.23
Christian	0.08	0.08	0.03
Other	0.05	0.06	0.04
Caste: (%)			
Scheduled caste	0.15	0.18	0.23
Scheduled tribe	0.08	0.17	0.03
Other backward caste	0.32	0.35	0.30
None of the above	0.44	0.28	0.45
Partner's Characteristics:			
Education (avg years)	9.79	6.77	7.89
Occupational Status: (%)			
Unemployed	0.02	0.02	0.02
Professional/ technical	0.15	0.06	0.08
Clerical	0.30	0.12	0.27
Agricultural	0.05	0.42	0.03

Services	0.08	0.05	0.10
Skilled & Unskilled manual	0.39	0.34	0.51
Fertility Measures:			
Age at first birth (avg)	20.64	19.31	19.53
Total children ever born (avg)	2.46	2.93	2.70
Number of living children (avg)	2.27	2.59	2.47

Table 2: Fertility Measures for Migration from Rural Areas, DHS 2005-2006

	Rural - Rural	Rural - Urban	Rural - Slum	F-Value
Mean age at childbearing (first birth)	19.16	20.27	19.29	18.9
Total children ever born	3.00	2.60	2.93	30.25
Number of living children	2.64	2.38	2.65	23.96
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