Estimated Internal Migration and Its Relationship with Workforce in India: Census, 2011

India is on the pick of its demographic dividend as per the recent Census, 2011. On an average 61 per cent people are in working age (15-59). But the work participation rate is substantially low (39.8 per cent or 0.48 billion) that has slightly improved from pervious census, 2001 (39.1 per cent). There is also wide variation for the states in work participation rate from 51.9 per cent for Himachal Pradesh to 32.9 per cent for Uttar Pradesh. Lack of job opportunities associated with regional disparities, poverty, regional imbalance in the development, different development policies adopted by states, caste, class and gender discrimination and somewhat inadequate reporting especially for female are the main reason for low work participation in India. Within the workforce participation, a substantial proportion of workers are in marginal category (24.8 per cent) i.e.persons who work for less than six months and its share has also increased by 2.5 per cent point from 2001. Meanwhile, main workers who work for more than six months have declined at the same rate. Regional variation in workforce, economic opportunities and growing marginal workers lead to huge mobility from one part of India to another part. Towards urban or urban centric migration from rural rather than urban to urban is the unique pattern of Indian migration. Urban centric economic growth or policies promotes economic growth around pre-existing growth centres in the advance regions (Srivastav, 2009; Srivastava and Sasikumar, 2005) is the responsibility for that. With the sluggish urbanization, the rate of migration in India has been declining during the last decade (Kundu, 2011a; Kundu and Saraswati, 2012). Due to exclusionary urbanisation, urban peripheries undergone through 'elite capture' and changed the economic pattern that reduces the absorption capacity of the cities for rural migrants (Kundu, 2011b; Kundu and Saraswati, 2012). However, internal mobility balance the demand and supply of labour and helps to flourish the economy at the place of destination as well as reduce the poverty at the place of origin through remittance flow (Srivastav, 2011a, 2011b).

The present study tries to estimate the rate of migration in 2011 on the basis of partially published newly census data 2011. Though migration related data has not published as yet, net migration rate is estimated by applying indirect method with the help of Life Table Survival Ratio (LTSR) method. Net migration helps to understand in and out flow of migration in a state,

direction of migration from one state to another and effect of migration on demographic structure. How existing demographic structure would affect the future labour force that ultimately leads to the direction of migration flow is also brought under the gamut of the present discussion.

Life Table Survival Ratio is the ratio of the ${}_nL_x$ (the number of person-years that would be lived within the indicated age interval x to x + n by the cohort of 100,000 life birth assumed in a life table) of two successive age groups (x and x+n) in a life table that expresses survival from a younger age (x) to an older age (x+n). It has applied to the population of the first census, 2001 in order to drive an estimation of the number of person expected to survive to the census, 2011. The difference between the enumerated population in the Census, 2011 and the expected survived population is the estimate of net migration. It is estimated by applying forward LTSR and backward LTSR. Averaging the forward and backward we get final net migration. Sample Registration System (SRS) under Register General of India (RGI) provide two abridge life tables 2001-05 and 2006-10 these covers total 10 year period. After calculation of the five years survival ratio from each table and averaging these get average LTSR that covers 10 year period. Net migration for 17 major states is estimated by this method. To understand the trend of migration, apart from census 2001, National Sample Survey (NSS)-2007-08 data also incorporated.

Results-

Direction of migration-

It is established fact that internal migration in India flows towards high-income states to low-income states (Srivastava, 2011). This trend remains more or less same in the Census 2011. But some high-income states' positive net migration rate have slightly been reduced from census 2001(Table-1). Likewise, some low income states' negative net migration have also been reduced, even some of them gained positive net migration. This is happened mainly due to return migration and retention of own population due to improvement of job opportunities for the changed governmental policies, for example in Bihar and Jammu and Kashmir. In the beginning of 2000s, Madhya Pradesh and Odisha suddenly open their economy and adopted industrialisation policies that deters out migration from there. Even, these states gained labour

from neighbouring states. On the other hand, Tamil Nadu and Karnataka shows huge net gain and two other destinations, Madhya Pradesh and Jammu and Kashmir have also emerged by gaining larger share of in-migrants during 2001-2011. This pull of in-migration probably has happened at the cost of declining share of in-migration in the high income states like Maharashtra, Punjab, Haryana and Gujarat. Kerala, Tamil Nadu, Andhra Pradesh and Punjab are the major supplier of overseas migrants as they were previously. Kerala has stridden first among them. Total 30 per cent GDP of Kerala depend on it (Rajan, 2011). Middle East countries are the most preferable destination of the Indian overseas labourers. Near about three million Indian are there though this account is very less i.e. less than one per cent of the total workforce in India (Srivastava and Sasikumar, 2005). In the Census 2001, international migration had been declined (31.6 per cent) from the census 1991. In 2011, higher negative net migration in Kerala (-5.41) and Andhra Pradesh (-2.02) and huge short fall of positive net migration in Punjab (0.77) could be because Indian overseas migration flow has get some rejuvenation. On the other hand, States namely West Bengal and Himachal Pradesh emerge as new suppliers of migrants where estimated net migration has gone to negative for the first time in 2011.

Migration and workforce-

There is a positive correlation between work participation rate and net migration which is 0.37 though this is very low. Workforce participation rate some extent indicates the opportunity of jobs at a particular region. States like Karnataka (45.6), Tamil Nadu (45.6), Maharashtra (44.0), Gujarat (41.0) and Haryana (35.0) which have recorded high work participation rate absorb higher migrants from comparatively low work participation rate states (Fig-1). It has already been mentioned that within the workforce, a quarter of proportion is in marginal workforce who do not get gainful employment throughout the year, mainly act as a push factor for the migrants. Net migration rate is negatively correlated (-0.37) to the marginal work force. The states of Bihar (38.5), Uttar Pradesh (32.2), Odisha (39.0), Assam (27.4) and Rajasthan (29.5) have recorded huge proportion of marginal workers. Hence, these are considered as hub of the labour outmigration in India (Fig-2).

Migration and demographic structure-

According to 2011 census, on an average every six out of 10 people are in 15-59 age group in India. Whole southern and two western states namely Goa and Gujarat occupy high rank with respect to 15-59 aged population where on an average 63 per cent are in that group (Fig- 3). Some northern states namely Haryana, Punjab and Delhi are also experiencing the same phenomenon. Huge working population in these states are due to the contribution of in-migration from other parts of the states. Net migration and proportion of 15-59 aged population are positively correlated that is 0.43. On the other hand, Bihar (40.2), Jharkhand (36.2), Uttar Pradesh (36.0), Meghalaya (39.8) and Arunachal Pradesh (35.7) occupy large proportion of 0-14 aged population (Fig-4). This indicates Bihar, Uttar Pradesh and Jharkhand are not only the present supplier of labour but will remain the future store house of labour. Some north-eastern states may accompany with them in future considering the progress in age structure.

References-

1. Kundu, A. 2011a. Method in Madness: Urban Data from 2011 Census. *Economic and Political Weekly*, Vol. 66 (40), pp. 13-16.
2. Kundu, A. 2011b. Method in Madness: Urban Data from 2011 Census. *Economic and Political Weekly*, Vol. 66 (20), pp. 10-12
3. Kundu, A. and Saraswati L. R. 2012. Migration and Exclusionary Urbanisation in India. *Economic and Political Weekly*, Vol. 67 (26), pp. 219-227.
4. Srivastav, R. 2009. Economic Geography and Development: Some Observation on India's Experience. Invited key note paper, Annual Conference of Indian Economic Association, Bhubaneswar, December 27-29, 2009.
5. Srivastava, R. &Sasikumar, S.K. 2005. An Overview of Migration in India, Its Impacts and Key Issues, in TasneemSiddiqui (ed.), *Migration and Development: Pro-poor Policy Choices*, The University Press, Dhaka, pp. 157-216.
6. Srivastava, R. 2011a. Labour migration, Inequality and Development in India: An Introduction, *The Indian Journal of labour Economics*, Vol.54 (3), pp. 373-385.
7. Srivastava, R. 2011b. Labour migration in India: Recent Trends, Patterns and Policies Issues, *The Indian Journal of labour Economics*, Vol.54 (3), pp. 411-440.
8. UNO Manual VI. 1956. Methods for Population Projections by Sex and Age. Population Studies, No. 25, United Nations
9. UNO Manual VI. 1970. *Methods of Measuring Internal Migration.* Population Studies, No.47, United Nations.

Appendix-

T-1, Net Migration Rate in India			
State	Net Mig. Rate 1991-2001	Net Mig Rate 2007-08	**Estimated Net Mig. Rate 2001-11**
1	2	3	**4**
Andhra Pradesh	-0.3	-0.87	**-2.02**
Assam	-0.7	-0.5	**-2.21**
Bihar	-2.7	-5.64	**-3.39**
Gujarat	1.7	1.63	**1.64**
Haryana	4.1	3.52	**2.01**
Himachal Pradesh	1.0	-	**-0.40**
Jammu & Kashmir	-0.4	-1.24	**0.37**
Karnataka	0.3	0.97	**1.68**
Kerala	-0.6	-4.43	**-5.41**
Madhya Pradesh	-0.1	-0.68	**0.48**
Maharashtra	3.0	4.1	**1.34**
Orissa	-0.7	-1.26	**-0.55**
Punjab	1.7	1.27	**0.77**
Rajasthan	-0.6	-0.93	**-1.34**
Tamil Nadu	-0.7	-1.42	**4.92**
Uttar Pradesh	-2.0	-3.1	**-1.94**
West Bengal	0.4	1.34	**-0.50**
Source: Col. 2 Census of India, 2001, Col. 3 NSSO-64 & Col. 4 Estimated from Census 2011 by LTSR			

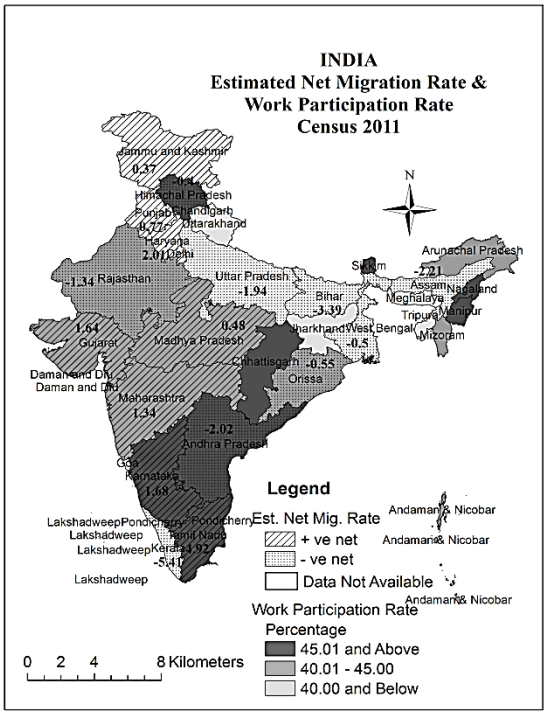

Fig-1

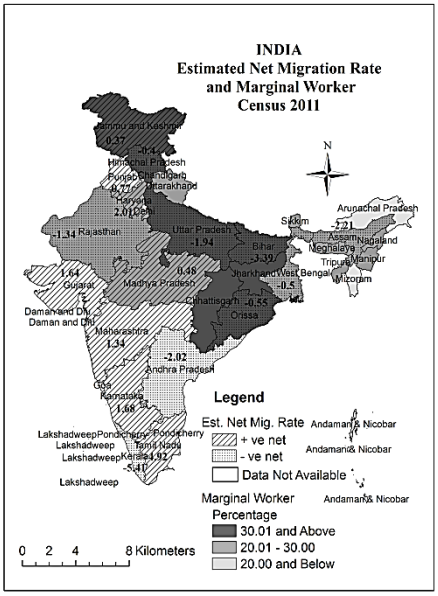

Fig- 2

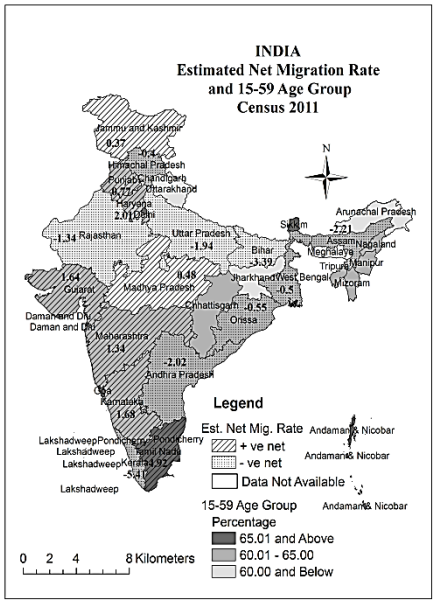

Fig-3

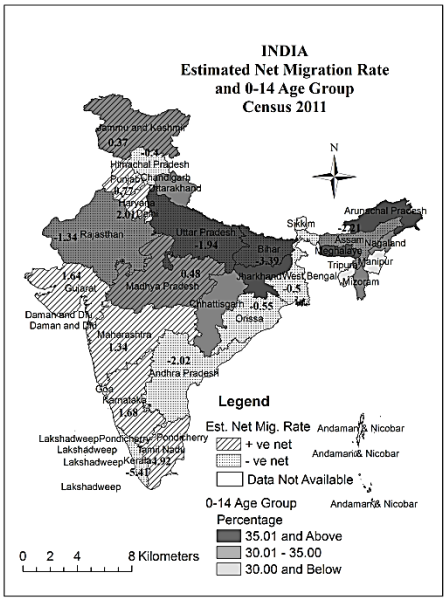

Fig-4