

Exclusionary Opportunities? Gendered Perspective of Work in Peri-Urban Areas of Large Metropolitan Cities in India

Dr. Sucharita Sen¹

Introduction:

The common thread that ties the story of women's participation in the labour market in the wake of industrialisation and development in the developing world is that the former typically responds positively to the latter. It is expected that with new and diversified opportunities for work that is characterised by a significant amount of flexibility in the production system of the post-Fordist era, women would find work opportunities suiting their comparatively restricted circumstances. India's experience, however, deviates significantly from the above pattern. Not only has women's work participation rates been historically far lower than that of men in the country, an additional matter of concern is that the overall rates have fallen consistently for the last quarter of a century (Abraham 2013, Chandrasekhar and Ghosh 2013). Explanations as prosperity-induced withdrawal driven by increases in real wage rates and education-related withdrawal for the younger age group have been offered as the primary reasons for such trends (IGAS 2012; Abraham 2009; Srivastava and Srivastava 2010; Himanshu 2011). Though the latter element augurs well in the long run for the future of women and the country at large, the former explanation, by and large, can be interpreted as an expression of continuing patriarchy in the country. The fact that one of the important indicators of women's empowerment and contribution to the economy has been experiencing a stubborn downward trend is indeed somewhat alarming.

The urban female work participation rates, however, have shown a lower level of decline, albeit fraught with greater volatility (Chandrasekhar and Ghosh 2013). This trend is consistent with the fact that India, like other Asian countries as China, has been experiencing an urban-centric growth process centred on large metropolitan cities. Evidences suggest that investments in India, particularly from private and often international sources are higher around the in the metropolitan centres in the post-reform period, though with a rider. While the metropolitan centres remain better-off compared to the non-metropolitan centres, the relative position of the former has fallen in the post-reform period. What has happened, however, as evidences from Delhi, Mumbai and Chennai suggest, is that the edges of these centres distinctly find favour though the cores of the centres have been stagnating in terms of investment inflows (Chakraborty 2000). The transformations that take place in terms of land use *around* the metropolitan cities in the post globalization era as a result of global or domestic private capital inflows often result in emergence of large investment projects often involving

¹ This is the draft paper of Dr. Sucharita Sen as an input to the "Rural-Urban Poverty Linkages" conference on 2-4 Sept 2014 in Zhejiang, People's Republic of China. This paper will be revised into a final paper after the conference. The views expressed in this paper are those of the author, and do not necessarily reflect the views and policies of the organizers (the Asian Development Bank [ADB] and the International Poverty Reduction Center in China [IPRCC]), or ADB's Board of Governors, or the governments they represent. ADB and IPRCC do not guarantee the accuracy of the data and information in this paper.

“high-end” infrastructure, new industrial and service activities, and the construction of new housing colonies and commercial ventures catering primarily to upper income-groups (Kennedy 2007). This has led to far-reaching changes and consequences, which have been articulated as corresponding to ‘diverse and often conflicting stakes’ that makes the peri-urban areas of large metropolises exposed to multi-faceted vulnerabilities along with or possibly at times, in exclusion of the obvious opportunities that are expected to be associated with urbanization (Dupont 2007). The reasons for expecting such vulnerabilities are numerous. These peri-urban areas experience rapid changes of rural to urban land-use, making high demands on corresponding transitions of livelihood. Secondly, these areas, in spite of having production dynamism, are often stagnant in terms of governance and basic provisions as they are ‘invisible’ from the point of view of both urban and rural public authorities. Thirdly, the population of this area typically increases rapidly with changing characteristics, with at least three identifiable sets of people moving in here: the urban rich, the urban poor and the rural poor (Kundu Schenk and Dash 2002). The former moves in voluntarily, utilising the real estate development of the kind mentioned above to avoid the crowded city-core. The second group is often ‘resettled’ or ‘forced to resettle’ here from slums and squatter settlements in the core to clear out areas with high land prices, in an urge to bring in the limited spatial changes that these can undergo. The third group come to the peri-urban areas often in search of better job opportunities. These three characteristics of the peri-urban areas, seen in the larger context of India’s capital-intensive ‘jobless growth’ in India’s organized non-primary sectors in phases of the post reforms year, poses questions about potential marginalities faced by both the rural and urban sections of population in the fringes of the large metropolises in the specific context of employment (Kannan and Raveendran 2009). Other than the strong elements of rural-urban linkages that the peri-urban areas are associated with, it is a spatial platform that enables us to capture the larger processes of globalization operating at the country at large, with a kind of magnifying lens. Given the larger context of deceleration of women’s work participation rates in the country, it is important to understand whether the workspaces in the peri-urban areas offer women specific opportunities emerging out of the process of urbanization, or they expose them to new vulnerabilities not observed in other regions.

The larger land-use changes in the urban hinterland at the micro-level translate into transfers of ownership of land, in particular, from the peasant class to the industrial and service sector entrepreneurs, often via the state. The global South in general and India in particular has been marked by processes of agricultural land acquisitions where land is a scarce resource that supports the livelihoods of majority of the population in the rural areas. Livelihood displacements emanating from this process not only impacts the cultivators, but the landless agricultural labourers who are dependent on agricultural land. While the former get compensation that can potentially help them overcome the economic and social distress of land dispossession, the latter end up losing often the sole means of their livelihood. It is expected that among these households, the women, with their non-negotiable domestic responsibilities and care-giving role to the household, would adjust to the dispossession differently compared to the men.

Given the above background paper attempts to understand the gendered patterns of employment of women in the peri-urban areas of the large metropolitan cities. The overarching question that this paper asks is that, given the transient nature of the peri-urban spaces that necessitates adjustments, which in turn is likely to impose a barrier to entry to the labour market, does women’s participation in work play out differently compared to that of men, given

their restricted mobility and lower levels of access to education? In particular, the paper poses the following specific questions:

- Are the gender differences with respect to employment particularly sharp in the peri-urban areas where the effects of urban processes are the most visible? How have these differences changed over the recent times?
- What are the barriers of women entering the labour market in the peri-urban areas, and are these different from that of men?
- What are the wage-rate differentials between men and women in the peri-urban areas? Is this differential coming down over time? Is this differential higher in the peri-urban areas compared to the city core?
- Does lack of mobility prevent women from accessing work the kinds of jobs that are available in the city core and the peri-urban areas? How important is home-based work for women and to what extent would such possibilities improve their participation in the labour market in peri-urban areas?
- What is the nature of employment transition experienced by the households completely dependent on agricultural income before land acquisition? Is this transition different for men and women?

This study extensively uses unit level data from the Employment-Unemployment rounds of 2004-05 (61st round) and 2011-12 (68th round) of the National Sample Survey Organization for the most part. The study also uses both qualitative and quantitative evidences from field surveys carried out in Delhi and Kolkata (reference years 2008 and 2011 respectively) to answer the last research question. The Population Census 2001 and 2011 is also used for providing background information on urbanization in India.

The study covers six largest metropolitan centres of India, namely, Mumbai, Delhi, Kolkata, Hyderabad, Bangalore and Chennai. Each city is broken into three spatial units, urban core, peri-urban and the respective residual states. The peri-urban areas have been taken as the district around the metropolises (see appendix I and II). For the peri-urban areas and the residual states, employment characteristics of both rural and urban areas have been analysed (for sample sizes see Appendix-III).

One of the limitations that the study suffers from is the way peri-urban areas have been defined due to data limitations. Districts are often too large a spatial unit to represent peri-urban areas. However, since the NSSO data provides break-up only up to the district level, such aggregations were unavoidable. Also, a temporal analysis stretching before 2004-05 could not be done, as Hyderabad, Bangalore and Chennai were not recognized as districts before that. Also, information about work in the principal and subsidiary statuses of work² were not available before 2004-05, and these divisions have strong gender implications .

² The activity status on which a person spent relatively longer time (major time criterion) during the 365 days preceding the date of survey is considered the usual principal activity status of the person. To decide the usual principal activity of a person, he/she is first categorised as belonging to the labour force or not, during the reference period on the basis of major time criterion. Persons, thus, adjudged as not belonging to the labour force are assigned the broad activity status 'neither working nor available for work'. A person whose principal usual status is determined on the basis of the major time criterion may have pursued some economic activity for 30 days or more during the reference period of 365 days preceding the date of survey. The status in which such economic activity is pursued during the reference period of 365 days preceding the date of survey is the subsidiary economic activity status of the person.

II. Nature of Urbanization, Changing Rural-urban Linkages and Implications for Gendered Nature of Work in Peri-Urban Areas of Large Metropolises

In general, it has been observed that the post reform growth in India, as in case of China has been associated with increased capital accumulation with an associated contribution of labour productivity to Total Factor Productivity (TFP) growth, with a major share of the growth coming from the services sector in case of India (Bosworth and Collins, 2007). As mentioned before, much of this period has been associated with low employment generation in the non-agricultural sector, with the burden falling on the agricultural sector, characterised by far lower wage rates compared to the non-farm sector. Consequently, the shift of workers from agriculture to non-agricultural sector contributes to a very small percentage of the total growth in the economy. These trends have significance for the peri-urban context, where the demand for local economy to absorb agricultural worker to the non-agricultural fold is high due to the visible changes in land-use.

Nature of Urbanization in Large Metropolitan Cities and Implications for their Hinterland

The above-mentioned problem becomes more critical due to the current trends of urbanization that is visible in the peri-urban regions. In the last decade in India, there has been a clear stagnation of population in cores of the large metropolitan centres, accompanied a very rapid population growth in districts around the metropolitan cities, Bangalore being the only exception out of the metropolises considered for this study (Kundu 2011 and Table 1). This trend gets explained by lower levels of rural to urban migration to these cities, a phenomenon that has been explained by the process of 'elite capture' of large cities, coming out from a policy of 'sanitizing' these cities (Kundu and Ray Saraswati 2012). Thus, though such cities have experienced an increase in income levels and better basic provisions, such benefits, have, in fact been exclusionary, through processes that have been contradictory and contentious, and not consensual, as some of the vision documents of the local bodies have projected (Kennedy and Zerah 2008, Kohli 2006). It has been noted from the experiences of Hyderabad and Mumbai that the city governance in both cases that are different in many other ways, have been narrowly defined as extending interface with the people and the Government through increased use of information and communication technology, rather than the more basic issue of agenda prioritising (Kennedy and Zerah 2008). Such processes have given rise to not only the crowding of the hinterlands, but also what has been termed as 'degenerated peripheries', which have performed poorly in terms of basic services, and have been 'dark areas' with respect to urban municipal governance, though the changes in such areas have been centrally driven by the nature of urban processes that have had a marked similarity, across India, and often, across Asian countries (Kennedy and Zerah 2008, Kundu 2009, Dupont 2007). Such processes would tend to have links with informalization of labour possibly leading to increased subsidiarisation of work, along with the potential opportunities of getting higher wage rates emerging out of the expansion of non-agricultural activities for the households in the peri-urban areas.

It has been observed that with the exception of Bangalore, the population growth rates in the peri urban areas of the other five metropolises have been far higher not only compared to the city cores and but also the residual states (Table 1). This does indicate migration from other parts of the state or outside in the last decade to the peri-urban areas. Additionally, the sex ratio for the working age-group is mostly highest in the residual states, followed by the peri-urban regions,

and the lowest in the core (Figure 1). Interestingly, the patterns of 0-6 sex ratios, which is influenced by much more by birth-rates than migration, are not only different but without any uniform pattern across cities when the three spatial units are compared (Figure 2). It may be reasonable to conclude from the above that migration in the city-cores has typically been more male-selective over the years, compared to that in the peri-urban areas, where more women have accompanied the male members of their families. The net land outflow from agriculture to non-agricultural activities is likely to impact the native population, particularly those living in the rural areas, and the households that were engaged in agriculture as well as those dependent primarily on agricultural wage-work. It may be expected that the male members from both the migrant households as well as those affected by land outflows from agriculture are likely to be part of a transient working population, who may be engaged more than one short-term work or commuting to urban cores for work. This would have implications for the women of these households, who either may not be able to participate in the job markets or be able to take up only subsidiary and part-time occupations, having to handle the burden of the household in an alien environment without the social support of the extended family or being a part of a household where the earning members may be adjusting to new occupations, or both.

Effects of Rural-Urban Linkages in the Peri Urban Regions

The linkages between the rural and urban areas are probably the most visible and inescapable in the peri-urban areas, particularly around the cities that are expanding fast. The distinctions between the rural and the urban, it has been argued, become less clear in these areas (Tacoli 1998).

Urbanization is seen to have positive externality effects on the rural peripheries too, along with negative ones. On the one hand, while it leads to a reduction of availability of land along with economic and social displacement in terms of rural livelihoods, there is evidence to believe that agriculture around the peripheries become more profitable either through intensification of land use or a shift to high-value agriculture or both (Chadha Sen and Sharma 2004). However, such high value agriculture is unlikely to be able to compete in the long run for scarce land and labour resources, unless alternative production technologies for fruits, vegetables, flowers and the like become available (Midmore and Jansen, 2003). Thus even the agriculture-dependent population who do not directly suffer land dispossession, are in a state of flux as they constantly compete with activities that are likely to overtake agriculture in terms of their ability to pay land rents.

Table 2 provides a rough comparison of the economic status of urban-core, peri-urban areas and the residual states. Some of these indicators are also an expression of rural-urban linkages. It may be observed that both in terms of monthly per capita consumption expenditure (MPCE) and the wage rates, there is a continuum from the urban-core, peri-urban areas and the residual states taking these three spatial platforms in totality. A higher MPCE may also reflect a higher cost of living, but taken considered in conjunction with a higher wage rate, this trend may be taken to indicate a more prosperous living. There are a few city-wise variations that need to be noted (Appendix IV). The wage rates of the peri-urban regions of Bangalore and Kolkata, both in rural and urban areas are not higher than that of the residual states, though their former group's MPCE is higher than the latter's. This may indicate that in relative terms, the fruits of urbanization have not had as much effect in the peri-urban regions of these two cities compared to the others. Similarly, the rural population in the peri-urban region of Mumbai is relatively depressed, with its wage rates having no

significant difference with the residual state, and the MPCE of the former actually being lower than latter. In contrast, the urban section of peri-urban Delhi is actually better off not only compared to the residual state, but also the city core.

So far as share of non-workers is concerned, in the rural areas, the residual states in totality have a lower share compared to the peri-urban regions (Table 2). This could be due to a variety of reasons, including positive factors as greater share of children and youth attending educational institutions in the peri-urban regions, but the matter that is of concern is that the share of those who are workers on principal status³, a group that is better off than the other workers, is lower in the peri-urban regions, compared to the residual states for rural workers, and compared to the city core and by a small margin, the residual states in the urban areas. With this rider, the sectors that are associated with higher wage rate and security have a greater presence in the peri-urban areas. The share of worker in the peri-urban regions working in the non-farm sector as opposed to farm-sector, and those in the organized enterprises as opposed to unorganized enterprises, is higher than in the residual states⁴. The barriers to entry to the non-farm sectors are known to be higher in both the non-farm and organized sectors, as opposed to their respective counterparts, and the fact that more of the peri-urban population are engaged in such sectors is indicative of a set of higher levels of skill in these areas (Jatav and Sen 2013).

Though in terms of most of the parameters discussed above, most of the peri-urban areas seem to have gained from the opportunities typically associated with urbanization, it is widely known that women are not able to access the opportunities with the same ease with men (Raju 2013 a, Paul and Raju 2014). With the special context of the peri-urban areas mentioned in the section above that make women doubly vulnerable, the next section attempts to examine the extent to which women have been able to access the benefits associated with employment, which has widely been considered to be an important indicator of not only their economic welfare, but also their empowerment and decision-making ability.

III. The Gender Context of Changing Livelihoods in Peri-urban Areas

Though literature with respect to gender and work in the context of peri-urban expansions is limited, there are a few key observations about specificities of characteristics of economic development in India and the developing part of the world that can inform the analysis being undertaken in this study. Firstly, new forms of production that is defined by a process of vertical disintegration of firms in the post-Fordist era has seen emergence of new economic spaces around large cities in the developing world that are aiming to not only lower costs by employment of skilled and unskilled cheap labour, but seeking out destinations that provide a complex of factors like quality infrastructure, specialised services as well as markets (Kennedy and Zerah 2008). Such developments have created opportunities of diversified employment opportunities, associated with wage rates higher than in the pre-existing economic landscape. The spatial clustering of

³ A worker working only on the principal status is one that has round-the-year work or work for a major part of the year. The other workers are those who are working either only on subsidiary status, or on both principal and subsidiary status (two or more jobs) are ones who can be assumed to be in a greater amount of distress than the first group.

agricultural and non-agricultural activities in the peri-urban areas, at times, have been observed to be advantageous for women, who are then able to join the labour market more easily in addition to their existing burden of unpaid domestic responsibilities (Hart 1996). However, there are some evidences suggesting that women have by and large been excluded from enjoying the benefits of these expanded economic opportunities in the Indian context (Paul and Raju 2014). Women are often known to stay back in agriculture in the rural peri-urban zones while the male migrants commute or migrate to join the labour pool in the urban centres (Tacoli 1998, Iaquina and Drescher 2000). For those that join the urban labour market, gender discriminations in wages have been observed, the markets offering women the 'flexibility' of divisible short term work that comes with the new form of production, often in the form of home-based work (Raju 2013b, Lu and Song 2006). Brighter prospects for women have been noted in Hangzhou, in China, where wage differential have been noted in the white collar jobs, but not at the lower orders, where at times, women have been even receiving higher wages compared to men (Webster *et al* 2003).

The Gendered Nature of Work Participation

Table 3 gives a fair idea about the change of work participation rates of males and females over the last 7 years. It can be observed, that across the board, while the male work participation rates (WPR) have remained stable, the female rates have gone down significantly between 2004-05 and 2011-12. Secondly, while the male overall (principal and subsidiary status) WPR is only slightly higher than their WPR at the principal status, the corresponding difference among the females are very high indicating a higher level of subsidiarisation.

In rural areas, the peri-urban WPR of females are lower than that of the residual states, though over time, though in both the spatial units the rates have declined, which is more in the residual states. Even so, in 2011-12, these differences remain, particularly so with respect to WPR in the principal status. Columns 4 and 7 provide the ratio of male and female WPRs, which indicate the disparity among the two groups. The disparities in the peri-urban areas remain higher over time compared to the residual states, though the difference has been bridged somewhat over time.

In the urban areas, the disparities represented a continuum in 2004-05 in the overall WPR (principal and subsidiary status), with the urban core showing the most disparity, and the residual states, the least. For the principal status, however, the peri-urban areas showed the maximum disparities. In 2011-12, however, both the in the overall and the principal statuses, the disparities are higher in the peri-urban areas compared to the other two geographical units. During this time, the disparity of WPR in the principal in the urban core has actually gone down.

The above analysis show there are barriers to women's participation in work relative to men, which is more in the peri-urban areas than both the urban core and residual states, irrespective of whether they are in the rural or urban areas. The gaps of disparities have, however, come down between the peri-urban and residual states in the rural areas. Women's vulnerability in the peri-urban areas due to the transient status of work of men of their household appears to be important in restricting their involvement in the work front. The hypotheses of prosperity induced withdrawal of women from the work-force cannot explain the reason why the disparities between male and female should remain higher and in fact grow in the peri-urban regions compared to the urban cores, since the latter

region's consumption expenditure and wage rates have remained higher than the peri-urban regions for most of the cities. The participation in education in the younger age groups leading to withdrawal from the labour market could partially explain the reduced female WPR, though whether it does so to explain the specific position of the peri-urban areas can be explained through the age-wise analysis of WPR.

Figures 3 to 8 show the age-wise work participation rates in the usual (principal and subsidiary) status over the two periods under consideration. The male work participation rates have fallen marginally in the younger age-groups due to increased attendance in schools and colleges both for the peri-urban and the residual states (Fig 3). Other than this, there is a slight reduction in the older age groups, indicating earlier withdrawal from work in the peri-urban areas, probably due to better status of living in the peri-urban regions compared to the residual states. For females, the peri-urban areas have experienced withdrawal in two age groups, in the 15-20, due to increased participation in higher education, and in the age-group of 41-50, who have gone into domestic and extra-domestic activities (Fig 4). The urban trend of female WPR in peri-urban areas is similar, except that the withdrawal is in the 31-40 age group, which could be overlap somewhat with the new migrants. The residual states in comparison, has experienced a reduction in all age groups consistently. The explanation for the post-education age withdrawal of female workforce in both the peri-urban and residual states requires a deeper investigation and is outside the scope of the current study. It needs to be mentioned that there has been an increase in the urban core of female work force in both the 21-30 and more surprisingly, in the 51-60 age groups. The latter age group's incremental involvement in work can primarily be explained by increased participation in subsidiary work.

One of the explanations of a reduced female WPR can be found in both the peri-urban and urban areas. Table 4, which depicts the composition of work reveal that the quality of work in both rural and urban peri-urban and residual states have improved, with the share of unpaid family work in family enterprises going down and that of the regular salaried going up. These changes are sharper in the peri-urban areas than the residual states, the difference being particularly visible in the rural areas. Due to higher access to education, as is visible from the education related withdrawal from the workforce, the trends suggest that women in the urban fringe and in the urban residual states are holding out from the work domain, unless they are offered a better quality of job. In the urban core, where the WPR has gone up, there is no such change in the composition of female workers. In fact there has been a marginal increase in the unpaid family work and a reduction in the share of regular salaried work. Table 5 further reveals a third to a fifth of the non-working women depending on their location, are willing to work from home, and this share is higher in the peri-urban areas in rural locations than the residual states, and for urban locations, becoming higher as one moves away from the city core. Most of the women who are willing to work if it was made available at home favour part-time regular work, followed by full-time regular work. Notably, the share of non-working women willing to work in part-time regular works is higher in the peri-urban areas than the other locations, for both rural and urban areas. This is revealing because it indicates the inability of women residing in the fringe area in getting engaged in full-time work, in all probability due to reasons like lack of family support to do house-work due to their migrant status or as a result of taking over farm work from men etc.

Though the gendered nature of work participation is evident from the foregoing analysis with respect to the developments in the urban hinterland, Table 6

reveals the stark differences of the determinants of work force participation of males and females⁵. Firstly, while the men have a higher probability of participating in work in the urban core followed by the peri-urban areas (higher by 28% and 5% compared to residual states respectively), the corresponding probability is the lowest in peri-urban areas, followed by urban core (lower by 49% and 8% to residual states respectively). Thus, controlling for other factors like age, education social group, household size, marital status, per capita consumption expenditure, women in peri-urban areas have a lower probability of joining the labour market, while same is not the case for men. For men, the process of urbanization provides opportunities as expected and the urban fringe, in this respect, represents a continuum between the urban core and the residual states.

Education too, impacts men's and women's work participation very differently. The probability of men's work participation increases with lower levels of education, with a fall in probability after the primary level. This is because the men are looked on as the main bread earners of the household and enter the labour market irrespective of their educational background, into jobs that require lower levels of skills if they are less educated. In contrast, the probability of women joining the labour force actually is lower in the middle and secondary levels of education compared to the higher secondary levels and above. The probability increases at levels lower than that compared to the highest level of educational attainment and is the highest for the illiterates. There is thus appears to be a clear divide between the kind of jobs taken up by women educated upto middle school, vis-a-vis those who have upto primary level schooling and below.

The social strata interact somewhat differently with participation in the labour market for men and women. While the men from scheduled caste background have a greater barrier to entry to the labour market for men compared to general caste groups probably due to work-place discriminations, for women, the latter have the lowest probability of entering the labour force. It is well documented that though lower castes are generally disadvantaged in the social structure, paradoxically, the cultural barriers for women from such households to enter the job market is less marked compared to those upper caste women (Beteille, 1991, Agarwal, 1994). Surprisingly for men and expectedly for women, the scheduled tribes and the OBCs have a higher probability of entering the labour market compared to the general castes.

The domestic and extra-domestic responsibilities that prevent women from entering the labour market expectedly reduce the probability of a married woman being a worker compared to divorced and separated women. However, the cultural restrictions on the never married girls/women are even higher that prevent them from working, controlling for education. Thus, among men, while the divorced and the separated have the lowest probability of working compared to men from other marital statuses, this group have the highest probability of working among women more as a result of distress and a lower social and economic status, than anything else.

Age, household size, consumption expenditure level of the household (taken as a proxy for income) and rural or urban location have no gender differentiated

⁵ The determinants of work participation have been done using a Logit Analysis, with the dependent variable taking a binary form, i.e. whether working or not.

impact on probability work participation. Notably, though age has a positive impact on the probability of joining the work force for both men and women, it has a much more diluted impact for women. In other words, experience has a higher premium for men in the labour market compared to what it does in case of women.

In all, the gendered division of the labour market is significant for the six developed states for which the study is carried out. The heightened barriers to women's entry to this factor market in the peri-urban areas indicate that the opportunities that urbanization has created has been in a sense exclusive and have not been able to create adequately flexible and favourable conditions for women to avail of these opportunities. Such an observation, however, needs to be interpreted with a few exceptions. The quality of employment for women being better in the peri-urban regions is suggestive of probably a combination of a higher bargaining power on the one hand and a restricted mobility vis-a-vis the household space that prevents women from availing of all opportunities that come their way, on the other. Also, the fact that more of the women residing in the fringes are willing to take up part-time regular home-based work indicates that there is in fact a potential feminine labour force that is untapped. However, the centrality of domestic responsibilities in women's life that 'continue to embed women in traditional constructs of domesticity' have not been successfully mediated by the diverse opportunities that characterise the peri-urban labour markets that require mobility from the home-space, in spite of the higher levels of income, wages and access to education (Raju 2013b).

Wage Rates and Gender Differentials

The work participation rates indicate an unfavourable gendered pattern in the peri-urban areas, which in many cases have deepened over the 7 years over which this analysis has been done. It is important to see this in conjunction with the trend in wage rates, to analyse whether there is a convergence of the patterns of work participation and wage rates, and whether these two factors together magnifies to contribute to the vulnerabilities faced by women. Wages have been compared in Tables 7 and 8 for rural and urban areas respectively. This has been done sectorally, and for the type of work, namely regular and casual, to ensure comparability. It needs to be noted that the data-base used does not include the wages of the self-employed category, in which has a substantial share of total workers, since that is difficult to compute. The sectors compared are those that have a minimum sample size (at least 30 in each category).

Tables 7 and 8 indicate a few known trends. Firstly the wage rates of regular workers are higher than that of the casual ones. Sectorally, the hierarchy of wages that are noticed are move from agriculture at the bottom, to manufacturing, construction, education, transport and on the top, health. In all sectors, the male wage rates are significantly higher than the female wage rates, except the transport sector, where in some cases females get higher pay, but this difference is not significant due to the higher variability in the female wage rates in the sector.

The rural wage rates are typically higher in the peri-urban areas compared to the residual states in all cases. The notable trend is that in 2011-12, the wage-rate differentials between males and females are higher in the residual states compared to the peri-urban areas, except in case of education (where females are paid less than half of males) which is the highest paid sector in the rural

areas. Importantly, however, in case of both construction and education, the wage rate differentials have increased over time, i.e. between 2004-05 and 2011-12, while they have gone down for agriculture and manufacturing, which are the two lowest paid sectors. The ratio indicating wage differential fell more sharply in the peri-urban areas for education, whereas for construction the fall was sharper in the residual states.

In the urban areas, the wage rate differentials are lower compared to that in rural areas. However, in all the sectors considered for the analysis, namely, the gaps are relatively higher in the peri-urban areas compared to both the city-cores and the peripheries. Significantly, like in the rural areas, the gender ratio of wage rate has fallen more sharply in the two best paid sectors, i.e. education and health and the falls are far sharper in the peri-urban areas than the other two spatial units under consideration. For the city core, in fact, the differential has reduced over time in the education sector.

Clearly then, the wage rate trends in terms of gender differentials work unfavourably for the peri-urban areas, barring the two lowest paid sector of agriculture and manufacturing in the rural areas. It would be reasonable to suggest that this trend is observed due to men moving from the lower to the higher paid sectors (their share is far higher in the non-farm sectors) in the rural areas, and then from the rural to the urban sectors. Since the migration to the city core is more male selective compared to the peri-urban areas, as the change in the working age sex-ratio seem to indicate, the competition for jobs in the higher paid sectors is likely to be less in the city cores, also aided by the low work participation of women in the sector. The male wage rates can be depressed by offering to pay somewhat higher wages to the females. This would explain the wage-rate differential trend in favour of women in the city cores. On the other end, since men from the residual sectors migrate out, the demand for the female labour correspondingly go up there, resulting in lower wage rate differentials. In the peri-urban areas, where there would be greater demand for jobs for both males and females, coupled with 'flexible' opportunities for women in diversified sectors manifesting in phenomenon as home-based work for females. This would potentially lead to higher gender differentials in wage rates.

The work and wage dynamics taken together tells a somewhat dark story for the peri-urban areas. Though in over all terms, peri-urban areas do seem to be a desirable destination for the workers, following the 'elite capture' of cities, the findings thrown up by this study suggest a 'degenerated peripheralisation' of large metropolitan centres in India as has been stated by existing literature (Kundu 2009), especially when seen through a gendered lens.

IV. Gendered Responses and Livelihood Coping Mechanisms to Agricultural Land Dispossession

The above analysis portrays the peri-urban regions as often demarcating a dis-continuum between the city-core and the residual state with respect to a number of gendered employment indicators. The primary reason why this space is important to deconstruct is because of its continually changing land-use and employment characteristics. Such changes have a crucial impact on the livelihood of those whose basis for livelihood, i.e. land, changes hand and necessitate almost immediate livelihood responses to such changes.

This section attempts to evaluate the gendered responses to occupational changes in households among households that were earlier dependent on

agricultural activities in the peri-urban regions of two metropolitan cities, Delhi and Kolkata, and compares individuals from households that have lost land as opposed to those that have not. This section is based on field surveys carried out earlier at different points of time for earlier studies with which the author was associated⁶.

There has been a growing opposition against acquisition of land, particularly through the state in India, many leading to land-based movement by the dispossessed and some of these have had violent outcomes (Basu 2007). Often these land acquisitions leads to physical and economic displacement of farming community without adequate options for rural livelihoods and has serious impact on the food security of the household (Guha 2014).

The transition of land from agriculture to non agricultural uses is often politically justified, with two major points to support it, irrespective of the process of acquisition. Firstly, it is argued that it is inevitable that land from agriculture would be converted into non-agricultural/industrial use, given the increasing pressure on land. Secondly, in the South Asian context, since the increasing population pressure has reduced the sizes of agricultural holdings such that many of them are unviable, the employment opportunities created by the non-primary activities along with the compensation money will provide them adequate/better options. It is clear that understanding the process of land dispossession becomes critical before accepting such conjectures.

Delhi Case Study

Rani Khera village located in north-west Delhi where 19% of agricultural land had been acquired through a notification in 2007 has been selected as the area of study. This village has been randomly selected from a group of villages having both relatively high share of acquired area after 1991 and persistence of agriculture. Rani Khera, falling within the NCR of Delhi has been exposed to urban influence for a considerable period. Yet, agriculture appears to be the predominant livelihood for the many people. This sub-section is based on an exploratory field survey conducted during April 2008 where both households as well as individuals have been the level of analysis. The sample consists of 30 households (196 persons in total) selected purposively such that at least some of the family members of the household had been engaged in agricultural work prior to land acquisition.

Broadly it may be noted that following land acquisition, 15 out 36 persons who reported agriculture as their principal occupation have been displaced such that the share of workers having agriculture as principal occupation has declined from 18.4% to 10.7% within just one year (Table 1). While a marginal increase in the share of workers in non-agriculture has been observed, there has been an increase in the share of non-workers from 7.1% to 12.2% within one year. In terms of absolute numbers, out of the 15 people who were displaced from agriculture as principal occupation, only 6 of them have been able to secure

⁶ This section is based on field surveys conducted for two PhDs and one M.Phil submitted in Jawaharlal Nehru University in 2014, 2012 and 2006. These studies attempted to look at household responses and overall individual responses since due to low work participation rates of women in Delhi and Kolkata, the sample size for women was not adequate. Thus this analysis should be taken as suggestive rather than conclusive. Quantitative information has been supported by qualitative notes revealing important gender dimensions.

alternative employment in the non-agricultural sector while the remaining 9 have become jobless.

With respect to agriculture as subsidiary occupation, it has been observed that out of the 86 members who reported being in agriculture, 16 got displaced such that the share declined from 43.9% to 35.7% within one year (Table 9). Out of the displaced agricultural workers, only one has been accommodated in non-agriculture while the remaining 15 persons have become unemployed with respect to subsidiary status work. So, the share of workers having no subsidiary occupation increased from 49.5% to 57.1% (Table 9). The erosion of subsidiary activities has rendered households more vulnerable.

The displacement of the farmers and the virtual absence of their subsequent absorption into non-agricultural work highlights on one hand the incapability of the ensuing urban labour market to accommodate the additional labour released from agricultural sector. On the other hand it also reflects the inability of the land dispossessed farmers to seize whatever opportunities exists. There is adequate evidence from earlier studies to insist upon the possibility of a stark mismatch between the stock of skill of the hitherto farmers and the human capital demand of the jobs available.

None of the women in the study area are engaged in it in the principal status. Women were mostly engaged in agriculture in the subsidiary status (Table 10). The similarity between the males and females is that most members of both genders from households that did not own land have been converted from being agricultural wage worker to unemployed in the secondary status after land acquisition. These are the households that have not received any compensation, and the loss of cash income is likely to hit these households. The relatively minor point of gender difference that emerges is that for households that partially lost land, women have stayed back in agriculture more than men, though even a substantial share of men, albeit lower than that of women, have also done the same. This implies that land is considered an important commodity even in its reduced status and that there are not tremendous avenues of available jobs to these individuals.

The field discussion revealed that the compensation money temporarily encourages the individuals to withdraw from the labour market and this is equally applicable for both genders. There is some evidence that women have withdrawn from livestock activities following land acquisition, as livestock was sold in many cases due to high cost of fodder purchased from the market as opposed to it coming as the by-product of the crop. This has directly had an impact on the cash availability from sale of milk, which though meagre, gave some opportunities of spending by women, relatively unmediated by men.

Kolkata Case Study

The case of Rajarhat New Town (344 individuals) and Tata Motors Small Car Project in Singur (232 individuals) have been selected for this study as they have emerged as the two projects that have entailed largest land acquisition in West Bengal during the last decade. However, none of the women reported themselves as workers in the principal status, and a very few in the secondary

status before the acquisition⁷. There is a loss of livelihood in the secondary status, as in case of the Delhi case study.

However, the qualitative discussions revealed a number of gender specific observations.

The households with large land holdings saw an upward mobility in terms of both occupation and income. They were able to use the compensation money productively to be members of construction syndicates and were able to graduate to non-farm works that gave better returns compared to the past agricultural activities. However, in these households there was a complete prosperity induced withdrawal of women from their subsidiary status of work, wherever it was reported.

It is observed that in Rajarhat, the number of housewives have increased from 124 to 141. Two reasons can be noted, as per the field discussions, for this increase. Firstly, due to the compensation money, the young girls are being married-off early, leading to a fall in the average age at marriage. Secondly, the already married women have withdrawn from the labour market as a result of the immediate relief provided by the compensation money. The poorer households having less land have reported, however, that though they are not looking for work right now, many of them would be forced to work as housemaids in urban households when the compensation money eventually dries up. Some of the women belonging to small land owning and pure tenant households have undertaken home-based work following their loss of subsidiary status work as family labour or wage workers in agriculture. These home-based works includes activities like making of bindi, bags, incense sticks as well as stitching of clothes, bidi-rolling etc. and is done mostly on a part-time basis. The remuneration received in lieu of these kinds of work is a deplorable amount of 50- 100 rupees a month! Most of the women, however, did not engage themselves in such part-time work due to the lack of incentives in such jobs. It needs to be mentioned here that following land-loss, the scope of economic participation for women reduced significantly. This is because the participation of women in paid work in the public domain is fraught with the risk of violating the prestige and honour of the family in relation to the pre-land-acquisition phase, when women's work was essentially construed around one's own farmland and the processing of agricultural outputs within the home before land acquisition.

Impoverishment has compelled some of the households to undertake socially stigmatized occupations, though these were not reported in the response to structured questions. Key informant's interviews revealed that while some of the men from the poorer households have taken up liquor trade, the women have been condemned to prostitution. Even the children have been often found guilty of stealing petty things from the construction sites which they sold to obtain pocket money. The vulnerable sections have been furthered marginalized following land dispossession.

There has been another social impact of land acquisition. Following land loss and associated withdrawal of agriculture, while the men have started working in non-agricultural enterprises, the women have remained within the confines of homes.

⁷ It may be noted that the work participation rates of females are very low around Kolkata and West-Bengal, as per the NSSO data presented in the earlier section.

On one hand it has weakened her bargaining position in matters of decision making within the household on account of her estrangement from active economic contributions in agricultural enterprise. On the other hand, it has deprived her from the petty income that used to accrue from cattle and poultry rearing. This is an observation that is common with the Delhi case-study. It has further thrust the women in a dubious condition as they are not completely aware of the whereabouts and exact activity portfolio of their husbands. Thus the land dispossession has indirectly deteriorated the social position of the women.

Conclusion:

The foregoing discussion uses the concept of peri-urban space as one that is dynamic and transient, holding both opportunities and vulnerabilities that are unequally distributed across different sections of population living there. The peri-urban state has been compared and offset against the city core, on the one hand and the residual state on the other, that represents a space beyond the urban fringes which is expected to have more rural characteristics than the peri-urban areas. These three spatial units ideally should form a continuum with respect to the processes and outcomes of urbanization. The above analysis shows that with respect to a number of employment characteristics, specifically with respect to gender differences, the peri-urban spaces breaks the continuum and creates a spatial dis-continuum. With respect to both work participation and wage-rates, such dis-continuums have heightened over time. This, taken in conjunction with the continuums in overall wage rates and per capita consumption expenditure leads us to conclude that the process of urbanization has offered exclusive opportunities, favouring the men more than the women. This is likely to be the case in other Asian countries like China, as the growth processes and the routes to development is more homogenised for the developing countries.

Work participation of women in peri-urban areas has been found to be particularly low, in relation to men. The women have however been selective about the jobs that they wish to take up and work in larger proportions as regular and salaried workers. The non working women have shown a willingness to take up part-time but regular work is it is made available at home. It is well known and also observed through this study that although women voluntarily opt for subcontracted home-based work, the terms are extremely exploitative. This can be suggestive of two types of interventions: one route could be a government provisioning of home-based work targeting to engage the women of the displaced households thereby assuring just wage rates; the other route can be government encouragement of expansion of home-based work by the private agencies and NGOs where the government would intervene to determine the statutory wage rates for subcontracting the work.

This study finds the rural peri-urban more on the margins compared to the urban peri-urban areas since the women of these areas are not able to access the fruits of urbanization. The National Rural Guarantee Schemes which are not actively managed in these areas should not only be initiated in these areas, but the gender sensitive provisions in such problems like providing them work close to home, along with providing crèche facilities could go a long way in encouraging the women in these areas to join the labour market.

One part of the providing flexible job opportunities to women has to do with the urban governance issue. There is an urgent need to bring in the peri-urban areas into the fold of urban Governance. This could lead to improve of access to education and safe transport to the women in the urban fringe. The former, as our results indicate is a strong barrier to entering the labour market for women.

Our study finds that the gender differentials wage rates are reducing at the lower ends of the work spectrum and increasing at the higher end and such increases are sharper in the peri-urban areas. This indicates that even if women are somehow able to overcome the barriers to enter the job market and in the better paid sectors, the wage rate differentials in these sectors are likely to act as a dampener. There is thus a need to implement not only the statutory wage rates at the lower end of the spectrum, and institute norms implemented by the Government to associate wages with the type of work done.

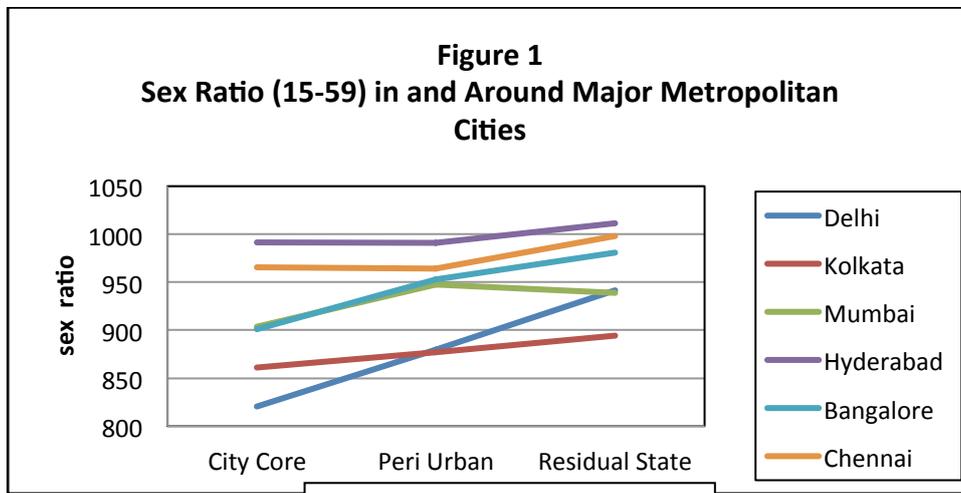
The problem of land acquisition in the peri-urban zone has few very specific problems. The peri-urban zones have been dominated by significantly small land holdings which add complexity to land acquisition. The agricultural land either sustains high value agriculture to cater to the demands of the city or is left fallow for speculation. In the peri-urban zones, therefore, land ownership has additional value compared to any interior rural area. This is evident from our Delhi case study, where in spite of access to smaller sizes of holding women, and a number of men still stay back in agriculture. The men have joined formal construction syndicates, whereas women have retreated into the confines of their home spaces in rich and poor households alike. Micro-credit organizations targeted for women could go a long way in providing them not only flexible means of livelihoods, but those that can potentially provide them alternatives that they independently decide about. This, as the success story of micro-credit organizations of rural Andhra Pradesh and Bangladesh shows us, can be done successfully through both state and civil society interventions.

One of the major causes of the impoverishments of the pure tenant farmers has been their non-receipt of compensation as they did not have formal tenancy rights. While the registered tenants have been sanctioned 25% of the total compensation accruing to the land owner, the unregistered tenants have not received anything. This study indicates tenants' distress in terms of their conversion to non-worker status in the post-land acquisition stage. There is thus an urgent need of safeguarding the interests of the tenants through formalization of tenancy prior to land acquisition. One of the major drawbacks of the earlier Act (1894) of not compensating the dependent on land other than the land owners has been substantively addressed in the New Act. The revision of the compensation provision in the New Act promises a significantly higher amount that is likely to trigger less unrest among the land losers. Though this is not a gender specific mechanism, it is likely to help the women from the poorest households, who suffer from double deprivation associated with structures of both class and gender.

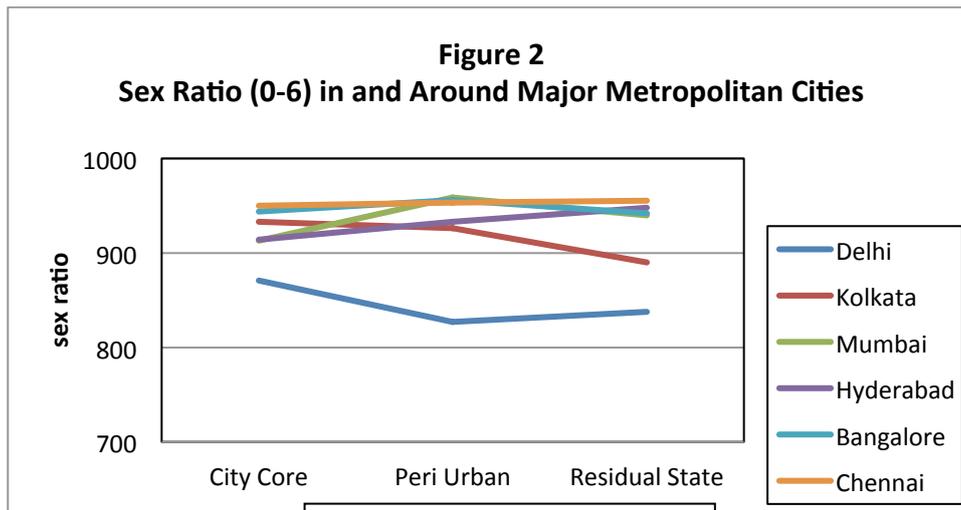
Table 1: Population Growth Rates of City Cores and its Surroundings, 2011

Cities	Spatial Units	Urban	Rural		Cities	Spatial Units	Urban	Rural
Delhi	Core	2.12			Hydrabad	Core	0.30	
	Peri-Urban	6.35	0.94			Peri-Urban	9.19	-0.36
	Residual State	3.20	1.01			Residual State	3.67	0.19
Mumbai	Core	0.39			Bangalore	Core	4.72	
	Peri-Urban	4.73	0.79			Peri-Urban	3.17	0.43
	Residual State	2.74	1.05			Residual State	2.22	0.75
Kolkata	Core	-0.17			Chennai	Core	0.70	
	Peri-Urban	3.32	0.09			Peri-Urban	6.36	0.63
	Residual State	4.33	1.01			Residual State	2.59	0.66

Source: Census 2011



Source: Census of India 2011



Source: Census of India 2011

Table 2: Indicators of Development in and around Selected Metropolises# in India

Sector	Spatial Units	MPCE*	Average Earning of workers per day in INR*	Indicators of Work Status		Share of Rural worker engaged in Non-Farm Sector	Share of Workers engaged in the Informal Sector
				Non Worker	Principal Status Worker		
Rural	Peri-Urban	1584	231	41.2%	38.8%	56.7%	10.1%
	Residual State	1481	210	37.7%	46.8%	49.5%	8.5%
Urban	Urban Core	3357	480	47.8%	50.7%		15.8%
	Peri-Urban	2847	438	48.7%	47.4%		15.2%
	Residual State	2101	337	48.4%	48.0%		11.2%

Source: Calculated from Employment-Unemployment Round, NSSO, 2011-12

Note: * All differences significant at 1% level. # Figures are averages for city core, peri-urban and residual states in relation to the 6 selected metropolitan cities; MPCE: Monthly Per-Capita Consumption Expenditure

Table 3: Comparison of Male and Female Work Participation Rates, 2004-05 and 2011-12

Spatial Units 1	61 st Round: 2004-05					
	Male WPR 2	Female WPR 3	Ratio of Female to Male WPR 4	Male WPR 5	Female WPR 6	Ratio of Female to Male WPR 7
	Principal and Subsidiary Status			Principal Status		
Rural						
Peri-Urban	87.3%	39.2%	0.45	85.6%	25.7%	0.30
Residual State	87.6%	61.2%	0.70	86.4%	53.3%	0.62
Urban						
Urban Core	80.9%	21.3%	0.26	79.8%	19.2%	0.24
Peri-Urban	82.5%	24.3%	0.29	80.8%	17.9%	0.22
Residual State	80.8%	30.3%	0.38	80.0%	26.8%	0.34
68 th Round: 2011-12						
Rural						
Peri-Urban	87.1%	35.9%	0.41	85.3%	19.0%	0.22
Residual State	87.4%	47.6%	0.54	84.9%	39.3%	0.46
Urban						
Urban Core	79.1%	22.7%	0.29	78.5%	21.4%	0.27
Peri-Urban	83.5%	21.8%	0.26	80.5%	17.8%	0.22
Residual State	78.8%	24.6%	0.31	78.4%	22.0%	0.28

Source: Calculated from Employment-Unemployment Rounds, NSSO, 2004-05 and 2011-12

Fig 3
Rural Male Work Participation across Age Groups

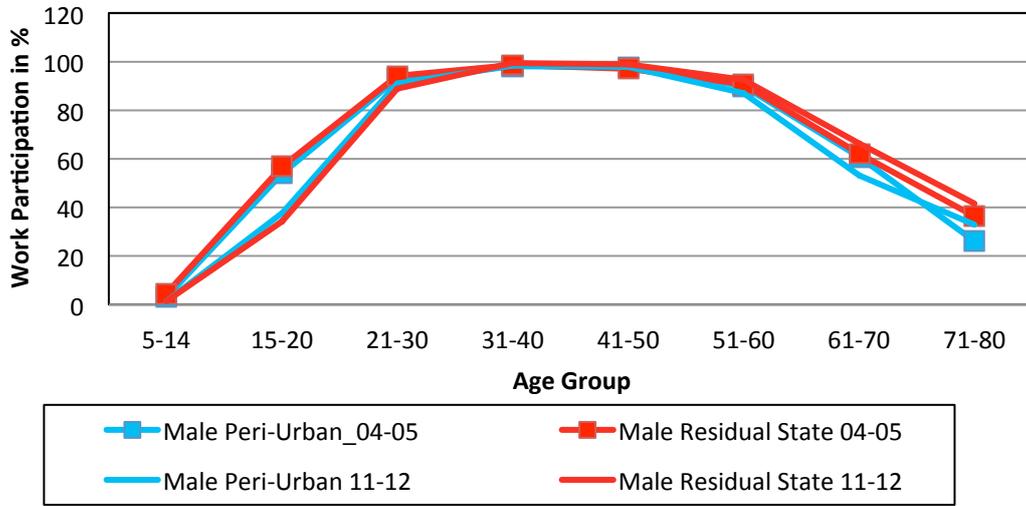
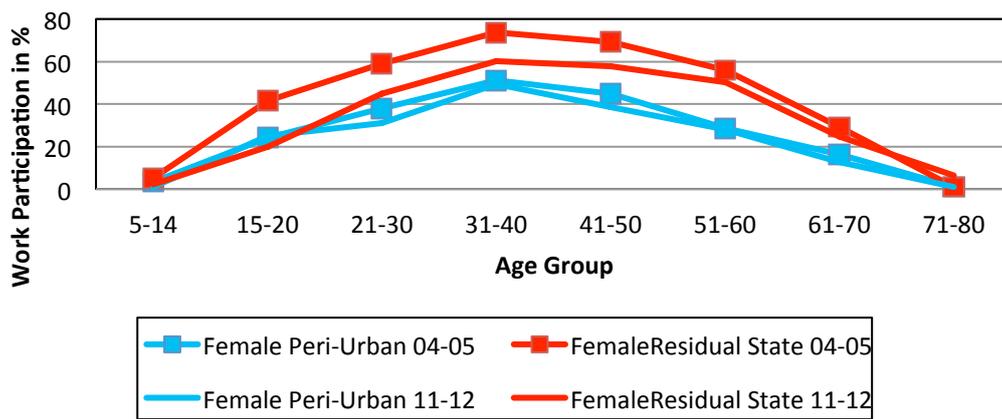
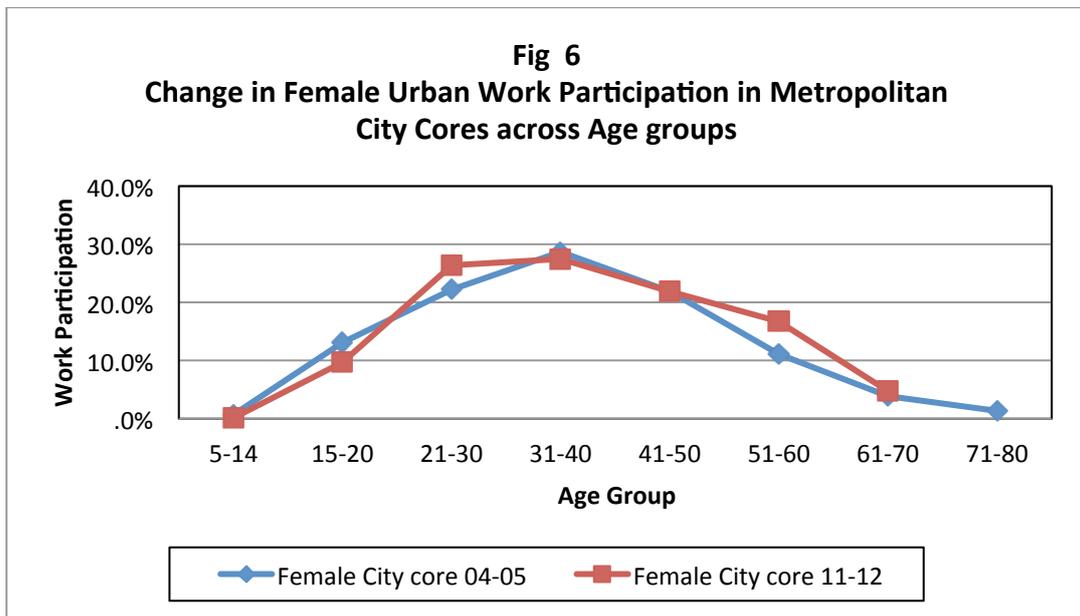
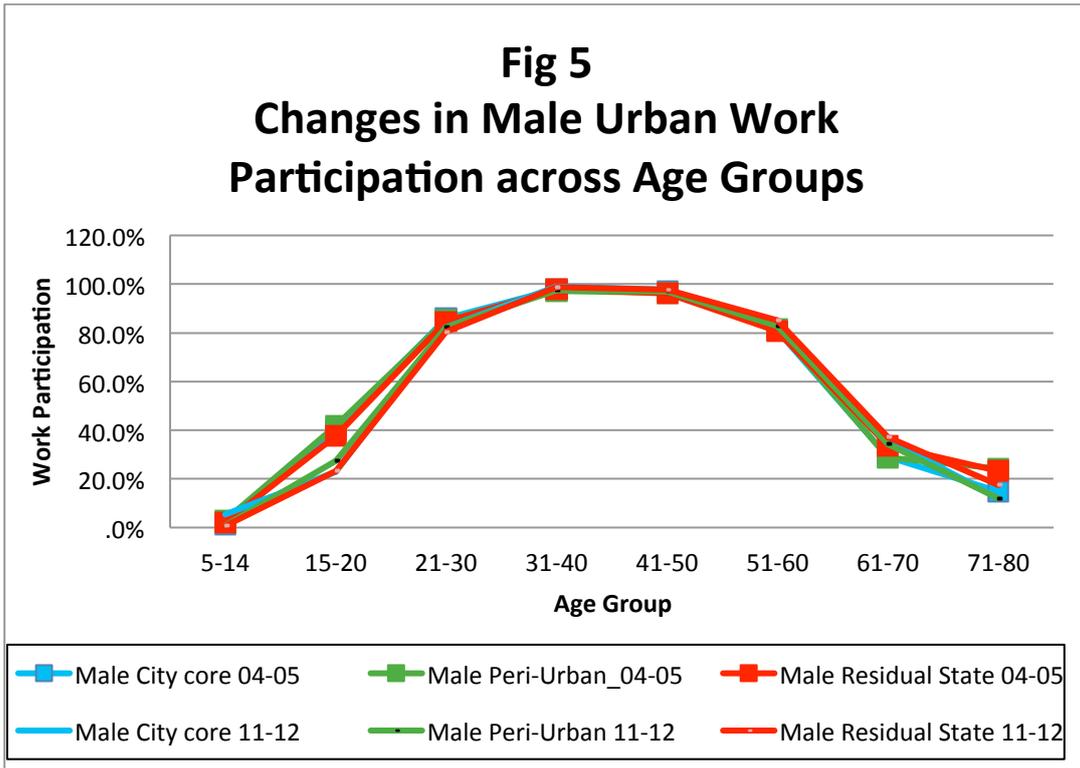
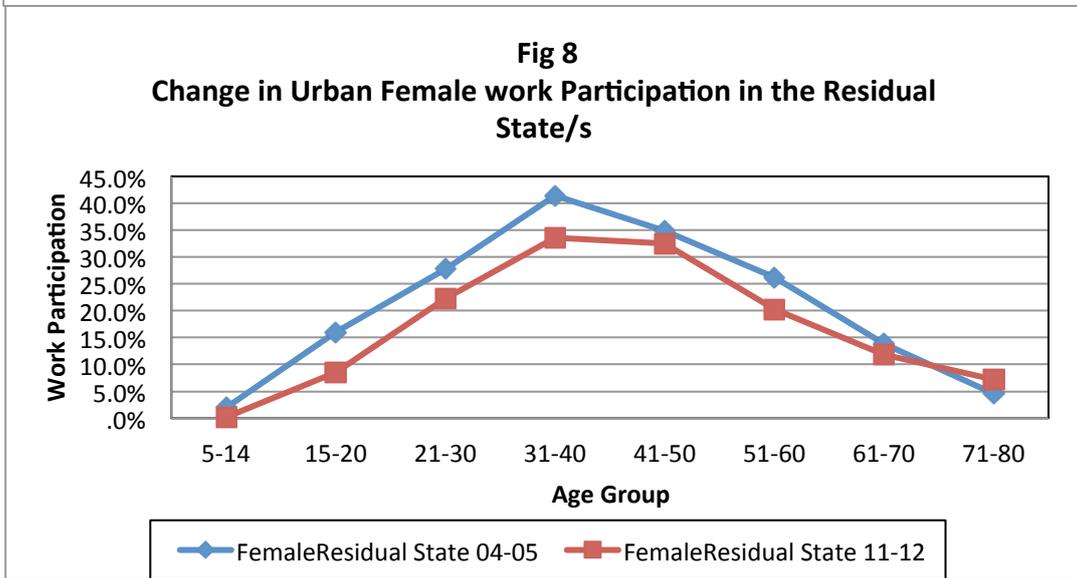
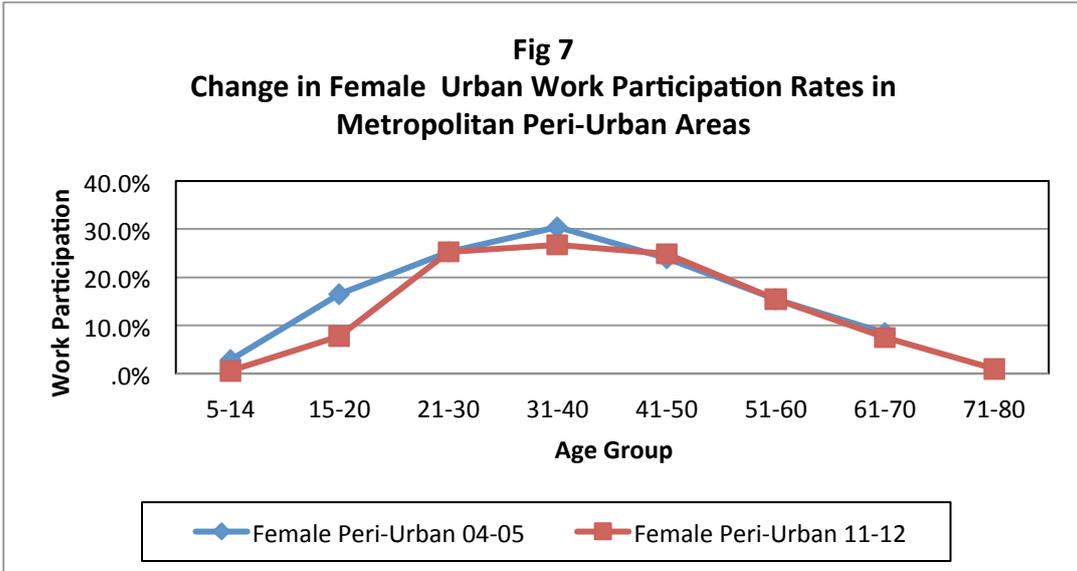


Fig 4
Rural Female Work Participation across Age Groups







Source for Figs 4 to 8: Extracted from Employment-Unemployment Rounds, NSSO, 2004-05 and 2011-12

Table 4: Change in Composition of work of Females

Spatial Units		2004-05					2011-12				
		Own Account Worker	Employer	Unpaid Family Work	Regular Salaried	Casual Wage Worker	Own Account Worker	Employer	Unpaid Family Work	Regular Salaried	Casual Wage Worker
Rural	Peri-Urban	20.6%	.0%	32.6%	7.2%	39.5%	16.4%	1.7%	18.3%	19.8%	43.9%
	Residual State	11.7%	.3%	34.2%	4.9%	48.9%	11.7%	.2%	32.9%	6.7%	48.5%
Urban	Urban Core	13.4%	1.5%	7.2%	72.1%	5.7%	14.9%	1.1%	9.2%	70.6%	4.1%
	Peri-Urban	18.5%	.5%	14.1%	56.3%	10.6%	23.3%	.0%	5.0%	62.0%	9.7%
	Residual State	21.1%	.6%	21.9%	33.3%	23.1%	23.9%	.2%	14.7%	40.5%	20.8%

Source: Calculated from Employment-Unemployment Rounds, NSSO, 2004-05 and 2011-12

Table 5: Willingness to Take up Home-based Work

Spatial Units		% Willing to accept job if it was home-based	Type of job acceptable			
			regular full time	regular part-time	occasional full time	occasional part-time
Rural	Peri-Urban	31.0%	18.6%	76.9%	1.6%	2.8%
	Residual State	27.9%	24.1%	71.7%	1.3%	2.9%
Urban	Urban Core	20.7%	29.4%	65.3%	1.2%	4.0%
	Peri-Urban	25.6%	24.2%	71.3%	.9%	3.6%
	Residual State	27.0%	28.5%	67.8%	1.1%	2.6%

Source: Calculated from Employment-Unemployment Round, NSSO, 2011-12

Table 6: Logit Analysis-Difference of Determinants of Work Participation of between Men and Women

Variables	Male		Females	
	β	Exp(β)	β	Exp(β)
<u>Categorical Variables :</u>				
<i>Location (Reference: Residual States)</i>				
Urban Core	0.247	1.281	-0.076	0.927
Peri-urban	0.052	1.053	-0.667	0.513
<i>Educational Attainment: Reference : High School and Above</i>				
Illiterate	0.773	2.167	0.65	1.916
Upto Primary	1.683	5.38	0.278	1.321
Middle	0.863	2.37	-0.144	0.866
Secondary	0.27	1.31	-0.415	0.66
<i>Sector (Reference: Urban)</i>				
Rural	0.102	1.108	0.539	1.715
<i>Social group(Reference : General Caste)</i>				
Scheduled Tribes	0.254	1.289	0.874	2.396
Scheduled Castes	-0.071	0.931	0.324	1.382
Other Backward Castes	0.117	1.124	0.444	1.559
<i>Marital Status (Reference: Divorced and Separated)</i>				
Never Married	0.468	1.598	-1.217	0.296
Currently married	2.724	15.242	-0.957	0.384
Constant	-3.045	0.048	-0.532	0.588
<u>Constant Variable :</u>				
<i>Household size</i>	-0.05	0.951	-0.077	0.926
<i>Age</i>	0.105	1.11	0.005	1.005
<i>MPCE</i>	0	1	0	1

Source: Calculated from Employment-Unemployment Round, NSSO, 2011-12

**Table 7: Rural Wage Rates of Different Sectors and Comparison of Gender Wage Differentials
between
2004-05 and 2011-12**

Type of work	Spatial Unit	2011-12				Female/Male Wage rate		Mean Difference of wage rate in the sector (2011-12)
		Male		Female		2004-05	2011-12	
		Wage	N	Wage	N			
Agriculture								
Casual	Peri-Urban	136	237	103	127	0.69	0.76	42*
	Residual State	141	2414	99	2155	0.62	0.7	
Manufacturing								
Regular	Peri-Urban	249	161	181	26	0.41	0.73	118*
	Residual State	266	629	134	85	0.32	0.51	
Casual	Peri-Urban	132	132	97	161	0.54	0.74	67*
	Residual State	173	398	96	187	0.55	0.56	
Construction								
Casual	Peri-Urban	190	251	130	36	0.7	0.68	84*
	Residual State	199	1823	113	566	0.64	0.57	
Education								
Regular	Peri-Urban	498	78	214	40	0.74	0.43	295*
	Residual State	571	703	274	397	0.57	0.48	

Table 8: Urban Wage Rates of Different Sectors and Comparison of Gender Wage Differentials between 2004-05 and 2011-12

Type Of Work	Spatial Units	20011-12				Female/Male Wage rate		Mean Difference of wage rate in the sector 2011-12
		Male		Female		2004-05	2011-12	
		Wage	N	Wage	N			
Manufacturing								
Regular	Urban Core	404	569	327	101	0.84	0.81	193*
	Peri-Urban	462	487	191	51	0.44	0.41	
	Residual State	403	883	162	138	0.33	0.40	
Transport								
Regular	Urban Core	715	472	796	67		1.11	-62
	Peri-Urban	705	276	679	45		0.96	
	Residual State	467	903	494	83		1.06	
Education								
Regular	Urban Core	660	91	597	107	0.78	0.90	169*
	Peri-Urban	680	91	502	103	0.93	0.74	
	Residual State	649	545	452	414	0.68	0.70	
Health								
Regular	Urban Core	813	78	567	41	0.78	0.70	230*
	Peri-Urban	569	57	316	35	0.95	0.55	
	Residual State	530	129	351	109	0.70	0.66	

Table 9. Change in the Shares of the Broad Principal & Subsidiary Occupation Categories in Delhi Peri-Urban Area (2007-2008)

Occupation Categories	Occupations Before Land Acquisition (2007)				Occupations After Land Acquisition (2008)			
	Primary Occupations		Secondary Occupations		Primary Occupations		Secondary Occupations	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent
None	14	7.1	97	49.5	24	12.2	112	57.1
Agriculture	36	18.4	86	43.9	21	10.7	70	35.7
Non-Agriculture	34	17.3	10	5.1	40	20.4	11	5.6
Students	55	28.1	2	1.0	55	28.1	2	1.0
Housewife	57	29.1	1	0.5	56	28.6	1	0.5
Total	196	100	196	100	196	100	196	100

Source: Field Survey, 2008

Note: Population above 5 years of age has been taken as often children are also engaged in agriculture as secondary occupation

Table 10 : Category of Household and Change in Secondary Occupation Before and After Land Acquisition in Delhi Peri-Urban Region

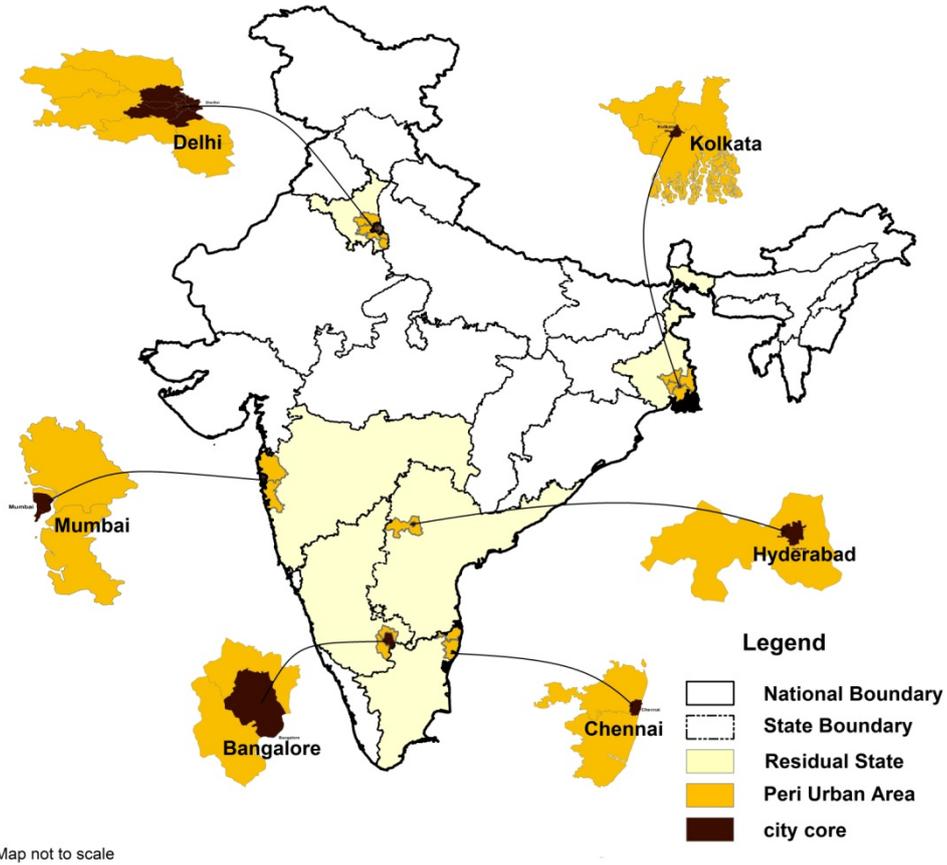
Sex : MALE		Change in Secondary occupation (%)			
Categories for Households	Not applicable	Cultivator to Wage labourer	Agricultural Worker to Unemployed	Agricultural Worker to Petty Non-Farm Work	Earlier Agricultural Occupation continued
Never lost any land	0	0	0	0	100
Partially lost land	6.7	0	10	0	83.3
Completely lost land	57.1	0	14.3	14.3	14.3
Never owned land	18.2	9.1	63.6	0	9.1
Total	16	2	22	2	58

Sex : FEMALE		Change in Secondary occupation (%)			
Categories for Households	Not applicable	Cultivator to Wage labourer	Agricultural Worker to Unemployed	Earlier Agricultural Occupation continued	
Never lost any land	0	0	0	100	
Partially lost land	0	0	3	97	
Completely lost land	50	0	50	0	
Never owned land	0	25	75	0	
Total	3.8	5.8	19.2	71.2	

Appendix I: District Around Metropolitan Cities

Metropolitan Centre	Districts representing peri-urban areas	
	2004-05	2011-12
Delhi	Gurgaon, Faridabad, Rohtak, Sonipat	Gurgaon, Faridabad, Rohtak, Sonipat Jhajjar
Mumbai	Thane, Raigarh	Thane, Raigarh
Kolkata	North 24 Parganas, South 24 Parganas, Haora, Hugli	North 24 Parganas, South 24 Parganas, Haora, Hugli
Hyderabad	Rangareddy	Rangareddy
Bangalore	Bangalore (rural)	Bangalore (rural), Ramnagar
Chennai	Kanchipuram, Thiruvallur	Kanchipuram, Thiruvallur

Appendix II
Study Area: Six Major Metropolitan Cities in India and Their Hinterland



**Appendix III: Sample Size of the 61st and 68th Rounds of National Sample Survey Organization
(Employment Unemployment Rounds)**

Sector	Cities	Spatial Units	2004-05			2011-12			
			Sex		Total	Sex		Total	
			Male	Female		Male	Female		
Rural	Delhi	Peri-Urban	1569	1373	2942	991	837	1828	
		State Residual	3284	3024	6308	2985	2637	5622	
	Mumbai	Peri-Urban	759	788	1547	662	635	1297	
		State Residual	11723	11006	22729	8946	8217	17163	
	Kolkata	Peri-Urban	3301	3276	6577	1997	1951	3948	
		State Residual	9009	8696	17705	5720	5600	11320	
	Hydrabad	Peri-Urban	392	375	767	292	260	552	
		State Residual	10859	10965	21824	7135	7304	14439	
	Bangalore	Peri-Urban	234	246	480	211	189	400	
		State Residual	6519	6317	12836	4477	4533	9010	
	Chennai	Peri-Urban	641	650	1291	484	465	949	
		State Residual	7263	7474	14737	5761	5959	11720	
	Total			55881	54457	110338	39890	38793	78683
	Urban	Delhi	City Core	2528	2058	4586	2014	1683	3697
Peri-Urban			888	746	1634	1003	841	1844	
State Residual			1766	1534	3300	1761	1568	3329	
Mumbai		City Core	2609	2391	5000	1650	1531	3181	
		Peri-Urban	1926	1710	3636	1320	1276	2596	
		State Residual	7107	6878	13985	5725	5402	11127	
Kolkata		City Core	1108	922	2030	871	783	1654	
		Peri-Urban	2652	2491	5143	2012	1902	3914	
		State Residual	2539	2394	4933	2406	2279	4685	
Hydrabad		City Core	881	915	1796	993	969	1962	
		Peri-Urban	641	566	1207	631	552	1183	
		State Residual	4313	4403	8716	3719	3803	7522	
Bangalore		City Core	1287	1208	2495	912	831	1743	
		Peri-Urban	90	80	170	111	123	234	
		State Residual	3436	3430	6866	3313	3241	6554	
Chennai		City Core	873	853	1726	613	627	1240	
		Peri-Urban	921	907	1828	613	604	1217	
		State Residual	5894	6039	11933	4530	4625	9155	
Total			41459	39525	80984	34197	32640	66837	

Appendix IV: MPCE and Wage Rates in and around Six Major Metropolitan Cities

Sector	Cities	Geographical Units	MPCE	Wage Rate	
Rural	Delhi	Peri-Urban	2017	341	
		Residual State	1828	291	
	Mumbai	Peri-Urban	1215	221	
		Residual State	1481	216	
	Kolkata	Peri-Urban	1343	189	
		Residual State	1236	221	
	Hyderabad	Peri-Urban	1775	221	
		Residual State	1532	181	
	Bangalore	Peri-Urban	1729	187	
		Residual State	1376	200	
	Chennai	Peri-Urban	2090	271	
		Residual State	1570	216	
	Urban	Delhi	Urban Core	3166	587
			Peri-Urban	3742	797
Residual State			2419	477	
Mumbai		Urban Core	3995	499	
		Peri-Urban	3303	448	
		Residual State	2097	379	
Kolkata		Urban Core	3264	392	
		Peri-Urban	2402	363	
		Residual State	1828	352	
Hyderabad		Urban Core	2839	379	
		Peri-Urban	2222	325	
		Residual State	2274	340	
Bangalore		Urban Core	3351	462	
		Peri-Urban	2513	279	
		Residual State	1901	287	
Chennai		Urban Core	3238	439	
		Peri-Urban	2623	358	
		Residual State	2131	280	

Bibliography

1. Abraham, V. (2009) Employment Growth in Rural India: Distress Driven?, *Economic and Political Weekly*, 44 (16), 97-104.
2. Abraham, V., (2013), 'Missing Labour or Consistent "De-Feminisation".' *Economic & Political Weekly*, Vol. XLviii, No. 31, pp :99-108.
3. Adell, G., (1999), 'Theories and models of the peri-urban interface: a changing conceptual landscape.', *Strategic Environmental Planning and Management for the Peri-Urban Interface*, *Development Planning Unit*, University College, London.
4. Agarwal, B. (1994), ' A Field of One's Own: Gender and Land Rights in South Asia. ', *Cambridge U.K.: Cambridge University Press*.
5. Basu, P. K. (2007). Political economy of land grab. *Economic and Political Weekly*, 1281-1287.
6. Beteille, A. (1991), ' Society and Politics in India: Essays in a Comparative Perspective.', *London School of Economics Monographs on Social Anthropology*. New Delhi: Oxford University Press.
7. Bosworth, B., & Collins, S. M. (2007). *Accounting for growth: comparing China and India* (No. w12943). National Bureau of Economic Research.
8. Chadha G.K, S. Sen, H. R. Sharma (2004), *Land Resources: State of Indian Farmers*, Academic Foundation, New Delhi.
9. Chakravorty, Sanjoy. (2000)."How Does Structural Reform Affect Regional Development? Resolving Contradictory Theory with Evidence from India*." *Economic Geography* 76.4: 367-394.
10. Chandrasekhar, C. P. And Ghosh, J. (2013), ' Where have all the women workers gone? ', *Hindu Business Line*, Nov. 11.
11. Dupont, V. (2007), 'Conflicting stakes and governance in the peripheries of large Indian metropolises—An introduction.', *Cities*, Vol. 24, No. 2, pp : 89-94.
12. Guha, A. (2014). Generating Public Consciousness around Land Acquisition for Private Industries. *Social Change*, 44(2), 205-228.
13. Hart, G., (1996), 'The agrarian question and industrial dispersal in South Africa: Agro-industrial linkages through Asian lenses.', *The Journal of Peasant Studies*, Vol. 23, No. 2-3, pp : 245-277.
14. Himanshu. (2011). Employment Trends in India: A Re-examination. *Economic and Political Weekly*, 46(37), 43-59.
15. Iaquina, D. L., and A. W. Drescher, (2000), 'Defining periurban: understanding rural-urban linkages and their connection to institutional contexts.', *Tenth World Congress of the International Rural Sociology Association*. Vol. 1.
16. Institute of Global and Area Studies. (IGAS) (2012). Puzzling Decline in Rural Women's Labor Force Participation in India: A reexamination, No 96, *GIGA Working paper*, Hamburg: Neff, D., Sen, K., & Kling, V. Jatav, M., & Sen, S. (2013). Drivers of non-farm employment in rural India. *Economic and Political Weekly*, 48(26-27).
17. Kannan, K. P., & Raveendran, G. (2009). Growth Sans Employment: A Quarter Century of Jobless Growth in India's Organised Manufacturing. *Economic and Political Weekly*, 44(91): 80-91.
18. Kennedy L. , (2007), ' Regional industrial policies driving peri-urban dynamics in Hyderabad, India.', *Cities*, Vol. 24, No. 2, pp :95–109.
19. Kennedy, L., & Zérah, M. H. (2008). the Shift to city-centric Growth Strategies: perspectives from Hyderabad and Mumbai. *Economic and Political Weekly*, 110-117.
20. Kohli, A. (2006). Politics of economic growth in India, 1980-2005: Part II: The 1990s and beyond. *Economic and Political Weekly*, 1361-1370.
21. Kundu, A. (2009). Exclusionary urbanisation in Asia: A macro overview. *Economic and Political weekly*, 48-58.

22. Kundu, A. (2011). Politics and economics of urban growth. *Economic and Political Weekly*, 46(20), 10-12.
23. Kundu, A., & Saraswati, L. R. (2012). Migration and exclusionary urbanisation in India. *Economic & Political Weekly*, 47(26), 219-27.
24. Kundu, A., Schenk, H., & Dash, B. P. (2002). *Changing role of state in urban governance, provision of basic amenities to poor in the context of unplanned growth in metropolitan peripheries of Delhi and Hanoi*. New Delhi: Institute for Human Development.
25. Lu, Z., & Song, S. (2006). Rural–urban migration and wage determination: The case of Tianjin, China. *China Economic Review*, 17(3), 337-345.
26. Midmore, D. J., & Jansen, H. G. (2003). Supplying vegetables to Asian cities: is there a case for peri-urban production?. *Food Policy*, 28(1), 13-27.
27. Paul, T., & Raju, S. (2014). Gendered Labour in India. *Economic & Political Weekly*, 49(29), 197.
28. Raju, S. (2013 a) . The Material and the Symbolic. *Economic & Political Weekly*, 48(1), 61.
29. Raju, S. (2013 b). Women in India’s New Generation Jobs. *Economic & Political Weekly*, 48(36), 17.
30. Schenk, H., (2004), ‘Towards Apartheid? Policies of segregation and deprivation in Delhi.’, *Urban development debate in the new millennium*. Atlantic, New Delhi, pp : 96-115.
31. Srivastava, N. and Srivastava, R., (2010), Women, work and employment outcomes in India. *Economic and Political Weekly*, 48 (28), 49-63.
32. Tacoli, C., (1998). ‘Rural-urban interactions; a guide to the literature.’, *Environment and Urbanization*, Vol. 10, pp : 147-166.
33. Webster, D., et al., (2003), ‘Emerging third stage peri-urbanization: functional specialization in the Hangzhou peri-urban region.’, *Research Monograp. Stanford, CA: Asia-Pacific Research Center, Stanford University* .