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LAND DISPOSSESSION AND RURAL TRANSFORMATION : THE CASE OF FRINGE VILLAGES OF KOLKATA

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ABSTRACT

Traditional understanding of rural transformation, although pertains to processes associated with agricultural development, rural poverty or urbanisation, the recent times have witnessed additional micro-processes in relation to state policies that not only affect rural lives but also compel them to undergo far-reaching changes. State- perpetrated land acquisition offers perhaps the most unambiguous shock to the rural lives as it directly impinges upon the economic base of the rural population. The recent massive land acquisition for the Rajarhat New Town project in West Bengal near Kolkata offers a pertinent case for the study of the nature of rural transformation invigorated by land dispossession. Attempting to analyse the trajectory of occupational transformation following land loss of the farmers (land owners as well as pure tenants) on one hand and on the other hand the role of access to assets in determining it, the paper has succinctly pointed out the following: firstly, a rapid de-stabilisation of the self-contained peasantry and their subsequent absorption into the manual jobs on one hand and business enterprises on the other the trajectory being guided by base asset position, access to land in specific, prior to land loss; secondly, a remarkable downward occupational mobility for the land dispossessed farmers in general and more so in case the pure tenants completely lost land households; and thirdly, a clear mismatch between the skill endowment of the land dispossessed farmers and the emerging activities in the study region that thrust the farmers into a tumultuous condition. It therefore, prompts one to question the route to urbanisation-industrialisation embarked upon by the Government that unambiguously impoverishes the peasantry and triggers a peculiar type of rural transformation that promises adversity.

Background of the Study

Rural change in India heralded by the Green revolution has been followed by a remarkable tendency of the economy to tilt in favour of non-farm employment in the recent times (Chandrashekhar, 1993; Chadha et al, 2002; Kundu et al, 2005). Many rural areas have witnessed the proliferation of a wide spectrum of non-agricultural work which often accounts for nearly half the income of the households (Start, 2001). It has stemmed principally from two sources: firstly, agricultural development

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leading to its commercialisation and spread effects encouraging the growth of agricultural support services. As exposited by John Mellor, non-farm diversification is the manifestation of the transfer of increased net gains from highly productive agriculture to a capitalist transformation of the economy through re-investment in rural industry on one hand and increased demand for non-agricultural goods and services induced by enhanced purchasing power. The second proposition regarding its origin considers the rural non-farm economy (RNFE) as an image of the urban informal sector reflecting the spill over into low paid alternative employment of a population unable to sustain its living on land because of population pressure and an inadequate development of agriculture (Chandrashekhar, 1993; Vaidyanathan, 1986). Thus the residual sector hypothesis emphasises the distress induced route to the development of the RNFE. Urbanisation has also emerged as a reason leading to the growth and expansion of the RNFE (Eapen, 2001; Lanjouw and Murgai, 2010). Understandably, rural transformation may be induced by prosperity, distress or a combination of both. It is also the result of combined push-pull forces of the rural and urban economies. It is a process whereby the rural economy adjusts gradually to either the stress accumulating within it or attempts to capitalise on the benefits of prosperous agriculture. Scholars argue that this is a manifestation of the rural sector undergoing a structural transformation (Unni, 1989, 1993; Start, 2001). Thus, it is a process that operates over a considerable period of time and the changes in the economy become evident very gradually. It is an outcome of the critical balance between the propensities of the rural sector to remain heavily dependent upon agriculture and the forces that induce diversification.

Contrary to the traditional understanding of rural change as a long-term process, it is important to take note of some of the drastic events that may potentially modify the practised mode of the rural economy. Besides any natural disaster it may take the form of change in policy guideline that may modify the nature and pattern of access to resources. Land acquisition is one such institution that involves a direct transfer of agricultural land to non-agricultural uses. It may be conceived as potent stimulant for rapidly changing the farm economy. The urban fringes of the large cities have evolved as the hot-spots of globalised capital where the progressive land alienation processes have triggered intense rural change commonly to the adversity of the rural population. In a situation where the principal mode of sustenance, that is, land have been institutionalised to slip away from the control of the peasants there hardly remains any other option but to diversify towards activities that are de-linked from land. The modification of the rural economy which essentially emanates from anguish calls for deep scrutiny regarding the robustness of such a transformation.

That the rural non-farm economy (RNFE), far from being homogeneous, reveal an extremely heterogeneous character, further complicates the trajectory of adaptation embraced by the rural population. The asset position determines the distribution of the incremental income stemming from RNFE among the different factions of the rural population. In a peri-urban locale, access to livelihood assets, particularly land plays all the more important role in the process of transforming the spatial characteristics of the peri-urban interface into opportunities rather than constraints (Mallik & Sen, 2011) as proximity to the city encourages land speculation which favours the landed gentry and marginalises the landless population. Also, access to land corresponds with other livelihood assets like good education and productive social contacts that smoothen the process of economic transition in general and especially during the event of land dispossession.

Located in this context, this paper purports to explore the impact of rapid land-use change following planned urban expansion along the fringes of Kolkata in terms of sustainability of rural livelihoods. Kolkata has been selected as a case study since the fringes of the city has been experiencing accelerated eastward expansion and massive re-organisation of economic space, particularly as a result of coming up of Rajarhat New Town Project (NTP). Kolkata poses to be an interesting case study since the politico-social upsurge following the ruthless onslaughts by the Leftist State government upon the poor peasantry in the name of urban development has not only shoved it into a pivotal position on the global platform, but has also generated copious debates and deliberations among the academia regarding the customary development paradigm.

A rural space that has been recently exposed to urban land intrusion would experience massive reorganisation of the means of production in a way that has been both negotiated as well as contested. Access to land that was central to the attainment of a meaningful livelihood is posited with the challenge of retaining its pre-eminence by the land acquisition. Consequently a range of alternative activities would emerge that would be essentially de-linked from land. The non-agricultural activities ranging between extremely high return enterprise to menial labouring occupations would entail that location of any household within the diverse spectrum would be guided by the pre-existing economic disposition of the households. Therefore, the central thesis of this paper is that the inevitable process of rural transformation under the aegis of urban expansion would bear different implications for livelihoods for those having differential access to livelihood assets commonly favouring the asset-rich and subsequently pushing the asset-poor further towards the peripheries.

Data and Methodological Issue

The paper is an outcome of a primary survey conducted during 2010- 2011 in three villages affected by massive land acquisition by the government of West Bengal for developing the Rajarhat New Town. Land had been acquired for the New Town in phases since 2003. Combining the land acquisition data obtained from the District Collectorate and Census 2001 village directory to select three villages based on the following two criteria: (a) considerable share of agricultural workforce in 2001 census and agriculture the mainstay of the people in the pre-acquisition period, (b) considerable share of land acquired by State recently and yet some agricultural land remaining and being cultivated. The villages of Akandakeshari, Chhapna and Patharghata were selected based on the above outlined criteria.

About 82 households affected by land acquisition and 30 control samples were selected through stratified random sampling technique to look into the nature of change in the livelihood embarked upon by the affected households. It must be pointed out that the samples constitute of only those households whose principal source of income had been agriculture prior to land loss. It includes both the owner cultivators as well as tenant cultivators. So, the sample contains some pure tenants whose operational holdings had been completely tenanted and that they did not own any land before land acquisition. This category of farmers had access to land through the land lease market but had no land ownership.

Questionnaires were canvassed both at the household level and individual level (those whose age is above 15 years during the time of the survey). Hence, while some of the analysis is undertaken at household level, the study of employment pertains to individuals aged 15 years and above.

The section on occupational mobility does not use any subjective criteria for ranking

the occupations. Rather the occupations have been clubbed according to the NCO 2004 scheme to arrange the occupations hierarchically. NCO 2004 uses educational level and skill required for performing any particular occupation rather than the actual possession of those by the individual undertaking the specific activity. Noting the occupation of any individual both before and after land dispossession three categories of occupational mobility have been evolved: downward mobility, upward mobility and no change. This analysis excludes those individuals who have been non-workers either before or after land acquisition or both.

General Characteristics of the Sample : The sample consists of 80 households who have lost land and another 30 households who have not lost land. Majority of them (45 per cent) have lost land completely to the New Town Project (NTP) and the rest have lost parts of their holdings (27 per cent) (Table 1). About 82 per cent of the households owned some land and cultivated either entirely ownership holdings or mixed holding (Table 2). The landless households (18 per cent) gained access to land through the lease market. Before land acquisition, agriculture had been the mainstay of all the sample households. The demographic composition, economic activity and educational attainments of the land lost and control samples do not differ markedly (Table 3).

Table 1: Types of Households

	N	%
Never lost land	31	27.4
Partially lost land	31	27.4
Completely lost land	51	45.1
Total	**113**	**100.0**

Source: Primary Survey 2010- 11.

Table 2: Household Characteristics

	Control		Land Lost	
	N	%	N	%
Households owning some land	26	83.9	67	81.7
Pure tenants	5	16.1	15	18.3
Total	**31**	**100.0**	**82**	**100.0**

Source: Primary Survey 2010- 11.

Table 3: Individual Characteristics

Attributes		Control		Land Lost (Before LA)	
		N	%	N	%
Age composition	0-14	41	24.8	96	21.7
	15-59	107	64.8	304	68.8
	above 59	17	10.3	42	9.5
	Total	165	100.0	442	100.0
Economic characteristic (above 15 years)	Non- worker	66	53.2	208	60.5
	Primary sector	34	27.4	118	34.3
	Non- primary sector	24	19.4	18	5.2
	Total	124	100.0	344	100.0
Educational Attainment (above 6 years)	Pre- primary education	7	5.3	15	4.2
	Primary education	35	26.7	91	25.6
	Secondary education	73	55.7	189	53.2
	Higher secondary & above	16	12.2	60	16.9
	Total	131	100.0	355	100.0

Source: Primary Survey 2010- 11.

Analysis and Results

(a) Changes in Access to Land : The study revealed that access to land reduced remarkably among the sample households such that mean size of ownership holding declined from 3.63 bigha to 0.66 bigha while operational holding declined from 5.22 to 0.56 bigha owing to land acquisition for urban expansion (Tables 4 and 5). The pattern of access to land has changed considerably. While access to land with respect to both ownership as well as operational holding clearly informs massive incidence of landlessness (the shares of landless households with respect to land ownership increased from mere 18 to 70 per cent and with respect to operational holding it has been an increase from 0 to 70 per cent), the respective shares of small, medium and semi-large farmers have also declined. It may be mentioned at this point that the structure of access to land of the control samples correspond to the pre-land dispossession condition of the land-lost farmers and that the current situation of the latter relates to land dispossession experience.

Table 4: Change in Land Ownership Before & After LA

		Before LA					After LA				
		Landless	Small	Medium	Semi-large	Total	Landless	Small	Medium	Semi-large	Total
Control	N	-	-	-	-	-	5	9	12	5	31
	%	-	-	-	-	-	16.1	29.0	38.7	16.1	100.0
Land lost	N	15	26	27	14	82	57	19	5	1	82
	%	18.3	31.7	32.9	17.1	100.0	69.5	23.2	6.1	1.2	100.0
Mean size of land ownership (Land Lost)				3.63				0.66			

Source: Primary Survey 2010- 11.

Table 5 : Change in Land Ownership Before & After LA

		Before LA					After LA				
		Landless	Small	Medium	Semi-large	Total	Landless	Small	Medium	Semi-large	Total
Control	N	-	-	-	-	-	0	16	11	4	31
	%	-	-	-	-	-	0.0	51.6	35.5	12.9	100.0
	N	0	43	22	17	82	57	23	2	0	82
	%	0.0	52.4	26.8	20.7	100.0	69.5	28.0	2.4	0.0	100.0
	%	-	-	-	-	-	16.1	29.0	38.7	16.1	100.0
Land lost	N	15	26	27	14	82	57	19	5	1	82
	%	18.3	31.7	32.9	17.1	100.0	69.5	23.2	6.1	1.2	100.0
Mean size of land operated (Land Lost)				5.22					0.56		

Source: Primary Survey 2010- 11.

Land, which was an immobile asset, immediately got transformed into financial capital in the form of cash compensation following acquisition. However, according to the Land Acquisition Act 1894, only the land owners and registered tenants were compensated for their reduced access to land. So, while land constituted the mainstay for all the households, the loss was compensated only for those who had legal sanction for their access. Receipt of compensation offered the land losers with an opportunity to make good their loss of land through the acquisition of other assets and largely bypassed the un-registered tenant farmers. The State government has offered around one lakh to 2.7 lakh per bigha of acquired land as compensation (Table 6). Analysing the pattern of spending of the compensation money it may be observed that largest share of it has been allocated to the improvement of existing housing stock and for the creation of new housing assets (35.6 per cent). Considerable shares of households converted their housing stock into productive capital and rented out part of their establishments. About one-third of the compensation has been expended for the acquisition of consumption item. The entire structure of physical asset basket of the region has therefore, tilted away from capital goods to consumer goods- an observation relevant for most of the newly urbanising fringes (Mallik & Sen, 2011) and suggesting increasing vulnerability of the households. That merely 3 per cent of the entire compensation has been allocated for procuring productive assets further confirms that the eroding agricultural base not being replenished with non-agricultural capital leading to increasing livelihood insecurity. However, there has been some allocation of compensation amount towards business enterprises (13.8 per cent), financial investments (8.4 per cent) and savings (9 per cent) which together account for about one-third of the total money received.

The pattern of spending of the compensation illuminates the route of transformation of land asset to other assets. It suggests two things: firstly, decline in natural capital partly offset by increase in housing stock which has far reaching positive impact upon the health besides having productive income earning potential in the future owing to its peri-urban location; and secondly, modification of the physical capital basket in favour of items of conspicuous consumption clearly suggesting eroding livelihood sustainability. It must be emphasised that while the asset transformation issue in terms of circulation of the compensation

Table 6 : Use of Compensation

Uses	Amount (in ₹ Lakh at 2004-05 prices)	Mean
Construct houses/ improvement of existing buildings	124.23	35.66%
Consumption uses	118.12	29.69%
Business investment	59.33	13.88%
Savings	61.96	9.08%
Financial Investments	49.99	8.43%
Investments in productive assets	11.90	3.26%
Rate of compensation per bigha	₹ 1lakh to 2.73lakh per bigha	

Source: Primary Survey 2010- 11.

money is relevant for some of the land dispossessed households, in case of the unregistered tenant farmers it is an episode of recurring attrition of assets following land dispossession. Thus, the adjustment of the activity profile of the different categories of farmers is relevant for understanding their respective livelihood transformation experience.

(b) Principal Occupation : Work participation has remained almost unchanged with reference to principal occupation. However, there has been remarkable sectoral shift away from primary to secondary and tertiary sectors. For the land owning households, this shift has been more in favour of the tertiary sector while for the landless it is the secondary sector (Tables 7 and 8). The secondary sector mainly comprising construction related activities at the project site absorbed the majority of the land dispossessed pure tenant households while the landed households, perhaps by virtue of their pre-existing economic standing have been able to find relatively better tertiary work in the form of business enterprise. At this juncture it must be pointed out that both the types of work that have replaced the agricultural work of the land dispossessed farmers have been in relation to the burgeoning construction industry. With shifting locus of the real estate activity, the profitability of the related enterprises also shifted regularly. Thus, even though the returns from the business enterprises in relation to the real estate activities have been significantly attractive towards the initial phase, this has been a temporary phenomenon. The engagement of the construction workers have also followed a similar pattern and hence have been extremely volatile, the demand for local labour being governed by the location of the construction site. Further, conversion of the farmers to non-workers following land loss (15.4 per cent) have revealed some relation to access to land prior to land loss. There has been greater shift towards non-workers in case of the land-owning households (17 per cent) compared to the pure tenant households (8.3 per cent) which perhaps suggests that the former have obtained some rentier type of income to sustain a living rather than non-availability of work. It also indicates that the latter whose livelihoods were relatively less resilient owing to their initial asset poverty has been subjected to intense pressure due to loss of access to land that have compelled them to undertake any type of work to sustain a living

Table 7: Principal Occupation: Work Participation Before & After LA (above 15 years)

		Before LA		After LA	
		N	%	N	%
Control	Non- worker	-	-	66	53.2
	Worker	-	-	58	46.8
	Total	-	-	124	100.0
Land lost	Non- worker	208	60.1	205	59.2
	Worker	138	39.9	141	40.8
	Total	346	100.0	346	100.0

Source: Primary Survey 2010- 11.

Table 8 : Principal Occupation: Sectoral Change in Employment Before & After LA

Category of Households			Before					After			
			Primary	Secondary	Tertiary	Total	Non-worker	Primary	Secon-dary	Tertiary	Total
Control	Households owning some land	N	-	-	-	-		29	1	15	45
		%	-	-	-	-		64.4	2.2	33.3	100.0
	Pure tenants	N	-	-	-	-		5	6	2	13
		%	-	-	-	-		38.5	46.2	15.4	100.0
	Total	N	-	-	-	-		34	7	17	58
		%	-	-	-	-		58.6	12.1	29.3	100.0
Land lost	Households owning some land	N	98	1	13	112	19	12	35	46	112
		%	87.5	0.9	11.6	100.0	17.0	10.7	31.3	41.1	100.0
	Pure tenants	N	20	3	1	24	2	3	14	5	24
		%	83.3	12.5	4.2	100.0	8.3	12.5	58.3	20.8	100.0
	Total	N	118	4	14	136	21	15	49	51	136
		%	86.8	2.9	10.3	100.0	15.4	11.0	36.0	37.5	100.0

Source: Primary Survey 2010- 11.

Table 9 : Principal Occupation: Change in the Nature of Work Before & After LA

Category of Households			Before					After			
			Casual Labourer	Self-employed	Regular salaried	Total	NA	Casual Labourer	Self-employed	Regular salaried	Total
Control	Households owning some land	N	-	-	-	-	-	8	32	5	45
		%	-	-	-	-	-	17.8	71.1	11.1	100.0
	Pure tenants	N	-	-	-	-	-	6	6	1	13
		%	-	-	-	-	-	46.2	46.2	7.7	100.0
	Total	N	-	-	-	-	-	14	38	6	58
		%	-	-	-	-	-	24.1	65.5	10.3	100.0
Land lost	Households owning some land	N	4	103	5	112	19	39	47	7	112
		%	3.6	92.0	4.5	100.0	17.0	34.8	42.0	6.3	100.0
	Pure tenants	N	4	19	1	24	2	17	4	1	24
		%	16.7	79.2	4.2	100.0	8.3	70.8	16.7	4.2	100.0
	Total	N	8	122	6	136	21	56	51	8	136
		%	5.9	89.7	4.4	100.0	15.4	41.2	37.5	5.9	100.0

Source: Primary Survey 2010- 11.

following land dispossession. Given that the households who never lost land reveals about 60 per cent of them engaged in the primary sector in contrast to 11 per cent in case of the land dispossessed farmers confirms that there has not been adequate remunerative opportunities in the non-farm sector to encourage the voluntary transfer of the workforce away from agriculture. The shift towards non-farm sectors therefore, has been far from a gradual shift of the workforce away from the primary sector as argued by the Lewis model. So the farmers whose access to land has not been affected by land acquisition continue to depend upon agriculture even when the larger economic environment of the village has been changing in favour of non-agriculture.

The sectoral categories however do not convey adequate information about the quality of activities and therefore, call for deeper probe. Looking at the nature of work before and after LA, it has been observed that although the share of self-employed workers has reduced considerably it predominates the landed households. In case of the landless, casual labour which constituted 16.7per cent of the workers before LA has increased to 70.8 per cent after LA (Table 9). Although the control households have manifested greater adherence towards self-employment (which in rural economy largely refers to the cultivator category) there has been about one quarter of them involved in casual work. Noticeably, the current level of casualisation among the farmers who have not lost land is much higher than that of the land dispossessed farmers before land acquisition. This indicates that although the region have been experiencing casualisation of workforce in consonance with the national level trends, the landless households are marginalised to a greater extent compared to the land owning counterparts with respect to access to alternate work following land dispossession. Chadha et al (2002) have rightly expressed concern over the switch over from self-employed to casual work in rural India as it has been conceived as indicative of displacement of self-employed cultivators out of agriculture leading to rising shares of landless agricultural labourers which is the case in this study area. The above two observations indicate that land ownership have had some contribution in determining the direction of change in the nature of activity such that processes of casualisation have been under way in case of the landless to a greater extent than that experienced by the landed households.

(c) Subsidiary Occupation : Rural economy commonly dwells upon multiplicity of activities. Thus, a farmer by principal status is also an agricultural labourer by his subsidiary status work. At times, especially in the recent times, majority of the farmers combine agricultural and non-agricultural work to tide over the seasonality and fluctuations attached with the farm enterprise which effectively improves the resilience of the household. So, even a brief overview of the subsidiary occupations is relevant for a deeper understanding of the economy.

Table 10 : Subsidiary Occupation: Work Participation Before & After LA

		Before LA		After LA	
		N	%	N	%
Control	Non- worker	-	-	43	34.7
	Worker	-	-	81	65.3
	Total	-	-	124	100.0
Land lost	Non- worker	167	48.3	297	85.8
	Worker	179	51.7	49	14.2
	Total	346	100.0	346	100.0

Source: Primary Survey 2010- 11.

Table 11 : Subsidiary Occupation: Sectoral Change in Employment Before & After LA

Category of Households			Before				After				
			Primary	Secondary	Tertiary	Total	Non-worker	Primary	Secondary	Tertiary	Total
	Households owning some land	N	-	-	-	-		54	8	9	71
		%	-	-	-	-		*76.1*	*11.3*	*12.7*	*100.0*
Control	Pure tenants	N	-	-	-	-		8	2	0	10
		%	-	-	-	-		*80.0*	*20.0*	*0.0*	*100.0*
	Total	N	-	-	-	-		62	10	9	81
		%	-	-	-	-		*76.5*	*12.3*	*11.1*	*100.0*
	Households owning some land	N	114	10	15	139	113	12	5	9	139
		%	*82.0*	*7.2*	*10.8*	*100.0*	*81.3*	*8.6*	*3.6*	*6.5*	*100.0*
Land lost	Pure tenants	N	29	7	2	38	32	3	2	1	38
		%	*76.3*	*18.4*	*5.3*	*100.0*	*84.2*	*7.9*	*5.3*	*2.6*	*100.0*
	Total	N	143	17	17	177	145	15	7	10	177
		%	*80.8*	*9.6*	*9.6*	*100.0*	*81.9*	*8.5*	*4.0*	*5.6*	*100.0*

Source: Primary Survey 2010- 11.

Table 12 : Subsidiary Occupation: Change in the Nature of Work Before & After LA

Category of Households			Before					After			
			Casual Labourer	Self-employed	Regular salaried	Total	NA	Casual Labourer	Self-employed	Regular salaried	Total
	Households owning some land	N	-	-	-	-	-	10	60	1	71
		%	-	-	-	-	-	*14.1*	*84.5*	*1.4*	*100.0*
Control	Pure tenants	N	-	-	-	-	-	2	8	0	10
		%	-	-	-	-	-	*20.0*	*80.0*	*0.0*	*100.0*
	Total	N	-	-	-	-	-	12	68	1	81
		%	-	-	-	-	-	*14.8*	*84.0*	*1.2*	*100.0*
	Households owning some land	N	31	108	-	139	113	7	19	-	139
		%	*22.3*	*77.7*	-	*100.0*	*81.3*	*5.0*	*13.7*	-	*100.0*
Land lost	Pure tenants	N	13	25	-	38	32	3	3	-	38
		%	*34.2*	*65.8*	-	*100.0*	*84.2*	*7.9*	*7.9*	-	*100.0*
	Total	N	44	133	-	177	145	10	22	-	177
		%	*24.9*	*75.1*	-	*100.0*	*81.9*	*5.6*	*12.4*	-	*100.0*

Source: Primary Survey 2010- 11.

It may be noted that with respect to subsidiary occupation work participation have declined considerably in case of the land lost population from 51.7 to 14.2 per cent while the control samples have registered very high shares in the recent times (Table 10). The general trend has been a loss of work by 145 persons out of 177 (81.9 per cent) who have become non-worker after the land loss (Table 11). This has been the case with many workers who were directly or indirectly related to the family farm enterprises and lost work when land was acquired. The shares of workers involved with the primary sector have declined following land acquisition, but the decline has been less drastic compared to the trend observed in case of the principal occupation. The persistence of agriculture as a subsidiary status occupation has been partly on account of a switch-over of the status of agriculture from the principal means of sustenance to a truncated subsistence activity, and partly owing to shift of some of the households towards dairy and kitchen gardening. There have not been alternative subsidiary occupations compensating for the primary sector work losses. Infact, in many cases the individuals have pursued their non-primary subsidiary occupations as their principal occupation after the land loss.

Nature of work of the subsidiary occupations have been dominated by self-employed for both the land owning as well as landless categories of households (Table 12). After land acquisition, a miniscule 13.7 per cent of the land owning and 7.9 per cent of pure tenant households continue as self-employed worker, about 5 per cent in casual labour and the remaining have lost subsidiary occupation whereas the control sample farmers continue to be largely self-employed in agriculture. Clearly, following land dispossession the rural economy lost the inherent balance that was ensured by the multiplicity of activities and eventually has become vulnerable.

(d) Occupational Mobility : The term occupation entails the exact description of one's work and hence articulates even the minute specificities attached to any type of work performed. It reveals the intricate nuances embedded in the specific occupation and far surpasses the information conveyed by the industrial categories of work although the latter has been commonly used by the practitioners in analysing the world of work. Further, the industrial classification merely clarifies whether the worker belongs to the primary, secondary or tertiary sector and fails to enlighten the exact nature of the job undertaken within that sector while it is well known that nature of work within any of these sectors vary from high end managerial enterprise to menial manual labouring types of work. Hence, an analysis of land dispossession induced occupational change is a worthwhile exercise even after an analysis of the employment structure because it would highlight the exact qualitative aspect of the nature of occupational transformation observed in the study area.

The first step towards identifying occupational mobility[1] has been to arrive at a hierarchical arrangement of the occupations reported by the respondents.The micro- studies have generally employed modes of payments and condition of work (AERC, 1988), nature of land rights and standard of living indicators (AERC various years) along with income and modal village wages (Pal et al, 2000), a combination of sector of work and the principal source of income (Swaminathan, 1991) as axes along which occupations have been ranked[2]. While these criteria have been very effective in case of the specific micro-study, they have been extremely context-specific and generally lack universal applicability and may suffer from spatial comparability issues. The National Classification of Occupation (NCO) 2004 in India has been devised to obtain occupational categories that find international comparability as it follows the principles of the International Standard Classification of Occupations (ISCO) 1988[3] brought out by the International Labour Organisation (ILO). It is based on two main concepts:

….*the concept of kind of work performed in an occupation and the level of skill involved in the performance of the occupation* [emphasis added]. Here it is emphasised that the focus in NCO-2004 is on the skill required to carry out the tasks and duties of an occupation and not on whether a worker holding a particular occupation is more or less skilled than another worker in the same occupation. In case of multi-skill occupations, the codification has been done on the basis of the pre-dominant skill requirement in the performance of the occupation (NCO, 2004; p.19- 20).

In this study the occupations of the respondents have been coded according to NCO 2004 schema to arrive at a hierarchical ordering[4].

All the land lost households had been asked about their principal occupation before and after LA which have been presented in the form of a matrix in Table 13. It represents the percentage of persons in a particular occupation after land loss out of those who had been into that occupation prior to land acquisition. An increase in the share of workers in the region lying above or below the diagonal elements would denote shift in occupations and those lying along the diagonal indicate continuance with previous occupations.

It has been observed that except for the skilled agricultural and fishery worker category, all the occupations have remained considerably stable during the period between land acquisitions (Table 13). This category comprises primary sector workers who have been self-employed in farming in either ownership farms or tenanted holding and also those engaged into animal rearing for their households and excludes the manual worker in agriculture as well as non-agriculture. It may be noted that only 15 out of the 116, i.e, 12.9 per cent of the persons who were skilled agricultural workers are continuing

Table 13 : Change in the Occupation with Respect to the Principal Occupations of the Land Lost Households

Codes/Occupations		Occupations After Land Acquisition									Total
		0	1	2	3	5	6	7	8	9	
0	Non- worker	**88.5**	0.5	1.9	1.0	0.5	0.5	1.9	0.5	4.8	100.0
		(184)	(1)	(4)	(2)	(1)	(1)	(4)	(1)	(10)	(208)
1	Legislators, Senior Officials and Managers	0	**0**	0	0	0	0	0	0	0	0
		(0)	**(0)**	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
2	Professionals	0.0	0.0	**75.0**	0.0	0.0	25.0	0.0	0.0	0.0	100.0
		(0)	(0)	**(3)**	(0)	(0)	(1)	(0)	(0)	(0)	(4)
3	Associate Professionals	25.0	0.0	25.0	**50.0**	0.0	0.0	0.0	0.0	0.0	100.0
		(1)	(0)	(1)	**(2)**	(0)	(0)	(0)	(0)	(0)	(4)
5	Service Workers and Shop & Market Sales Workers	25.0	0.0	50.0	0.0	**0.0**	0.0	25.0	0.0	0.0	100.0
		(1)	(0)	(2)	(0)	**(0)**	(0)	(1)	(0)	(0)	(4)
6	Skilled Agricultural and Fishery Workers	17.2	1.7	12.1	2.6	7.8	**12.9**	15.5	1.7	28.4	100.0
		(20)	(2)	(14)	(3)	(9)	**(15)**	(18)	(2)	(33)	(116)
7	Craft and Related Trades Workers	0	0.0	0.0	0	0	0	**100.0**	0	0	100.0
		(0)	(0)	(0)	(0)	(0)	(0)	**(2)**	(0)	(0)	(2)
8	Plant and Machine Operators and Assembler	0	0	0	0	0	0	0	**0**	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	**(0)**	(0)	(0)
9	Elementary Occupations	0	0	0	0	0	0	0	0	**100.0**	100.0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	**(6)**	(6)
	Total	59.9	0.9	7.0	2.0	2.9	4.9	7.3	0.9	14.2	**100.0**
		(206)	(3)	(24)	(7)	(10)	(17)	(25)	(3)	(49)	**(344)**

Source: Primary Survey 2010- 11. Figures in parentheses indicate number of observations.

with the same occupation and the rest are dispersed into other occupations. People engaged in the other occupations accounting for a miniscule number of workers have broadly remained stable during the period between land acquisitions thereby denoting that the loss of access to land have been the chief trigger to the de-stabilisation of the skilled agricultural workers. The bulk of the skilled agricultural and fishery workers (28.4 per cent) have shifted to the category of elementary occupations entailing manual labour which has been the lowest occupation type in the hierarchy. Another 15.5 per cent have shifted to craft related trade workers that comprise occupations like mason, tailor, mechanics of various kinds and carpenters. Only 12.1 per cent have moved to professional occupations consisting of business enterprises and 7.8 per cent to service workers and shop and market sales workers from among the skilled cultivators. It may be observed that out of the 208 non-workers before land loss, only 24 of them, ie, 11.5 per cent have become economically active. While decline of traditional occupations and immigration have been cited as reasons causing shift towards manual labour

(Swaminathan, 1991), in this study region dispossession of the peasantry has been the secular reason leading to the pattern of occupational transition experienced by the cultivators.

In order to identify the exact nature of occupational mobility experienced by the workers hailing from land dispossessed households, the nine divisions of the NCO-2004 occupations have been clubbed according to the relevant four skill levels[5] .This analysis pertains to those who have been working both before and after LA and excludes those who have non-worker status in any time period.Three types of mobility have been identified: (i) no change where the individual have been continuing with the occupation they had been engaged into prior to LA, (ii) downward mobility where individuals have shifted to occupations that rank lower compared to their occupation before LA, and, (iii) upward mobility where the individuals have improved their occupational rank.

Attempting to look into the direction of occupation change, it may be observed that 55 out of the 114 persons (48.2 per cent) who were employed both before and after land acquisition have experienced downward occupational mobility (Table 14) and about one-third of them have exhibited upward mobility, the rest continuing with their previous occupations. The nature of land dispossession experience has some impact upon the type of mobility attained by the farmers.There has been considerable variation in the pattern of occupational mobility experienced between those who have completely lost all land and those who have lost part of the land they owned before land acquisition. While, about 40 per cent

Table 14 : Principal Occupation: Nature of Occupational Mobility Following LA

Category of household			Nature of change			
			No change	Downward movement	Upward movement	Total
Partially lost land	Households owning some land	N	15	15	10	40
		%	37.5	37.5	25.0	100.0
	Pure tenants	N	4	2	1	7
		%	57.1	28.6	14.3	100.0
	Total	N	19	17	11	47
		%	40.4	36.2	23.4	100.0
Completely lost land	Households owning some land	N	5	28	19	52
		%	9.6	53.8	36.5	100.0
	Pure tenants	N	4	10	1	15
		%	26.7	66.7	6.7	100.0
	Total	N	9	38	20	67
		%	13.4	56.7	29.9	100.0
All land lost	Households owning some land	N	20	43	29	92
		%	21.7	46.7	31.5	100.0
	Pure tenants	N	8	12	2	22
		%	36.4	54.5	9.1	100.0
	Total	N	28	55	31	114
		%	24.6	48.2	27.2	100.0

Source: Primary Survey 2010- 11.

of the partially land lost households have been continuing with their previous occupations, this has been the case with only 13.4 per cent of the households who have completely lost land. Also, the propensity to experience downward occupational mobility has been considerably higher for those who have completely lost all land relative to those who have partially lost land. Such a phenomenon perhaps indicates that land continues to be the chief economic base to which the people persistently remain attached and draw sustenance till they completely lose access. Further, it suggests that households who have completely lost land have been thrust into a situation where they have been offered with very little opportunity for livelihood provisioning post-land dispossession and that they have been compelled to undertake whatever job was available. Hence, the completely land lost people have been placed more precariously following land dispossession.

Although only 27.2 per cent of the individuals have experienced upward occupational mobility, the pure tenant households have been grossly left out of this upward mobility. While 31.5 per cent of the land owing households have moved upward, this figure is only 9.1 per cent (2 out of 22 persons) for the pure tenant households. The downward mobility has been high irrespective of land owned (46.7 per cent) or not owned (54.5 per cent). Such a pattern although confuses the association between access to land and livelihood outcome, a positive albeit weak connection between the two may be construed.

The most widely accepted factor leading to improvement in livelihoods has been level of human capital development. Educational attainment as well as skill levels of the individuals has been assumed to be the chief determinant of how well any individual would negotiate with any kind of change in the economy. A positive causal link between them has been extensively estimated (Chadha & Sahu, 2002; Kundu et al, 2005). Table 15 indicates that among the land owning households, although majority have been secondary educated (about 50 per cent) irrespective of experiencing upward or downward mobility, 31 per cent of upward mobile persons have been higher secondary and above educated. Overall 80 per cent of the upward mobile persons have had education above secondary level which for the downward mobile persons has been around 55 per cent. Among the landless, there has not been any notable link between educational attainment and occupational mobility.

Skill attainment has also been very poor among the respondents and has not displayed any remarkable impact upon the nature of occupational mobility. More than 50 per cent of both upward and downward mobile individuals hailing from both landed and landless households have no training. In fact, 28 per cent of the downward mobile land owning persons have been noted with non-formal vocational training against 10.3 per cent for the upward mobile persons. Such a peculiar pattern does reveal that the jobs that have emerged in the region do not match the vocational skill endowment of the land acquisition affected individuals and that the majority of them have experienced downgrading of occupational status leading to deterioration of their social status.

Policy Implications and Concluding Remarks

The study has clearly indicated that there has been shift of the agriculturalists towards tertiary sector work in the form of business enterprise in case of the landed households and shift towards secondary sector mainly consisting of construction activities at the project site in case of the pure tenants following land dispossession. While larger shares of the landed households have been able to continue being self-employed, the pure tenants have experienced increase in casual type of work. Further, the higher propensity of the pure tenant households to experience downward occupational mobility relative to the landed

Table 15 : Comparison of Educational Attainment & Skill Levels Between Upward & Downward Occupational Mobility Categories

Occupational Categories		Educational Attainment					Skill levels				
		No formal schooling	Primary education	Secondary education	HS & above	Total	No training	Non-formal vocational	Formal vocational	Tech-nical	Total
Households owning some land											
Downward	N	6	13	22	2	43	26	12	5	0	43
mobility	%	14.0	30.2	51.2	4.7	100.0	60.5	27.9	11.6	0.0	100.0
Upward mobility	N	2	3	15	9	29	20	3	5	1	29
	%	6.9	10.3	51.7	31.0	100.0	69.0	10.3	17.2	3.4	100.0
Total	N	8	16	37	11	72	46	15	10	1	72
	%	11.1	22.2	51.4	15.3	100.0	63.9	20.8	13.9	1.4	100.0
Pure tenants											
Downward	N	6	1	5	0	12	6	3	3	0	12
mobility	%	50.0	8.3	41.7	0.0	100.0	50.0	25.0	25.0	0.0	100.0
Upward mobility	N	0	0	1	1	2	1	0	1	0	2
	%	0.0	0.0	50.0	50.0	100.0	50.0	0.0	50.0	0.0	100.0
Total	N	6	1	6	1	14	7	3	4	0	14
	%	42.9	7.1	42.9	7.1	100.0	50.0	21.4	28.6	0.0	100.0

Source: Primary Survey 2010-11.

gentry reiterates the advantageous position of the latter under any circumstance of land loss compared to the former owing to their entitlement for receipt of cash compensation. It clearly indicates the need for intervention to safeguard the interests of the most vulnerable groups that is the landless agricultural workers. Inclusion of the landless agricultural workers like agricultural labourers and tenant farmers within the compensation net would ensure some cash receipt in lieu of land and livelihood loss. Perhaps formalisation of tenancy prior to land acquisition would facilitate the compensation disbursement process.

Improvement in the status of human capital has been widely acknowledged as the second route to compensating livelihood loss. However, in this study area, although education has displayed some weak positive relation with upward occupational mobility, skill endowment has remained far from having any such association. Perhaps the most intriguing finding relates to this issue of mismatch between skill attainments of the individuals and the nature of occupational mobility experienced by them. It suggests that the emergent types of activities have not been in consonance with the stock of skill available to the land dispossessed people. The relative asset poverty of the vulnerable sections perhaps may be addressed through targeted provisioning of education and skill training. However, at this juncture it is important to note that capacity building alone would be inadequate if it does not economically rehabilitate the displaced persons. As observed in this study, the mismatch between skill levels of the land dispossessed households and the emergent types of jobs lead to deterioration of their lives. Hence, the training imparted must be in accordance to that demanded by the emerging jobs in the vicinity of the land acquisition site so that the displaced persons get absorbed easily into the urban-based economic activities.

The hitherto self-contained peasantry has been thrust into a condition of imperfect proletarianisation by the state perpetrated institutionalised land alienation whereby they have been compelled incessantly to struggle to forage a living wage. The construction industry at the urban project sites has emerged as by far the leading alternate employment provider that exudes transient nature of the employment. Yet the majority of the land dispossessed has been left with not many options but to join the army of casual wage labourers. It prompts one to question the route to urbanisation-industrialisation embarked upon by the Government that unambiguously impoverishes the peasantry and triggers a peculiar type of rural transformation that promises adversity.

Notes

1. The study although have identified both the principal as well as subsidiary occupations of the respondents, the latter part of the analysis on correlates of occupational mobility has been based upon the principal occupation only.
2. There have been manifold ways in which scholars have arrived at the hierarchy of occupations. For a comprehensive review of the available literature on this issue see pal et al, 2000.
3. This has been the most recent.
4. The ISCO-88 skill levels have been modified to suit the Indian conditions before codifying the occupations in the NCO-2004 particularly to accommodate for informal skills which constitute a very significant share of training and skill acquisition through generations.

   The NCO 2004 scheme does not include the non-workers and denotes armed forces by the code zero. However, the non-worker category indicated in the occupation matrix has not been a

part of the hierarchy as it is not possible to judge whether all the non-workers have been enjoying higher or lower economic status compared to the workers of any of the occupational categories.

5. The schema of NCO code and the relevant skill level has been presented below:

Skill Levels in NCO 2004

Division/ Codes	Title	Skill level	Definition of NCO 2004 skill levels
1	Legislators, Senior Officials and Managers	Skill not defined	The concept of skill level has not been applied as skills for executing task and duties of these occupations vary to such an extent that it would be impossible to link them with any of the four broad skill levels.
2	Professionals	IV	More than 15 years of formal education
3	Associate Professionals	III	14-15 years of formal education
4	Clerks	III	
5	Service Workers and Shop & Market Sales Workers	II	11-13 years of formal education
6	Skilled Agricultural and Fishery Workers	II	
7	Craft and Related Trades Workers	II	
8	Plant and Machine Operators and Assemblers	II	
9	Elementary Occupations	I	Up to 10 years of formal education and/ or informal skill

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