

Diversification in the Rural Employment Structure in West Bengal during the Post Reform Period

Rajasi Dutta

Govt. Approved Part Time Lecturer, Charu Chandra College, Kolkata
and Research Scholar, Department of Commerce,
University of Calcutta
e-mail : rjs.dutta@gmail.com

Ratan Kumar Ghosal

Professor of Economics, Department of Commerce,
University of Calcutta
e-mail : ratankumarghosal@rediffmail.com

Abstract: The present paper is prepared with the objective of examining the trends of the nature of diversification of rural workforce structure in the state of West Bengal on the basis of NSSO and Census data. An attempt has been made to find out the inter-district and gender disparities in this regard across the districts of West Bengal during the post reform period. It finds that the state of West Bengal and its districts have experienced a sharp increase in the rural non-farm employment with the rise of the informal non-farm sectors like trade, construction, hotelling, manufacturing, transport etc. during the period of reform. The major explanatory factors behind this process of diversification of rural workforce in the state of West Bengal seem to be the economic distress, agricultural growth, development of infrastructure, implementation of various employment generating programmes and the land reform measures taken by the Government.

Key-words: Rural workforce, economic reform, farm and non-farm activities, feminization, diversification.

1. Introduction

It is well known that Indian economy has witnessed a series of economic reforms pertaining to all major sectors of economy viz. agriculture, industry, trade, construction and so on since 1991. This seems to have produced a remarkable impact on the employment structure in both rural and urban sectors of all the states of India during the post reform period. From the various reports of National Sample Survey Organisation (NSSO) it has been found that a large proportion of rural workforce has shifted from farming activities and engaged themselves in various non-farm activities of different industrial categories viz. manufacturing, mining and quarrying, electricity, gas and water, construction in secondary sector, and some have shifted themselves to tertiary sector also which includes trade, hotel and restaurant, transport and storage, service and others. The major reasons behind this process of diversification of rural workforce structure have been found to be the development of infrastructure, economic distress, growth in agriculture, increase in literacy rate and so on. (*Basu & Kasyap 1992, Chandrasekhar*

1993, Ghosal 2002, Sundaram 2001a, 2001b, Sen 1996, Visaria & Basant 1994, Visaria & Minhas 1991, Unni 1994). Most of the earlier studies, however, highlight the tremendous fall in the rural land-man ratio due to demographic pressure, the fall in the productivity of agriculture and the desparate migration, rigorous implementation of redistributive land reform policies, etc. (Ghosal 2005, Gazdar & Sengupta 1996; Leiten 1992,1996; Ghatak & Ghatak 2002 etc) as the main explanatory factors behind the rapid transformation of employment structure during the post reform period. Interestingly, all these studies are dated.

An important study in this respect has been the study undertaken by C.P Chandrasekhar (1993), on the transformation in the nature and pattern of rural workforce structure and its dynamism in West Bengal, based on primary and secondary data. However, this study does not shed any light on the transformation process during the current millennium. Most of the other studies cited above have also suffered from the same limitation. Another study which has concentrated on the nature of changes in the employment structure across the districts of West Bengal is the study of R.K Ghosal (2005). However, this study is also a dated one and it covers the period upto 2001.

So, all these studies could not capture the current scenario of the rural workforce structure since economic reform. Moreover, very few have focused on the district level analysis. So, our study tries to examine the nature and pattern of diversification in the rural occupational structure in West Bengal and its districts so as to find out the trajectories behind the process of this transformation during the post reform period.

This study is based on secondary data collected from different reports of surveys of NSSO on employment-unemployment situations and different reports of Censuses of post reform period. This paper is structured as follows: Section II analyses the changing pattern of workforce participation and the nature of Employment in West Bengal. Section III focuses on the inter-district analysis of rural occupational structure. Section IV discusses the trend in feminisation of rural employment structure. Section V gives concluding observations.

2. Changing Pattern of Workforce Participation and the nature of Employment in West Bengal

In this Section we proceed to analyse the changing pattern of workforce participation in rural Bengal and its nature. In rural West Bengal the livelihood pattern is changing nowadays, where agriculture is becoming unprofitable and hence it is no longer the main source of living. It has been found that a large proportion of rural workforce has shifted from farming activities and engaged themselves in various non-farm informal activities viz. manufacturing, electricity, etc. in the secondary sectors and majority of the workers have also shifted themselves into tertiary sector which includes trade, hotel, transport, services and others. In this section we analyse the same. It is known that the best measure of the level of the employment is the Workforce Participation Rate (WFPR) and its sex wise composition. So, we have shown this WFPR in West Bengal during the post reform period in Table 1 and Table 1A.

Table 1 depicts the rural workforce participation rates which are computed on the basis of the data available from NSSO. We find from the table that the state West Bengal has registered a significant male-female gap regarding rural WFPR. In case of rural male workers of West Bengal, it is found that WFPR hovers around 54.3% to 59.4% and in case of female the same is found to hover around 8.8% to 11.2%. Surprisingly, WFPR of rural male in West Bengal has registered a negative inter-temporal growth in 2011-12 over 2009-10 accompanied by positive inter-temporal change in case of female. Again, Table-1A reveals rural WFPR on the basis of data available from census in West Bengal over last three decades. It is evident from the table that in West Bengal, rural WFPRs have registered a marginal improvement over the period from 2001 to 2011. The main factors which seem to be responsible for this pattern of change are the risk and uncertainty in agricultural operations, the creation of non-farm informal employment opportunities in the rural and sub-urban areas out of various workforce programmes of the Government, etc.

Table-1: Rural Workforce Participation Rates in West Bengal during Post Reform Period (%)

Year	Male	Female
1993-94	55.4	8.8
1999-00	54.3 (-1.99)	12.1 (37.5)
2004-05	58.1 (7)	11.1 (-8.26)
2009-10	60.9 (4.82)	9.6 (-13.51)
2011-12	59.4 (-2.46)	11.2 (16.7)

Source: Various Reports of NSSO (Figure in parenthesis are percentage point change)

Table-1A: Rural Workforce Participation Rates in West Bengal during Post Reform Period (%)

	Year		
	1991	2001	2011
Male	51.1	40.7 (-20.35)	57.2 (40.5)
Female	8.7	20.6 (136.78)	19.4 (-5.82)
Person	39.7	37.9 (-4.53)	38.7 (2.11)

Source: Various Census Data (Figures in parenthesis are percentage point change)

Now, we consider the changing pattern of workforce distribution in West Bengal as reflected in the decennial Census data. Table 2 reveals the same between 1991 and 2011.

Rajasi Dutta and Ratan Kumar Ghosal

It follows that the work participation rates have increased in rural West Bengal with respect to male, female and person. However, it is clear that the increase was due to mainly the increase in the percentage of marginal workers from 1.96 to 12.15, 0.74 to 13.0 and 3.29 to 10.9 respectively for persons, male and female between the year 1991 and 2011. Whereas, the percentage of main workers has declined from 30.23 to 26.43 between 1991 to 2011 for rural persons, for the rural female workers, the same is found to increase marginally from 7.96 in 1991 to 8.86 in 2001, which is followed by a decline in the year 2011 to 7.90 percent. It seems that with the implementation of reform process in various sectors like trade, investment and finance, the opportunities of informal employment in both rural and urban areas have increased substantially, albeit, the nature of the employment is mainly contractual and temporary.

Table-2 : Percentage of Main and Marginal Workers by Sex in West Bengal during the Post-Reform Period

Year	Main Workers			Marginal Workers		
	Person	Male	Female	Person	Male	Female
1991	30.23	50.56	7.96	1.96	0.74	3.29
2001	28.75	47.32	8.86	8.03	6.91	9.22
2011	26.43	43.52	7.90	12.15	13.0	10.9

Source: Census of India, West Bengal, GOI

Although the work participation rate is increasing, the importance of agriculture as a source of livelihood has declined during the post reform period in West Bengal for both male and female rural workers because of agricultural operation being mostly non-profitable. So a large number of workers are now being shifted to non-farm sectors for supplementing their livelihood. Table 3 presents the sectoral distribution of workers in West Bengal during 1993-94 to 2011-12. It is clear from the table that proportion of non-farm employment has increased tremendously for both male and female. The services and manufacturing sectors have registered a conspicuous increase in case of female workers. It seems that due to non-profitability in agricultural operation, there has been a distress driven tilting of female workforce to non-farm sector.

Table-3 : Distribution of Rural Workforce in West Bengal by Industrial Category during the Post Reform Period (in percentage)

Category	Year	West Bengal	
		Male	Female
Agriculture	1993-94	64.7	58.9
	1999-2000	66.4	54.1
	2004-05	63.9	58.8
	2009-10	59.4	42.4
	2011-12	56.8	41.6
Manufacturing	1993-94	11.7	30.0
	1999-2000	10.9	36.1
	2004-05	8.9	28.9
	2009-10	12.0	37.3
	2011-12	12.3	42.2
Trade & Hotelling	1993-94	9.0	2.7
	1999-2000	10.2	2.8
	2004-05	11.4	3.4
	2009-10	10.5	4.6
	2011-12	8.9	2.8
Services	1993-94	7.5	6.3
	1999-2000	5.0	6.7
	2004-05	5.9	8.3
	2009-10	5.5	13.0
	2011-12	6.7	10.2
Total Non-farm	1993-94	35.3	41.1
	1999-2000	33.6	45.9
	2004-05	36.1	41.2
	2009-10	40.6	57.6
	2011-12	43.2	58.4

Source: Various Reports of NSSO

Again, Table-4 depicts the overall trends in farm and non-farm employment in the state of West Bengal. It is clear from the table that majority of our workforce is dependent on the

farm sector for their livelihood. About 65% of the male workers in 1993-94 were employed in farm sector and we find a precipitous fall in the rate. In the year 2011-12 also about 56.4% of the male workers in West Bengal is employed in farm sector. In case of female workers, however, majority are in non-farm sector in the year 2011-12, though in the year 1993-94, the situation was reverse.

Table-4: Farm and Non-farm Employment during the Post Reform Period

	Year	Farm		Non-Farm	
		Male	Female	Male	Female
West Bengal	1993-94	64.7	58.9	35.3	41.1
	1999-00	66.4	54.1	33.6	45.9
	2004-05	63.9	58.8	36.1	41.2
	2011-12	56.8	41.7	43.2	58.3

Source: Various Reports of NSSO

3. Inter-district Analysis of Rural Occupational Structure

This Section focuses on the change in the rural occupational structure in the state. The Table-5 gives an overview of the participation in work by male and female workers on the basis of the secondary data available through the Censuses of India and West Bengal and its variation across the districts. The table reveals a wide inter-district variation in the WFPR for male and female workers at the inter-temporal level i.e. in the years between 1991, 2001 and 2011. The table clearly brings out the following facts –

First, the table reveals that the male WFPR has increased tremendously from 1991 to 2011. All the districts of West Bengal except Darjeeling, Purulia, Malda, Murshidabad and Jalpaiguri surpass the state level average (i.e. 57.2%) in 2011. In 1991, except Nadia, Medinipur, Jalpaiguri, Purulia and Darjeeling all the districts lie above the state level average figure (i.e. 51.1%). It indicates the increasing trend of male WFPR in the state during the post reform period. Second, the rural WFPR for female in the state has also shown a rising trend in the post reform period. In all the districts there has been a sharp increase in the female WFPR in the period of reform. Third, the WFPRs for male and female do not show any uniform pattern of changes and the state has experienced an improvement in rural employment situation in varying degrees. Finally, the inter-district variation in the rural employment measured in terms of coefficient of variation (C.V) over the post reform period is found to be low for male and high for female workforce.

Thus, it may be concluded that there has been an improvement in rural employment situation during post reform period in most of the districts in West Bengal and it is seemed to be due to implementation of various poverty alleviation and employment generation programmes and

different developmental strategies of the Government and rapid expansion of Self Help Groups (SHGs), growth of agriculture and institutional reforms and so on.

Table-5 : Rural Workforce Participation Rates of Male and Female Workers in West Bengal and its Districts

Districts	1991		2001		2011	
	male	female	male	female	Male	female
Cooch Bihar	53.8	6.1	55.2	23.1	58.4	21.4
Jalpaiguri	33.1	30.7	52.4	26.0	54.1	25.1
Darjeeling	46.3	23.9	39.0	25.3	50.3	26.0
West Dinajpur	75.0	33.2	42.8	23.5	—	—
Malda	50.8	11.8	52.8	29.5	53.0	23.7
Murshidabad	—	7.0	51.4	14.4	55.3	14.2
Nadia	2.6	3.5	55.3	13.0	58.4	9.37
24 Parganas	48.5	3.2	52.8	11.9	58.9	12.7
Howrah	50.4	2.6	55.8	10.0	60.7	13.6
Hooghly	53.3	8.1	57.9	18.6	62.5	17.8
Bankura	50.9	14.7	57.1	32.3	57.3	24.3
Medinipur	8.1	—	55.1	24.2	59.0	27.5
Purulia	49.8	22	53.1	39.1	54.0	34.0
Burdwan	52.0	9.3	56.7	9.7	60.6	19.1
Birbhum	52.0	8.2	54.6	10.6	57.7	17.9
Dakshin Dinajpur	—	—	56.6	26.9	58.5	26.0
CV	41.9	77.8	9.68	43.5	5.75	32.04

Source: various reports of census, 1991, 2001, 2011

4. Trend in Feminisation of Rural Employment Structure

During the post reform period, the growth in the number of female workers in the rural West Bengal has increased. It is found that significant portion of female workers is concentrated in agriculture, manufacturing and community services as source of their livelihood. In all the four broad categories viz. cultivators, agricultural workers, household industry and other workers the rate of rural female workers participation has increased over the period between 1991 and 2011.

As is seen from Table-6 that for cultivators female workforce has increased by 13.40 percent, for agricultural workers it has increased by 72.76 percent during 1991-2001. Further, for the household industries and for other workers there have been an increase of 201.23% and 161.80% in 2001 over 1991. However the growth of female workforce is found to have decreased by 40.8 and 8.9 percent for cultivators and household industries respectively and slightly increased by 18.4 and 5.2 percentages for agricultural workers and other workers respectively between 2001 and 2011. From this table it is evident that in all the sectors the level of female employment has increased between 1991 and 2001, though the next decade depicts a mixed picture. However, one can say that the gender inequality in terms of engagement in work has been reduced with the growth in the number of female workers in the rural West Bengal.

Table-6: Growth in the no. of Female Workers in Rural West Bengal in four broad categories

Year	1991	2001	2011
Cultivators	869905	986430 (13.40)	584261(-40.8)
Agricultural workers	1305597	2255607(72.76)	2671217(18.4)
Household industries	349642	1053236(201.23)	959286(-8.9)
Other Workers	601428	1574488(161.80)	1656537(5.2)

Source: Various reports of Census

Table-7 presents the ranking of districts by percentage of female workers to total female population in rural West Bengal during the post reform period. From the Table it is clear that there has been an increasing tendency of feminization in West Bengal and its districts during the post reform period.

It was 11.25% in 1991 which has increased to 18.32% in 2001 and 18.08% in 2011 for West Bengal. Purulia being at the top of the ranking for 2011 (31.29), 2001 (36.21%) and 1991 (34.61%). Medinipur has got the second position in 2011 with a rise of 25.87%, which was 22.82% in 2001 and 17.50% in 1991. The other districts where rural female WFPR has increased between 1991 and 2011 are South 24 parganas, North 24 Parganas, Howrah, Hooghly, Murshidabad and so on. In Bankura, the WFPR increased from 19.21% in 1991 to 32.04% in 2001, but in 2011 it decreased to 23.62%. The districts like Malda, Dakshin Dinajpur, Uttar Dinajpur, Jalpaiguri, Birbhum have also experienced an increasing trend in the female WFPRs during the post reform period in varying degrees. Howrah being at the bottom of the ranking for both the years 1991 (3.73%) and 2001 (9.19%), though it has experienced an increase to 13.7% in 2011. On the whole almost all the districts are found to have experienced increasing trend in female WFPRs since economic reforms.

Table-7: Ranking of Districts by Percentage of Female Workers to Total Female Population in West Bengal during Post Reform Period (according to census data)

District	Year		
	2011	2001	1991
WEST BENGAL	18.08	18.32	11.25
Purulia	31.29 (1)	36.21 (1)	34.61 (1)
Bankura	23.62 (4)	32.04 (2)	19.21(3)
Malda	23.3 (5)	28.29 (3)	16.77 (5)
Dakshin Dinajpur	24.84 (3)	25.14 (4)	13.88 (7)
Uttar Dinajpur	18.9 (9)	23.84 (5)	12.48 (9)
Jalpaiguri	22.3 (7)	23.50 (6)	15.64 (6)
Medinipur	25.87 (2)	22.82 (7)	17.50 (4)
Cooch Bihar	20.67 (8)	22.22 (8)	9.21 (11)
Darjeeling	22.44 (6)	21.30 (9)	20.09 (2)
Birbhum	17.64 (10)	19.65 (10)	12.75 (8)
Murshidabad	17.38 (11)	16.37 (11)	10.33 (10)
Hooghly	16.24 (13)	16.16 (12)	8.05 (13)
Burdwan	16.48 (12)	16.03 (13)	9.01 (12)
Nadia	11.48 (17)	14.07 (14)	5.13 (16)
South 24 Parganas	15.24 (14)	11.83 (15)	6.18(14)
North 24 Parganas	12.81 (15)	11.33 (16)	5.41 (15)
Howrah	13.7 (16)	9.19 (17)	3.73 (17)

Figures in brackets are the ranks of the respective districts

The plausible explanation behind the increasing trend of feminization in rural employment structure during the post reform period may be the increase in literacy rate of women, government adopted strategies like National Literacy Mission for imparting functional literacy, economic distress, various workforce programmes of the Government, objective of supplementation of livelihood etc.

5. Concluding Observations and Policy Implementation

It is found that the rural workforce structure in West Bengal during the post reform period has been diversified from agricultural activities to informal non-agricultural activities. The percentage of main workers has been reduced in West Bengal between 1991 and 2011 with

an increase in the percentage of marginal workers in West Bengal. Besides, the percentage of agricultural workers (cultivators and agricultural labourers) is found to have decreased in the post reform period with a tremendous increase in the non- agricultural workers (in household industries and others).

There has been an increase in the demand in non-farm activities like construction, transport, storage, communication, trade, hotelling , service etc. with the fall in the share of agriculture in the rural workforce in West Bengal since 1991, the period of reform. Infact, due to demographic pressure leading to fall in the land- man ratio and the economic distress the rural workforce both male and female have tilted in favour of the non-farm activities.

It has been found that there is an declining trend in inter-district variations of WFPR irrespective of sex. No uniform trend has been witnessed over the period of reform in all the districts of West Bengal. On the other hand the female WFPR has increased tremendously in rural West Bengal and its districts in the post reform period since 1991 in all the four broad industrial categories (cultivators, agricultural workers, household industries and others). The reasons behind this increasing tendency of feminization in rural employment structure may be economic distress, poverty and increase in literacy rate for women. Different rural employment generating programmes and land reform measures have been taken by the Government to eradicate poverty and generate employment since the post reform period. Thus, we can conclude that West Bengal and its districts have witnessed a rapid diversification or transformation in the rural occupational structure in the post reform period since 1991 , from the farming activities to the informal non-farm sectors. It seems that this process of diversification is due to expansion of non-farm informal activities, economic distress and supplementation livelihood for rural people in Bengal.

References

- Basant, R. and Kumar, B.L. (1989). "Rural Non-agricultural Activities in India: A Review of the Available Evidence", *Social Scientist*, Vol. 17, Nos. 1-2.
- (1994). "Rural Non-agricultural Employment in India: A Review of Available Evidence", in P. Visaria & R. Basant (eds.), 'Non-agricultural Employment in India', Sage Publications, New Delhi.
- Basu, D.N. and Kashyap, S.P. (1992). "Rural Non-Agricultural Employment in India: Role of Development Process & Rural-Urban Employment Linkages", *EPW*, Vol. 27 NOS 51-52.
- Chandrasekhar, C.P. (1993). "Agrarian Change and Occupational Diversification: Non-agricultural Employment and Rural Development in West Bengal", *Journal of Peasant Studies*, Vol. 20, No. 2, Jan. 1993, pp. 205-270.
- Gazdar, H. and Sengupta, S. (1997). "Agrarian Policies and Rural Development in West Bengal", in J Dreze and A Sen (eds.), 'Indian Development: Selected Regional Perspectives', Oxford University Press, New Delhi and New York.
- Ghatak, M. and Ghatak, M. (2002). 'Recent Reforms in the Panchayet System in West Bengal', *EPW*, Vol. 37, No. 1.

- (2002). "Liberalisation and Occupational Diversification in Rural India", in Ashok Mathur and P.S. Raiky (eds.), 'Economic Liberalisation and its Implications for Employment', Deep & Deep Publication, Pvt. Ltd., New Delhi.
- Ghosal, Ratan Kumar. (2005). "Dynamics of Transformation of the Rural Workforce Structure in West Bengal During 1961 to 2001—An Inter-district Analysis", *Man & Development*, Volume 28, No. 2.
- . (2007). "Dynamics of Diversification of Rural Employment Structure in India: The Changing Trajectories", *The Journal of Labour Economics*, Vol. 50, No. 4.
- Lieten, G.K. (1992). *Continuity and Change in Rural West Bengal*, Sage Publication, New Delhi/London.
- Nag, Isita. (2011). "Employment-Unemployment Scenarios in West Bengal Since Economic Reform", *Artha Beekshan*, Vol. 20, No. 1, June.
- Sen, A. (1996). "Economic Reforms, Employment & Poverty – Trends and Options", *EPW*, Spl. No. September 1996.
- Sundaram, K. (2001a). "Employment-Unemployment Situation in Nineties: Some Result from NSS 55th Round Survey", *EPW*, March 17.
- . (2001b). "Employment & Poverty in 1990's", *EPW*, Vol. 36, No. 32.
- Unni, J. (1989). "Changes in Women's Employment in Rural Areas", *EPW*, Review of Women's Studies, Vol. 24, No. 17.
- Visaria, P. and Minhas, B.S. (1991). "Evolving an Employment Policy for 1990's: What do data tells us?", *EPW*, No. 15, April 13.
- Visaria, P. and Basant, R. (1994). "Non-agricultural Employment in India: Problem and Perspective", in Pravin Visaria & Rakesh Basant (eds.) *Non-agricultural Employment in India*, Sage Publications India Pvt. Ltd., New Delhi.