



# Inter-Regional Variation in Scheduled Tribe Out-Migration in West Bengal, India

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## Abstract

*Temporary and seasonal mobility of migration is higher among scheduled tribes and scheduled caste than other caste groups in rural areas in India and also similar to rural areas in West Bengal. After the detailed study it is cleared that scheduled tribe out-migration from West Bengal occurred from agriculturally and economically depressed area. In West Bengal highest proportion of scheduled tribe out-migration found in Bankura, Puruliya, Nadia, Murshidabad, Howrah, Hooghly, Koch Bihar and South 24<sup>th</sup> Parganas districts. But in term of scheduled tribe male out-migration greater proportion found from agriculturally backward districts like Puruliya, Bankura, South 24<sup>th</sup> Parganas etc. districts.*

**Keywords:** Out-Migration Region, Scheduled Tribe Out-Migration, Intra-Regional Scheduled Tribe Male Out-Migration, Intra-Regional Scheduled Tribe Female Out-Migration.

## Introduction

Migration cannot be considered only as a shifting of people from one place of residence to another, as it is most fundamental to the understanding of continuously changing population scenario<sup>1</sup>. Rural areas in India migration choices take place in the economic and social behalf of rural communities. Economic, Social and political agenda are effects on emigration in India<sup>2</sup>. In India and West Bengal, rural areas have a higher proportion of marginal jobs, which results in higher underemployment and also a higher proportion of rural workers employed in low-skill jobs relative to urban area in that context<sup>3</sup>. That's why; a huge number of rural people of West Bengal are migrated from those areas for their sustenance<sup>4,5</sup>. Now a days social and cultural network strongly influence on choice of destination for migrants<sup>6</sup>. It is also true that temporary migration is decrease with increase literacy. The temporary migration declines with increasing age and male are more migrate then female<sup>7</sup>.

**Study area:** West Bengal is taken as the study area for the purpose of the present research. The state is bounded by southern portion of Sikkim and Bhutan; Assam in the north east; Bangladesh in the east; Bay of Bengal and Orissa in the south; Jharkhand and Bihar in the west and the North West part bounded by Nepal. West Bengal lies between 85°50'E to 89°50'E longitude, and 21°38'N to 27°10'N latitude. In physiographic point of view the state is divided into three broad regions i.e. northern Hills and Terai, Western Rarh and the Gangetic plain. Rarh region is divided into East Rarh and West Rarh region<sup>8</sup>. Similarly Gangetic plain is divided into North Bengal and South Bengal plain.

**Objectives:** Following objectives have been undertaken for the study: i. To identify inter-regional patterns in Scheduled Tribe migration in West Bengal, ii. To find out spatial relation of such pattern of interregional migration in West Bengal.

## Methodology

For the analysis of inter-regional pattern of Scheduled Tribe out-migration, district wise information on Scheduled Tribe migration data and the related aspects have been collected from census of India migration table. The estimate of Scheduled Tribe out-migration rate has been fall out at by acceptance of following three laminated at the district level in the physiographic regions as follows: i. Percentage of Scheduled Tribe out-Migration to total Scheduled Tribe Population. ii. Percentage of Scheduled Tribe Male out-Migration to total Scheduled Tribe Male Population. iii. Percentage of Scheduled Tribe Female out Migration to total Scheduled Tribe Female Population.

For the analysis of inter-regional variation, among the different category of regions physical region has been chosen. The district is taken as the basic unit of the study. West Bengal has 18 districts in 2001 but here selected 17 districts. Kolkata district hasn't selected for the study. Kolkata is a 100 per cent urbanized district and big metropolitan city which is not match with other districts of west Bengal. This 17 number is good for spatial analysis of Scheduled Tribe migration in the West Bengal. For the analysis of spatial variation of scheduled tribe out-migration presented with choropleth technique with the help of GIS technique. Scheduled Tribe out-migration has been classified by using mean and standard deviation method.

## Results and Discussion

Migration spatially Scheduled Tribe migration has a long history in different places from West Bengal and they have not only crossed district boundary rather than state and international boundary also. But proportion of scheduled tribe out-migration was not clear because absence of scheduled tribe migration data in census of India. First time during 1991-2001 census period, census of India provide inter-district scheduled tribe out-migration data. This point of view this present study is important to know spatial variation of scheduled tribe out-migration at different districts and regional level. The extent of inter-regional variation of Scheduled Tribe Out-Migration Rate

(STOMR), Scheduled Tribe Male Out-Migration Rate (STMOMR) and Scheduled Tribe Female Out-Migration Rate (STFOMR) at district level are classified into five physiographic regions. Here also analyse average rate of out-migration in particular regions. For the limitation of census data it is not possible to present the complete picture of Scheduled Tribe inter-state out-migration pattern in district level. Because census of India does not provide any district wise inter-state Scheduled Tribe out migration data. So it is not possible to calculate district-wise inter-state out-migration by using any indirect method. That is why, the present discussion is limited to inter-district pattern only on district level<sup>9</sup>.

**Table-1**  
**Districtsand regions wise Intra-Regional Out-migration during the period of 1991-2001**

Regions	Districts	% of total ST out Migration to total ST Population	% of ST Male out Migration to ST Male Population	% of ST Female out Migration to ST Female Population
Hills and Terai	Darjeeling	1.92	1.44	2.41
	Jalpaiguri	0.75	0.59	0.91
	Koch Bihar	13.46	7.03	20.51
<b>Average</b>		<b>5.38</b>	<b>3.02</b>	<b>7.94</b>
North Bengal Plain	U.Dinajpur	3.39	1.45	5.37
	D. Dinajpur	2.61	1.41	3.82
	Maldah	2.63	1.64	3.65
<b>Average</b>		<b>2.88</b>	<b>1.50</b>	<b>4.28</b>
South Bengal Plain	Murshidabad	4.88	3.14	6.70
	Nadia	5.24	1.84	8.71
	N. 24 Parganas	4.26	1.50	7.13
	S. 24 Parganas	8.17	4.01	12.46
<b>Average</b>		<b>5.64</b>	<b>2.62</b>	<b>8.75</b>
East Rarh Plain	Barddhaman	3.42	1.21	5.66
	Birbhum	2.57	3.31	3.99
	Hooghly	5.87	1.33	9.39
	Howrah	6.88	3.12	10.80
<b>Average</b>		<b>4.69</b>	<b>2.24</b>	<b>7.46</b>
West Rarh Plateau Fringe	Purulia	5.18	3.36	7.11
	Bankura	7.45	3.31	11.64
	Mednipur	1.89	1.13	2.66
<b>Average</b>		<b>4.84</b>	<b>2.6</b>	<b>7.14</b>

Source: Census of India 2001, Sikkim and Migration Table D-11: persons born and enumerated in districts of the state and data have been computed.

**Inter-Regional Variation of Out-Migration:** The spatial pattern of inter-regional variation of out-migration at the district level analyse with statistic technique like average mean of out-migration, standard deviation and co-efficient of variation in STOMR, STMOMR and STFOMR<sup>10</sup>. The variation of degree of significant is tremendous both of male and female scheduled tribe population. The range of variation of scheduled tribe out-migration rate is low as 64.77 compare to other category. The degree of variation of scheduled tribe male out-migration is more significant with co-efficient of variation as high as 69.30. On the other hand the rate of scheduled tribe female out-migration rate is relatively consistent nature with co-efficient of variation as 67.18 in Table-2.

**Inter-Regional Variation of Scheduled Tribe Out-Migration:** The rate of mobility is higher among the scheduled tribes and scheduled caste population than other caste groups in rural areas<sup>11</sup>. From the selected study area, Koch Behar district shows highest Scheduled Tribe out-migration rate as 13.46 per

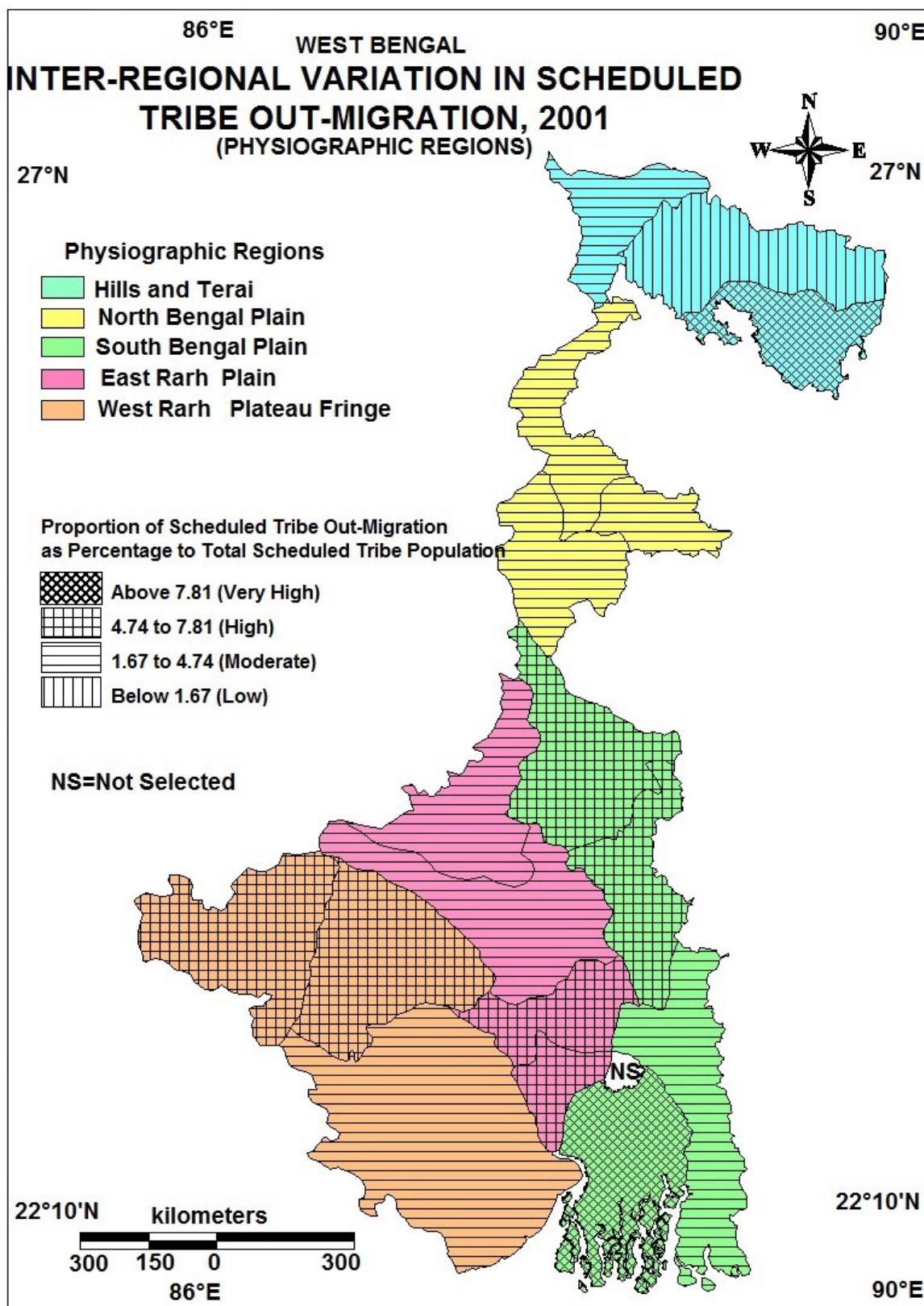
cent on the other hand Jalpaiguri district shows lowest Scheduled Tribe out-migration Rate as 0.75 per cent. From this point of view it is clear that there has a wide variety of inter-regional STOMR in West Bengal. Table-3 delineates proportion of STOMR in different districts level and their concern physiographic regions. Among the 17 districts two districts show extremely high STOMR which is belong to Hills and Terai region and another from South Bengal Plain region with above 7.81 per cent out-migration rate. High out-migration rate (4.74-7.81 per cent) is found six districts of the three physiographic regions as South Bengal Plain, East Rarh Plain and West Rarh Plateau Fringe region and each of them have two districts. Around 47.06 per cent or eight districts are recorded with moderate out-migration rate which belonging to all of five physiographic regions. But North Bengal Plain Regions shows all three districts in moderate range (1.67-4.74 per cent) of out-migration rate. Only one district i.e. Jalpaiguri which is located at Hills and Terai region (Figure-1) with low rate (Below 1.67 per cent) of Scheduled Tribe out-migration.

**Table-2**  
**Study Area: Average Scheduled Tribe Out Migration, Standard Deviation And Co-Efficient of Variation in Total out Migration Rate – 2001**

Categories	1991-2001 Census Period		
	Average OMR	Standard Deviation	Co-Efficient of Variation
Total Scheduled Tribe Out-migration rate (n = 17)	4.74	3.07	64.77
Scheduled Tribe Male Out-migration rate (n = 17)	2.28	1.58	69.30
Scheduled Tribe Female Out-migration rate (n = 17)	7.19	4.83	67.18

**Table-3**  
**Total Scheduled Tribe Out-Migration as Percentage to total Scheduled Tribe Population, 2001**

Category	Per cent Range	Physiographic Regions					Total Districts	
		Hills and Terai	North Bengal Plain	South Bengal Plain	East Rarh Plain	West Rarh Plateau Fringe		
							No	%
Very High	Above 7.81	1	0	1	0	0	2	11.76
High	4.74-7.81	0	0	2	2	2	6	35.29
Moderate	1.67-4.74	1	3	1	2	1	8	47.06
Low	Below 1.67	1	0	0	0	0	1	5.88
Total		3	3	4	4	3	17	100



**Figure-1**  
**Showing Inter-Regional Scheduled Tribe Out-Migration**

Average Scheduled Tribe out-migration rate (Table-1) is highest found in South Bengal Plain region i.e. 5.64 per cent in Murshidabad, Nadia, North and South 24<sup>th</sup> Parganas compare to Hills and Terai, West Rarh Plateau Fringe, East Rarh Plain and North Bengal plain. In Hills and Terai region, Jalpaiguri and Darjeeling district has prosperous with Tea garden and forest production with attract huge number of scheduled tribe person from his adjoining districts like Koch Behar, Uttar and Dakshindinajpur etc. On the other hand in South Bengal, Bardhaman, Kolkata, North 24<sup>th</sup> Parganas, Haora etc. have a great opportunity for job. That is why a large number of scheduled tribe migrated from surrounding district like Bankura, Puruliya, Nadia, Murshidabad, South 24<sup>th</sup> Parganas etc. It is clear that (Figure-1) high level of out-migration region has create an arc shape in between Birbhum and Bardhaman one side and 24<sup>th</sup> Parganas and Medinipur district on the other side.

**Inter-Regional Variation of Scheduled Tribe Male Out-Migration:** The degree of variation of scheduled tribe male out-migration is more significant with co-efficient of variation as high as 69.30. It indicates that among the scheduled tribe out-migration scheduled tribe male persons are more prone for inter-district or inter-regional out-migration. From this table it is clear that the total picture of STMOMR is very little change in district wise inter-regional pattern. Highest STMOMR is found in Koch Behar and lowest in Jalpaiguri district. Table 4 shows range of male out-migration rate. Very high range of male out-migration rate (Above 3.86 per cent) found one in Hills and Terai and another is South Bengal Plain region. High range (2.28-3.86%) is found three regions in South Bengal. Most of the districts are concentrated at moderate rate of out-migration rate. Here most important thing is that every regions show at list one district in this range. One district from Hills and Terai region is shows low level of male out-migration rate.

It is evident that those regions have agricultural and economical prosperous and high degree of urbanization, experienced low rate of STMOMR. Here region wise highest average rate (Table-1) of out-migration found in Hills and Terai region with

3.02 per cent compare to South Bengal Plain (2.62 per cent), West Rarh Plateau Fringe (2.60 per cent), East Rarh Plain (2.24 per cent), and North Bengal Plain (1.50 per cent).

**Inter-Regional Variation of Scheduled Tribe Female Out-Migration:** Female migrants are highly migrated or concentrate within the district and it is several times more than male out-migrants. Most of the rural male persons are migrating far from their village and most the female migrants moved to other areas within the same district<sup>12</sup>. In case of short distance, female was more migrated in rural areas but in medium and long distance more migrated in urban areas<sup>13</sup>. Widowed and divorced women were more concentrated within the district and rural out migration was dominated by females and its major cause is marriage. In West Bengal most of the scheduled tribe women are migrated boundaries districts.

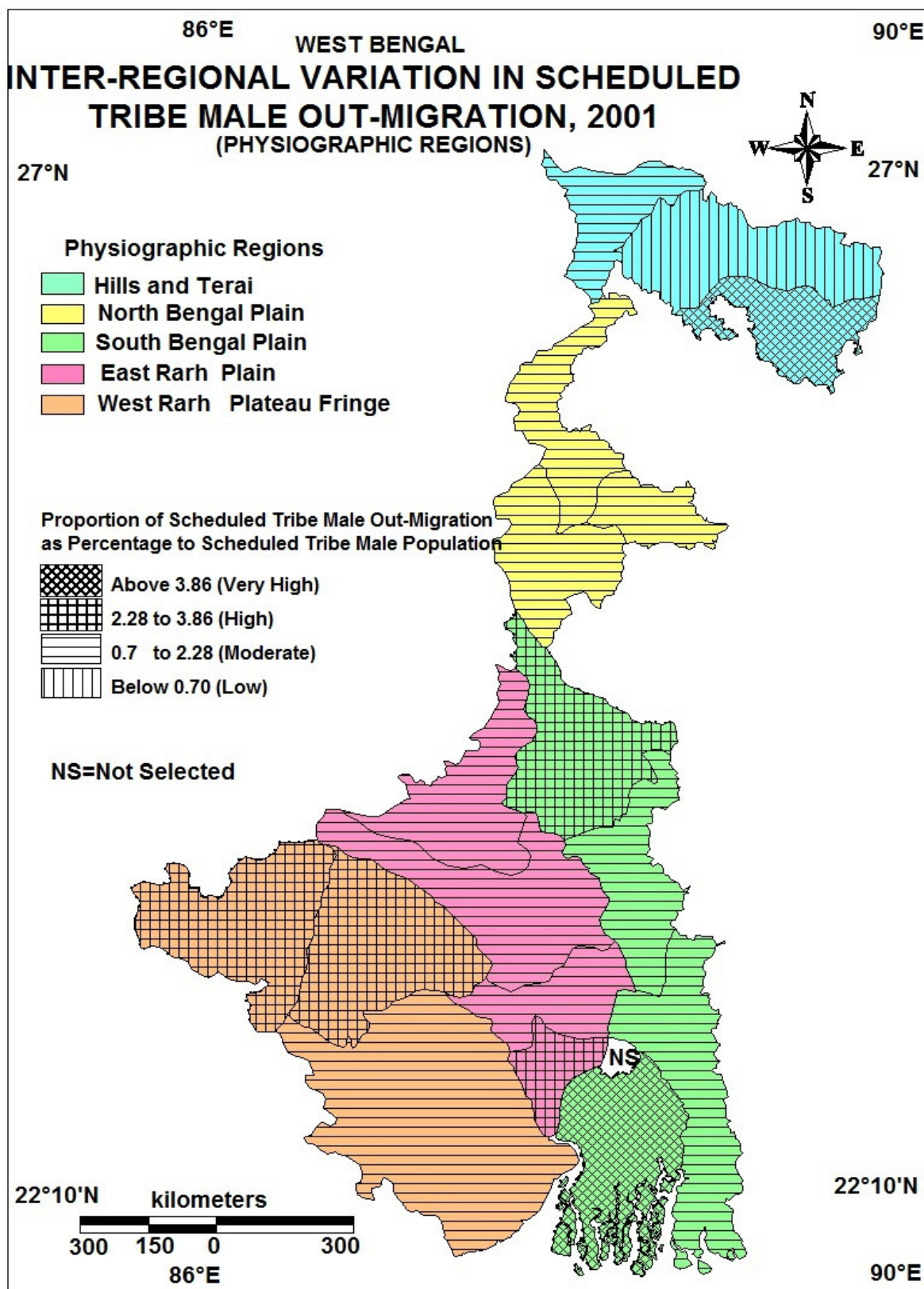
Table-5 highlight similar picture of STFOMR with STOMR in district wise inter-regional pattern. There has no change on inter-regional pattern of scheduled female tribe out-migration rate. Very high range (Above 12.02) is found in two regions. High range (7.19-12.02) of out-migration recorded into three physical region i.e. South Bengal Plain, East Rarh Plain and West Rarh Plateau Fringe regions. Moderate range (2.37-7.19) of out-migration shows every physiographic region as 47.06 per cent from total districts percentage. Low level of out-migration (Below 2.37%) found only Jalpaiguri district in Hills and Terai region.

Average Scheduled Tribe Female out-migration rate (Table-1) is highest found in South Bengal Plain region i.e. 8.75 per cent in Murshidabad, Nadia, North and South 24<sup>th</sup> Parganas compare to Hills and Terai (7.94 %), East Rarh Plain (7.46%), West Rarh Plateau Fringe (7.14%) and North Bengal plain (4.28%). South 24<sup>th</sup> Parganas recorded very high; Murshidabad and Nadia faced high rate of STOMR. North 24<sup>th</sup> Parganas has high rate of urbanize area and economical developed district which indicate moderate out-migration rate. Low average rate of STOMR is received in North Bengal plain i.e. 4.28 per cent.

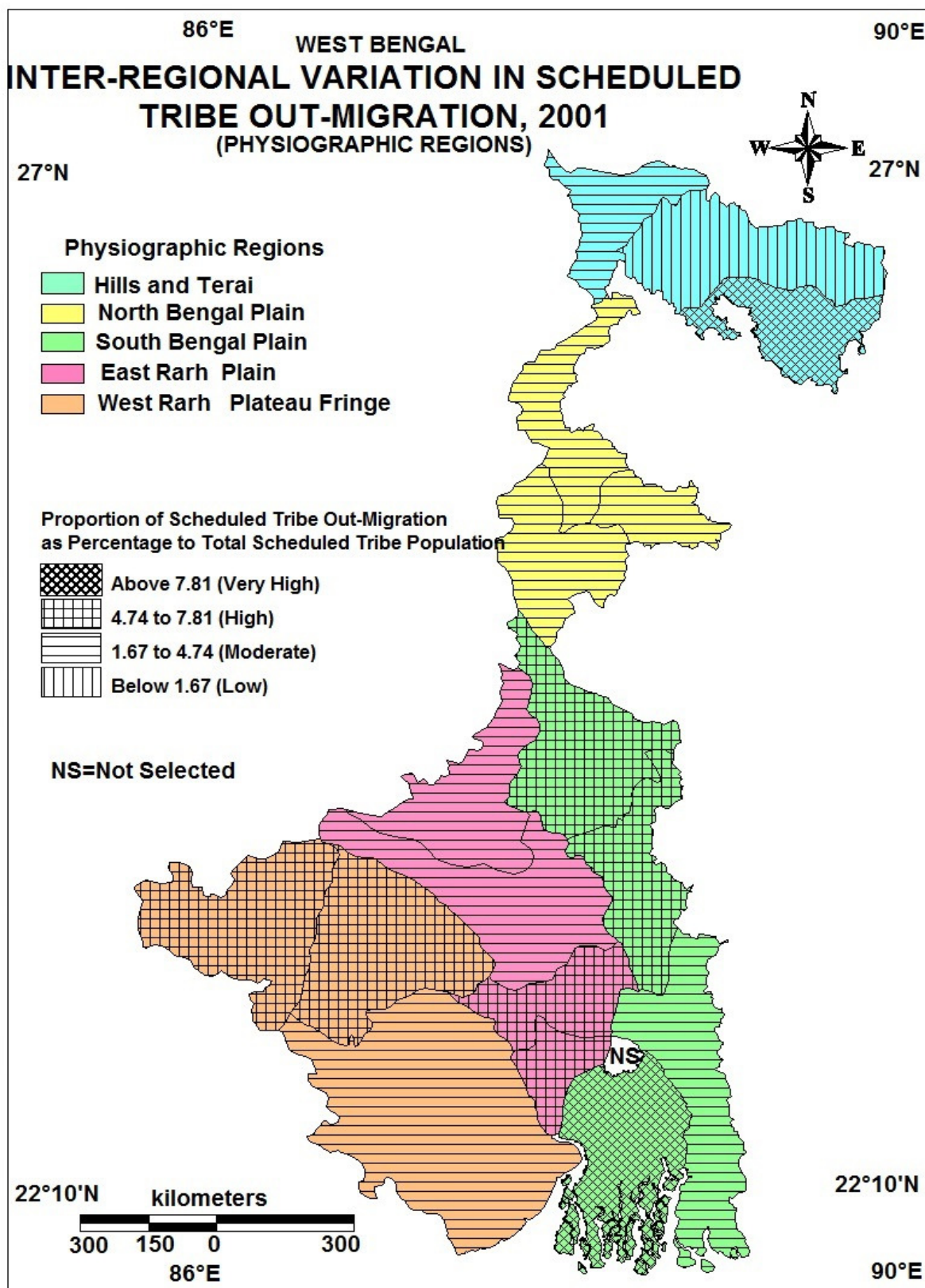
**Table-4**  
**Scheduled Tribe Male Out-Migration as Percentage to Scheduled Tribe Male Population, 2001**

Category	Per cent Range	Physiographic Regions					Total Districts	
		Hills and Terai	North Bengal Plain	South Bengal Plain	East Rarh Plain	West Rarh Plateau Fringe	No	%
Very High	Above 3.86	1	0	1	0	0	2	11.76
High	2.28-3.86	0	0	1	1	2	4	23.53
Moderate	0.70-2.28	1	3	2	3	1	10	58.82
Low	Below 1.70	1	0	0	0	0	1	5.88
Total		3	3	4	4	3	17	100





**Figure-2**  
**Showing Inter-Regional Scheduled Tribe Male Out-Migration**



**Figure-3**  
**Showing Inter-Regional Scheduled Tribe Female Out-Migration**

**Table-5**  
**Scheduled Tribe Female Out-Migration as Percentage to Scheduled Tribe Female Population, 2001**

Category	Per cent Range	Physiographic Regions					Total Districts	
		Hills and Terai	North Bengal Plain	South Bengal Plain	East Rarh Plain	West Rarh Plateau Fringe	No	%
Very High	Above 12.02	1	0	1	0	0	2	11.76
High	7.19-12.02	0	0	2	2	2	6	35.29
Moderate	2.37-7.19	1	3	1	2	1	8	47.06
Low	Below 2.37	1	0	0	0	0	1	5.88
Total		3	3	4	4	3	17	100

## Conclusion

The analysis of inter-regional scheduled tribe out-migration in West Bengal highlight that there has a wide range of regional variation. Highest level of inter-regional out-migration found in mainly three regions like South Bengal Plain, East Rarh Plain and West Rarh Plateau Fringe region. Each of regions has minimum two districts under high and very high level of out-migration. But here most important thing is that high rate of out-migration belt is surrounded with agriculturally and economically developed regions like Barddhaman (agriculturally and industrial developed), North 24<sup>th</sup> Parganas, Kolkata and Haora (economic and industrial developed). In South Bengal this agricultural and economic developed region attract scheduled tribe out-migrants from their surrounding regions. In North Bengal rate of out-migration comparatively less except Koch Behar district. From the Co-Efficient of Variation it is clear that for inter-district or inter-regional out-migration, male scheduled tribe migrants are more prone than female scheduled tribe out-migrants. Scheduled tribe migrants are comparatively more migrating from agricultural and economical depress areas like Puruliya, Bankura, Koch Behar district etc.

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