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Recent Trend of Tribal Migration in Meghalaya Plateau

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ABSTRACT

Meghalaya has the one of the largest concentration of scheduled tribe population in India. For absence of data it is not easy to get a precise estimate of scheduled tribe out-migration in the state. Fortunately census of India provides scheduled tribe out-migration data available at district level first time in 2001 census. The pattern of their out-migration however is not spatially uniform. The state has experienced significant rate of total and male tribal out-migration from the central part of the state whereas in term of intra-district it shows just opposite pattern. Large proportions of migrants are migrated in other north-eastern states from Meghalaya whereas Assam has observed about half of the total in and out-migrants from Meghalaya.

Keyword: Migration pattern, place of destination, net-migration, balance of migration, migration flow

Migration is a common phenomenon in developing country like India as well as the state of Meghalaya. North-East India has experienced two massive immigration waves in historical period of time. At the time of independence of India and formation of Bangladesh, Meghalaya also has experienced a significant proportion of immigration from Bangladesh. Meghalaya and others North-Eastern state has experienced a large scale illegal immigration from Bangladesh which effect on social harmony and social well-being (Singh, 2009).

Meghalaya has experienced high rate of illegal immigration from Bangladesh (Sarma, 2013). A diverse nature of inter-district scheduled tribe out-migration has noticed in Meghalaya. Some of the areas has observed high rate of tribal out-migration. Bulk of the migrants is moved within the state and the place of origin within the different districts (Nengnong, 1999). The proportion of migration is higher among the scheduled tribes and scheduled caste population than the other caste groups in rural areas in India (Keshri and Bhagat 2010). According to Sarma (2013) from the history of the Jaintia Community migration; they were come from Southeast Asia.

Objective

Following objectives have been undertaken for the study:

1. To identify recent trends of Tribal out-migration in Meghalaya
2. To analyse migration flow into North-Eastern States from Meghalaya

Methodology

The study has based on the migration data taken from Census of India. The latest data (2001 census) of district wise migration are available in census of India. Migration rates can be calculated for out-migration, in-mgration and net migration, as well as specific subgroups of population (Clark, 1986). Such as:

$$Or = \frac{O}{P}.K\,,\quad Ir = \frac{I}{P}.K\,,$$

Whereas,

Ir = In – migration rate, O = out – migrantrate

I = number of in – migrants, K = constant (usually 1000 *or* 100)

Migration balance is to be understood by the sum of the differences between inter-districts emigration and immigration (Kumar and Sharma, 1980). The balance of migration is calculated such as:

$$Bm = \frac{E}{I}$$

Whereas, Bm is the balance of migration,

E is the Emigration and

I is the Immigration

The calculation of out-migration rate at district level has been calculated as follows:

(i) Percentage of scheduled tribe out-migration to total scheduled tribe population.

(ii) Percentage of scheduled tribe male out-migration to scheduled tribe male population.

(iii) Percentage of scheduled tribe female out-migration to scheduled tribe female population

RESULTS AND DISCUSSION

Meghalaya has experienced low rate of tribal out-migration since historical time. But in recent time as similar as other north-eastern states, an increasing nature of inter-district tribal out-migration has observed in Meghalaya. The rate of total out-migration varies from one district to another district. The range of out-migration has been classified by using mean and standard deviation method. Tribal hill areas are associated with low level of economic development as well as agricultural development which create an effect on volume of out- migration. But, tribal society is dominated by some restriction, has impact on rate of out-migration.

Inter-District Total Scheduled Tribe Out-Migration Pattern

In recent time each part of our country as well as Meghalaya also has experienced high volume of rural to urban out-migration. Percentage of scheduled tribe population in India has recorded 8.02% in 2001 whereas Meghalaya has recorded 85.9%. The present study aims to analyse pattern of out-migration at district and state level. The Table 1 depicts the regional distribution of scheduled tribe out-migration within the state. This table also highlighted volume and rate of out-migration at district level. High rate of total scheduled tribe out-migration has observed in south Garo Hills and West Khasi Hills where as low rate has found in Ri Bhoi districts. Male and female tribal out-migration has also observed diverse pattern in inter-district level. High proportion of male tribal out-migration has observed in south Garo Hills i.e. 3.73% whereas West Khasi hill has noticed highest proportion (3.46%) of female tribal out-migration.

Table 1: Regional Distribution of Migration Pattern in Meghalaya, 2001

District	Volume of Out-Migration			Percentage of Out-Migration		
	Total	Male	Female	Total	Male	Female
West Garo Hills	5,730	3,516	2,214	1.47	1.79	1.14
East Garo Hills	2,887	1,795	1,092	1.21	1.48	0.92
South Garo Hills	2,969	1,807	1,162	3.10	3.73	2.45
West Khasi Hills	9,344	4,544	4,800	3.22	3.10	3.36
Ri Bhoi	1,153	569	584	0.70	0.68	0.71
East Khasi Hills	8,569	4,620	3,949	1.70	1.88	1.53
Jaintia Hills	3,152	1,406	1,746	1.10	0.99	1.21

Source: *Census of India, Meghalaya, Migration Table D-11: ST - Persons Born and Enumerated in Districts of the State/UT for Scheduled Tribe*

Migration took place from economically and agriculturally depressed areas. The Fig. 1 depicts the regional pattern of total scheduled tribe out-migration in Meghalaya. This figure portrays significant pattern of tribal out-migration. Highest proportion of tribal out-migration has observed in central part of the state. Western part and eastern part of the state has found medium rate of total scheduled tribe out-migration. Only Ri Bhoi district from northern part of the state has experienced low rate of total tribal out-migration. In term of human development index; Meghalaya ranks poorly in north-east India. Among the districts in the state, some districts have ranked high some are less.

High rate of total tribal out-migration has found in west Khasi Hills and south Garo Hill districts from central region of the state. Out-migration from the rural areas is dominated by the poorest and the richest (Oberai and Singh, 1980). West Khasi

Hills and South Garo Hills has recorded low rate of literacy, low percentage of urbanization and less agricultural field from other districts which are the main dominated factors for out-migration. On the other hand West and East Garo Hills, East Khasi Hills and Jaintia Hills are experienced moderate rate of total scheduled tribe out-migration.

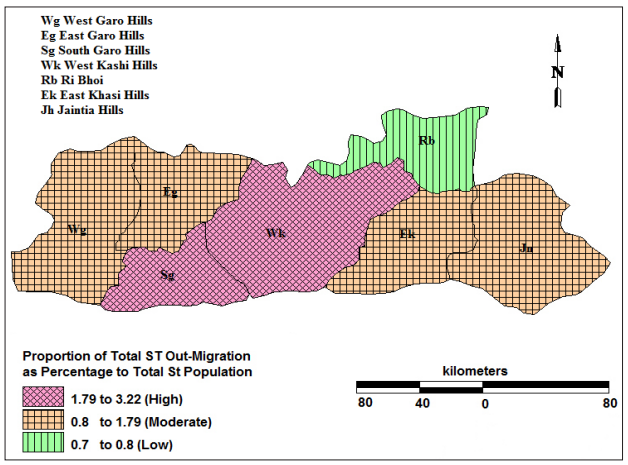

Fig. 1: Inter-District Pattern of Total Scheduled Tribe Out-Migration, Meghalaya, 2001

Inter-District Scheduled Tribe Male Out-Migration Pattern

Male are migrated more compare to female for searching job opportunity. Short distance movement are likely to be marriage related while long-distance movement are probably working related (Piotrowski, *at el.*, 2013). The main reason for out-migration in rural villages for male is shortage of job facility (Rele, 1969). Nath and Choudhury (1995) said that male migration (age group 15-25) rate is greater from rural to urban areas due to educational and employment opportunities. Figure 2 highlighted the pattern of male tribal out migration which is as similar as total tribal out-migration pattern in Meghalaya.

In Meghalaya, High level of male scheduled tribe out-migration has found in central region i.e. West Kashi and South Garo Hills. On the other hand moderate level of male tribal out-migration has observed in western and eastern part of this state. West Garo Hills and East Garo Hills from western region and East Kashi Hills and Jaintia Hills from Eastern region have experienced moderate level of male tribal out-migration. Low rate of male out-migration has found in Ri Bhoi district because this district has recorded high rate of work participation rate.

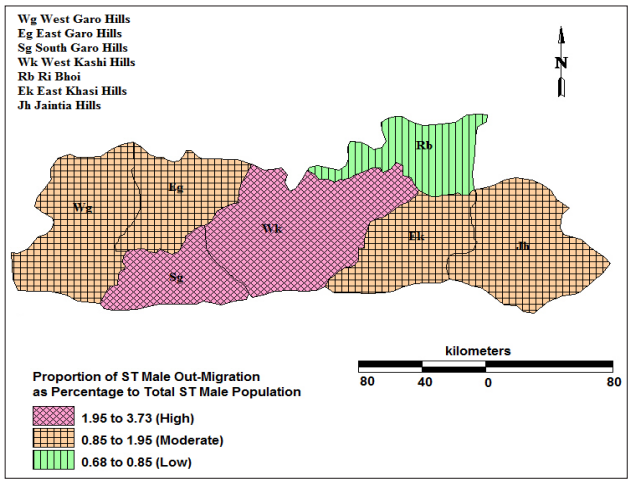

Fig. 2: Inter-District Pattern of Male Scheduled Tribe Out-Migration, Meghalaya, 2001

Inter-District Scheduled Tribe Female Out-Migration Pattern

Female out-migration is also a significant demographic as well as economic phenomenon in population study. Most of the researchers neglected female out-migration for the study because they are migrated mainly due to marriage. Premi (1980) argued that in case of short distance, female are migrated more in rural areas but in medium and long distance more of them migrated to urban areas. But in recent time, female are also moved for higher education, service and to join in different informal sectors in urban areas.

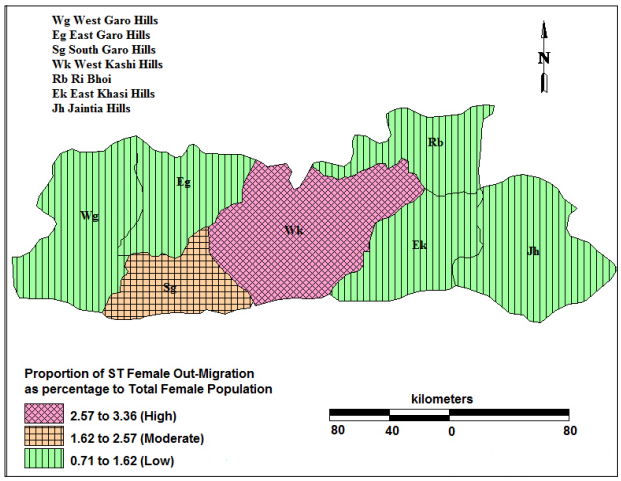

Fig. 3: Inter-District Pattern of Female Scheduled Tribe Out-Migration, Meghalaya, 2001

Tribal society of Meghalaya is different from Indian traditional society. Tribal society of Meghalaya is a matrilineal society which has no impact on female out- migration due to marriage purpose. That's why major portion of the state has observed low level of female out-migration. The figure 3 depicts that, except central part of this state all other regions have experienced low rate of female out-migration. High rate of total, male and female scheduled tribe out-migration have observed in West Kashi Hills and South Garo Hills from the central part of Meghalaya.

Intra-District Total Scheduled Tribe Out-Migration Pattern

Pattern of intra-district tribal out-migration is just opposite to inter-district scheduled tribe out-migration in Meghalaya. The figure 4 depicts the opposite pattern of intra-district out-migration compare to inter-district. Central part of this state like West Kashi and South Garo Hills are experienced low level of intra-district out-migration compare to western and eastern-central part of this state. On the contrary, high rate of intra-district tribal out-migration is found in West Garo Hills, East Garo Hills, Ri Bhoi and East Kashi Hills districts in Meghalaya. Central part of this state indicates out-migration in intra-district pattern rather than inter-district.

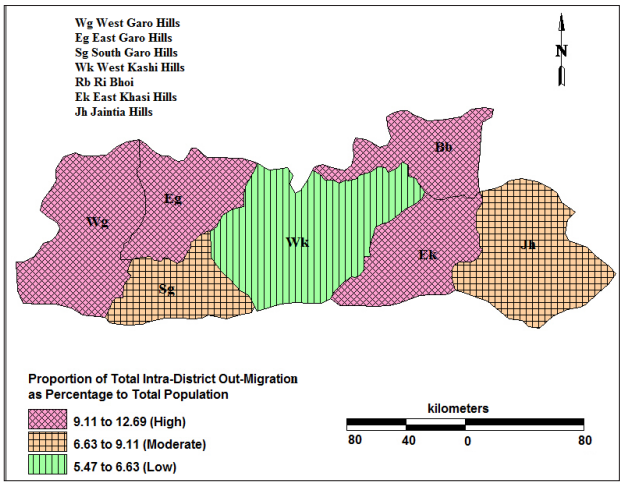

Fig. 4: Intra-District Pattern of Total Scheduled Tribe Out-Migration, Meghalaya, 2001

Inter-State Out-Migration Flow

People of Meghalaya are migrated not only within the state but also inter-state level. The Table 2 shows percentage share of inter-state out and in-migration and rate of net-migration. This table shows inter-state migration pattern in North-East state including west Bengal also. Assam is the most preferred destination place for the out- migrants from Meghalaya. West Bengal is the second preferred destination place for those migrants. Other north-eastern states have also experienced out-migrants from Meghalaya.

Table 2 also depicts rate of in-migration and rate of net-migration in Meghalaya with others north-eastern state of India. Assam has highest net-migration (7.937%). Positive net-migration is observed in Assam, Tripura, Manipur and Nagaland with Meghalaya that means these districts have received fewer migrants and sends more migrants in Meghalaya. On the other hand West Bengal, Mizoram, Arunachal Pradesh and Sikkim have received more migrants but send fewer migrants. West Bengal is more developed than Meghalaya in term of industry and agriculture. That's why West Bengal has received more migrants and sends less proportion of migrants. Other north-eastern states have situated far from the Meghalaya which effect on rate of migration. North-eastern states have received about 69.09% out-migrants to total out-migrants from Meghalaya whereas only 30.97% migrants were migrated in the other states in India. Similarly about 70.95% migrants to total migrants are moved into Meghalaya from other north-eastern states.

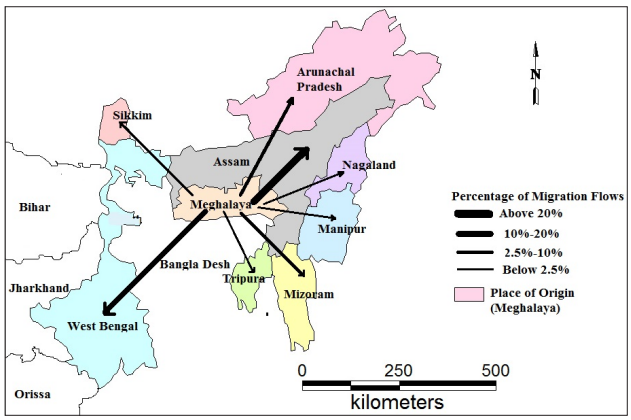

Fig. 5: Migration Flows from Meghalaya to North-Eastern State in India, 2001

The Fig. 5 depicts the flow of out-migration from Meghalaya plateau. Highest percentage (above 20%) flow of out-migration has found in Assam. West Bengal has received 10-20% migrants; Mizoram and Arunachal Pradesh have received 2.5 to 5% migrants

Table 2: Place of Origin and Destination Places for Out-Migrants of Meghalaya, 2001

Place of Origin	Place of Destination		Place of Origin	Place of Destination		*Net-Migration
	NE States	Per cent		State	Per cent	
Meghalaya (Out-migration from this State)	Assam	44.67	Assam	Meghalaya (In-Migration into this State)	52.611	+7.937
	@WB	12.94	WB		6.596	-6.345
	Mizoram	3.98	Mizoram		2.025	-1.954
	#AP	2.70	AP		0.467	-2.233
	Tripura	1.73	Tripura		2.867	+1.137
	Manipur	1.40	Manipur		4.449	+3.050
	Nagaland	1.14	Nagaland		1.706	+0.568
	Sikkim	0.47	Sikkim		0.235	-0.231
	$NE Total	69.03	NE Total		70.95	+1.920
	Others State	30.97	Others State		29.045	-1.930

**Net-Migration- Difference between in and out-migration, @WB-West Bengal, #AP-Arunachal Pradesh, $NE-North Eastern State*

***Source:** i. Census of India, Meghalaya, Migration Table D-2: Migrants Classified By Place of Last Residence, Sex and Duration of Residence In Place Of Enumeration and Migration Table D-1: Population Classified by Place of Birth and Sex.*

respectively from Meghalaya. Other states have received less than 2.5% migrants from Meghalaya.

Source: i. Census of India, Meghalaya, Migration Table D-2: Migrants Classified By Place of Last Residence, Sex and Duration of Residence In Place Of Enumeration and Migration Table D-1: Population Classified by Place of Birth and Sex.

Balance of Migration

Migration balance is to be understood by the sum of the differences between inter-districts emigration and immigration (Kumar and Sharma, 1980). Migration balance could be positive and negative. Migration balance is negative when calculated value is below 1 (one). Positive balance is just opposite to the negative balance. Balance of migration is calculated such as:

$$Bm = \frac{E}{I}$$

Whereas, Bm is the balance of migration,

E is the Emigration and

I is the Immigration.

Negative balance means volume of in-migration is larger than out-migration. Those districts show negative balance at inter-district patterns has indicated the drawing capacity of economic and demographic forces of the district concerned whereas positive balance indicates the draining capacity of the economic, cultural and demographic forces (Sarma and Singh, 1981). The table 3 depicts that only East Kashi Hills and Ri Bhoi distracts are experienced low rate of negative balance compare to other districts in Meghalaya. That means these districts received large volume of in-migrants and sends low volume of out-migration in the other districts of Meghalaya

Table 3: Net Migration and Balance of Migration, Meghalaya, 2001

District	Volume of Migration		Percentage of Migration		Net-Migration (IM-OM)	@Balance (OM/IM)
	In	Out	*In	#Out		
West Garo Hills	5,729	5730	14.51	16.95	-2.44	+1.17
East Garo Hills	3,462	2887	8.77	8.54	+0.23	-0.97
South Garo Hills	2,407	2969	6.10	8.78	-2.69	+1.44
West Khasi Hills	1,902	9344	4.82	27.64	-22.82	+5.74
Ri Bhoi	10,491	1153	26.57	3.41	+23.16	-0.13
East Khasi Hills	13,835	8569	35.04	25.35	+9.70	-0.72
Jaintia Hills	1,652	3152	4.18	9.32	-5.14	+2.23
Total	39,478	33,804	100.00	100.00		

**IN-In Migration, #OM-Out-migration, @Balance- Sum of the differences between inter-district in-migration and out-migration*

***Source:** Census of India, Meghalaya, Migration Table D-11: ST - Persons Born and Enumerated in Districts of the State/UT for Scheduled Tribe*

Factors of outmigration in Meghalaya Plateau

Here we used Parsons Correlation matrix models to examine the effect of socio-economic factors which control on inter-district and intra-district out-migration in Meghalaya. Outmigration and different socio-economic variables are interdependent to each other. Tables 4 provide valuable information and show significant relation between the variables.

At the inter-district level, 13 variables from various sources are taken for socio-economic matrix and the analysis is undertaken for 7 districts in Meghalaya. Whereas, out-migration at the intra-district level, 10 variables are taken from different socio-economic variables. Table 4 illustrates the correlation matrices between the inter-district outmigration and different socio-economic variables. Among the thirty variables, seven variables are negatively correlated whereas six variables are positively correlated. Proportion of outmigration are negatively correlated (r=-.34, r=-.18, r=-.20, r=-.42, r=-.67, r=-.62, r=-28) with Ratio of Female to Male Rural Labour Wage Rate (X2), Medical Facility (X3), Below Poverty Rate (X5), Main Worker (X6), Road Density/100sq.Km. (X8), Electricity (X9), Density of Population (X13).

The percentage of main worker (X6) and proportion of out-migration at inter-district level and the value of correlation coefficient is negative at -.42 in 2001. It means when percentage of main workers are increase proportion of out-migration decrees. Relation with road density 100/sq.km (X8) and Electricity (X9) with out-migration at inter-district level is negative (r=-.674, r=-.617). It means that when road length and electricity increases and propensity of out-migration decreases.

High positive correlation (r= .911 at 0.01 significance level) proportion of combined gross enrolment ratio in school (X14) and proportion of outmigration suggested that when literacy increase volume of outmigration also increases for higher education. Proportion of outmigration are positively correlated (r=.17, r=.42, r=.37, r=.25, r=.37) with Total Number of School (X4), Population Coverage Per Bank Branch (X10), Forest Cover Area (X11), Proportion of Scheduled Tribe (X12). It means that when these

Table 4: Correlation between Inter-District Out-migration and Socio-Economic Variables

	X1	X2	X3	X4	X5	X6	X7	X8	X9	X10	X11	X12	X13	X14
X1	1													
X2	-0.341	1												
X3	-0.182	-0.35	1											
X4	0.172	-0.303	0.749	1										
X5	-0.202	0.502	-0.023	0.242	1									
X6	-0.418	-0.415	.784*	0.526	-0.013	1								
X7	0.418	0.415	-.784*	-0.526	0.013	-1.00**	1							
X8	-0.674	0.076	0.33	-0.251	-0.193	0.617	-0.617	1						
X9	-0.617	-0.365	0.601	0.06	-0.326	.833*	-.833*	.852*	1					
X10	0.372	0.445	-0.717	-0.155	0.443	-.802*	.802*	-.790*	-.941**	1				
X11	0.249	0.534	-0.689	-0.364	0.631	-0.579	0.579	-0.348	-0.696	0.748	1			
X12	0.370	-0.216	-0.561	-0.499	-0.297	-0.722	0.722	-0.532	-0.435	0.422	0.161	1		
X13	-0.276	0.038	.868*	0.58	0.134	0.736	-0.736	0.544	0.553	-0.665	-0.421	-.821*	1	
X14	.911**	-0.017	-0.235	0.181	0.154	-0.441	0.441	-0.637	-0.737	0.52	0.545	0.156	-0.162	1

** Correlation is significant at the 0.05 level, ** Correlation is significant at the 0.01 level*

X1- Proportion of Inter-District Out-Migration, X2-Ratio of Female to Male Rural Labour Wage Rate, X3-Medical Facility, X4-Total Number of School, X5- Below Poverty Rate, X6-Main Worker, X7-Marginal Worker, X8-Road Density/100sq.Km., X9-Electricity, X10-Population Coverage Per Bank Branch, X11-Forest Cover Area, X12-Proportion of Scheduled Tribe , X13-Density of Population, X14-Combined Gross Enrolment Ratio in School.

Source: *Human Development Report, Meghalaya, 2008*
Socio-Economic Review, Meghalaya, 2003
Meghalaya State Report, 2016
Basic Statistic, East Khasi Hills, Meghalaya, 2016

Table 5: Correlation between Intra-District Out-migration and Socio-Economic Variables

	V1	V2	V3	V4	V5	V6	V7	V8	V9	V10	V11
V1	1										
V2	0.515	1									
V3	0.559	-0.097	1								
V4	0.404	0.689	-0.013	1							
V5	-0.404	-0.689	0.013	-1.00**	1						
V6	0.512	0.64	-0.193	0.617	-0.617	1					
V7	-0.082	-0.645	0.443	-.802*	.802*	-.790*	1				
V8	0.437	-0.177	.756*	-0.361	0.361	-0.521	.763*	1			
V9	-.795*	-.885**	-0.297	-0.722	0.722	-0.532	0.422	-0.174	1		
V10	0.458	.874*	0.134	0.736	-0.736	0.544	-0.665	-0.089	-.821*	1	
V11	-0.362	-0.09	0.154	-0.441	0.441	-0.637	0.52	0.293	0.156	-0.162	1

** Correlation is significant at the 0.05 level, ** Correlation is significant at the 0.01 level*

V1- Proportion of Intra-District Out-migration, V2-Human Development Index, V3-Below Poverty Level, V4- Main Workers,V5- Marginal Workers, V6- Road Density/100 sq.km., V7- Population Coverage Per Bank Branch, V8- Annual Area Under Jhum in sq. km., V9- Proportion of Scheduled Tribe, V10- Density of Population, V11- Combined Gross Enrolment Ratio in School.

Source: *Human Development Report, Meghalaya, 2008*

Socio-Economic Review, Meghalaya, 2003

Meghalaya State Report, 2016

Basic Statistic, East Khasi Hills, Meghalaya, 2016

variables are increase proportion of out-migration at inter-district level also increases.

The Table 5 depicts the correlation matrices between the proportion of outmigration and different socio-economic variables of intra-district outmigration. Among the ten variables, four variables are negatively correlated whereas six variables are positively correlated. Proportion of outmigration are negatively correlated (r=-.40, r=-.08, r=-795, r=-.36) with Marginal Workers (V5), Population Coverage per Bank Branch (V7), Proportion of Scheduled Tribe (V9), Combined Gross Enrolment Ratio in School (V11). Proportion of outmigration is negatively correlated with the percentage of scheduled caste population (V9) and the value of correlation coefficient is negative at r=-.795 in 2001 which is statistically significant at 0.01 level of significance. It means that regions with greater concentration of scheduled caste people are experiencing less proportion of outmigration at intra-district out-migration level.

Proportion of outmigration are positively correlated (r=.52, r=.60, r=.40, r=.51, r=.44, r=.46) with Human Development Index (V2), Below Poverty Level (V3), Main Workers (V4), Road Density/100 sq.km.(V6), Annual area under Jhum in sq.km. (V8), Density of Population (V10). It means that when these variables are increase proportion of out-migration at inter-district level also increases. Relation with annual area under Jhum in square km. (V8) and proportion of outmigration is positive (r= .437) at intra-district level. It means that when area under Jhum cultivation increases then it create huge pressure on man-land ratio which lead to more outmigration.

CONCLUSION

Migration is the result of several economic, social and demographic factors. Social stratification system has great impact on migration in both sexes. Tribal out-migration was very low in the historical time period in Meghalaya but out-migration pattern in inter-district, Intra-district and inter-state level have increased day by day in case of male and female. Increasing rate of female literacy and getting job opportunity in several informal sectors have also an influenced factor on female out-migration in the tribal society of Meghalaya. High rate of total tribal out-migration has found in west Khasi Hills and south Garo Hill districts from central region of the state due to low rate of literacy, low percentage of

urbanization and less agricultural field from other districts which are the main dominated factors for out-migration. Inter-state out-migration shows all of the North-Eastern states including West Bengal have received more or less out-migrants from Meghalaya but Assam and West Bengal are the favourite destination places of migrants from Meghalaya plateau.

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