

Transformations of traditional livelihood and Economic composition of population: A case study of Totopara Village (West Bengal)

Debarshi Ghosh¹, Dr. Snehasish Saha²

¹(Assistant Professor, Department of Geography, Dhugguri Girls' College, West Bengal, India)

²(Assistant Professor, Department of Geography and applied Geography, University of North Bengal, West Bengal, India)

I. INTRODUCTION

Social dynamics can lead to bring changes in the issue of resource dependability and sustainable development, whereas sustainability for the use of resources is linked with societal adjustments and adoption of newer occupations. The trend of work involvement in a society has its own attachment with the process of resource collection and use from the surrounding. The active working force of Totopara village has been transforming with their involvement towards the transforming economic activities. The traditional livelihood of the community has been shifting towards the new era of techno-centric life-style where abundant opportunities exist many a times without any rational thinking of environment sustainability and resource use. The tribes of Totopara rely on their primitive way of livelihood. But, the social transformations have been compelled them to deviate from their own traditional life-styles. Toto tribes have their own hall mark cultural heritage. They confined within a narrow village under the administrative jurisdiction of Alipurduar district (Madarihat Block) at the foothills of Bhutanese Himalaya. This pocket community has been declared as Primitive Tribal Group (vulnerable) by an official announcement of Govt. of India in 1975. Totos are basically animist, homogeneous tribal community with specific territory-culture-language, and associated with simple economy and polity (Dutta, 2014). The Totos are a curious race whose village is built on a hill called "Badoo", about 5 miles from the *Huntapara* tea garden (Grunning, 1916). Their racial heritage is connected with their remoteness and traditional livelihood. Previously, they were Jhum cultivators, hunters, copper collectors (Majumder, 1991). Another view on their identity is that they supposed to migrate from the adjacent hills of Bhutan. Now, Totopara has become the place of 'ethno-tourism' (Dutta, 2014) with increasing interactions from the outer world. This has certainly changed their social fabric. The new impositions have brought changes in their livelihoods and work participations. The open avenues of Totopara allow the advertisements of modern society to enter in their virgin lands.

Objectives

1. To analyse the changing trend of work participation among inhabitants of Totopara Village.
2. To know about the sex wise work participation of Totos and its intra-variability.

II. MATERIALS AND METHODS

The basic frame of the study has been constructed on the basis of intensive literature survey and field visits. Secondary data has been collected from District Census Hand Books (1961, 1981, 1991, 2001, and 2011) and official web-archive of Census of India. Primary schedule survey has been conducted by following stratified random selection of samples (10 samples from 6 hamlets, N= 60) without replacement. The basic population statistics of Toto tribes has been presented with relevant calculations of sex-ratio and decadal growth rate of population. Hamlet-wise age-sex distribution of population and sex wise distribution of population on the basis of primary occupation have been plotted by using suitable cartographic techniques. The industrial classification of population has been followed to show the distribution of working force. The intra-variations of sector-wise participation in various occupations have been presented and compared with the co-efficient values of variation.

III. LOCATION OF THE STUDY AREA

Totopara is located at the south of Bhutan hills (Tadong) in Madarihat Police station of Alipurduar district. Totopara in Madarihat Block is nearer to *Pahargaon* settlement of Bhutan and it falls under *Ballalguri* village administration. The area of Totopara is known as Laxmi-Duar or Lucky-Duar. The village is confined by many small seasonal creeks namely- *Dungti*, *Datingti*, *Dipti*, *Chuati*, *Japti*, *Se-ti* and *Hauri*. The entire study area falls within the administrative boundary of *Ballaguri* Gram Panchayat (JL No. 33). This isolated land of

Totos has an area of 1996.76 acre. The river Torsa flows on the eastern margin of the village. The arrangement of the rivulets confine a trapezoidal piece of land that is divided into 6 small hamlets viz. Panchayat Gaon, Mandal Gaon, Subba Gaon, Mitran Gaon, Puja Gaon and Dhumchi Gaon.

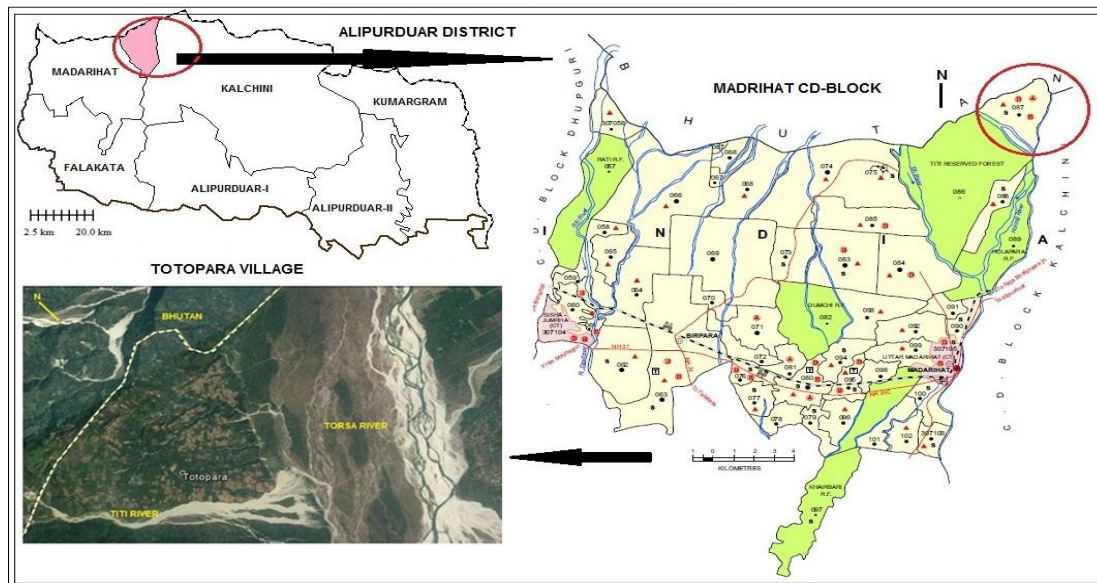


Fig 1: Location of the Study Area

IV. GEO-PHYSICAL SET-UP

Totopara is located at the piedmont tract of Bhutanese Sub-Himalaya. The elevation of the study area varies from 152 m to 617 m. The edge of the Bhutanese mountain raising form 300 to 1,000 msl turns to NE to meet with Torsa valley. The parallel rivulets are draining a 3-5 km wide piedmont terrace (Starkel et al., 2008). The entire terrace surface is covered by Titi forest on the west and the surface is drained by more than 10 parallel rivulets. The village entrance is obstructed by Se-Ti and Hauri streams. The continuous forest encroachment on the steep S-E facing piedmont slope promotes number of landslides. The length of the village is 4.02 km from north to south while the breadth along E-W is about 1 mile.

V. HISTORICAL BACKGROUND AND DEMOGRAPHIC CHANGES

The place Totopara was first identified by the British administrators. After 1865, the area became free from the control of Bhutan kingdom. The Bhutan-Duars act of 1868 played a key role for such re-distribution (Sanyal, 1955). The first settlement survey was carried out by Sunder (former settlement officer of Jalpaiguri in 1889 to 1894 (Sanyal, 1955). He declared Totopara mouza as reserved and restricted for Totos (Dutta, 2014). The survey report of Milligan during 1906-1916 revealed that there were only 235 individuals lived in 60 households in Totopara. In 1951, it was recorded that the total area of Totopara mouza was 1996.96 acre. During the settlement operation of 1969, under the right of individual ownership of land-holdings, the number of Toto families was flourished up to 89 (300 acre land). The residual land of Totos was known as “khas Land”. In 1951, there were 321 individuals in 69 houses and in 1971 it increased up to 544 (Dutta, 2014). By 1952 about 1/3rd population of the area was found belonging to non-Toto groups.

TABLE 1: Basic Population statistics of Toto tribes

Year	Population		Total population	Sex Ratio (Female/1000 male)	Decadal Growth Rate (%)
	Male	Female			
1901	72	99	171	1375	Initial year
1911	125	110	235	880	37.42
1921	140	131	271	936	15.31
1931	130	204	334	1569	23.25
1941	159	162	321	1019	3.89(negative)
1961	206	189	395	917	91.90
1981	362	350	712	967	23.05
2001	620	575	1195	927	67.84
2011	737	650	1387	882	16.07

Source: District Census Handbooks and Das, 2011

TABLE 2: Age-wise distributions of Population and Dependency Ratio

Villages	0-14 age-group	15-64 age group	65 & above age group	Total Dependency Ratio [TDR] (%)
Dhumchi Gaon	63	92	3	71.70
Mitran Gaon	69	82	1	85.37
Puja Gaon	71	60	1	120.00
Mondal Gaon	32	73	0	43.84
Panchayat Gaon	103	191	2	54.97
Subba Gaon	131	194	2	68.56

Source: Dutta, 2014

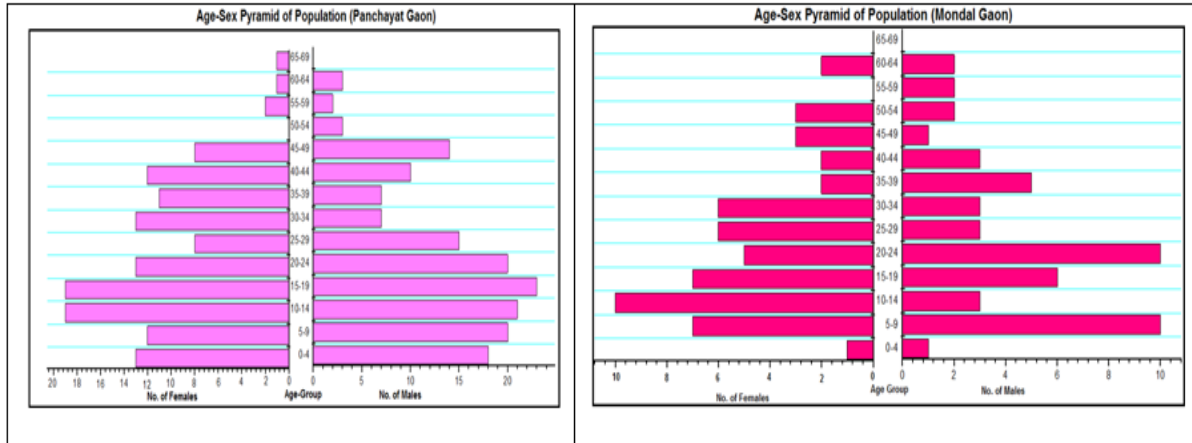


Fig. 2 & 3: Age-sex wise Population distribution of two Toto Villages

In 2011 Toto tribes shared only 23.46% of the total population of Totopara (Das, 2014). Besides the Toto, twenty six other communities live in Totopara (Das, 2014). The age-sex pyramids of 6 hamlets show an erratic distribution of population. In some villages, the total number of females is observed higher than males like in Mondal Gaon (10-14, 25-29, 30-34, 45-49 age groups) and in Panchayat Gaon (30-34 age group) etc (Fig 2 and 3). The total population is calculated highest for Subba Gaon (327 population) and lowest for Mandal Gaon (105 population). The number of non-dependent population is found higher for Subba Gaon and Panchayat Gaon. The highest dependency ratio has been calculated for Puja Gaon (120%). TDR of Mondal Gaon is because of the low total population in this area.

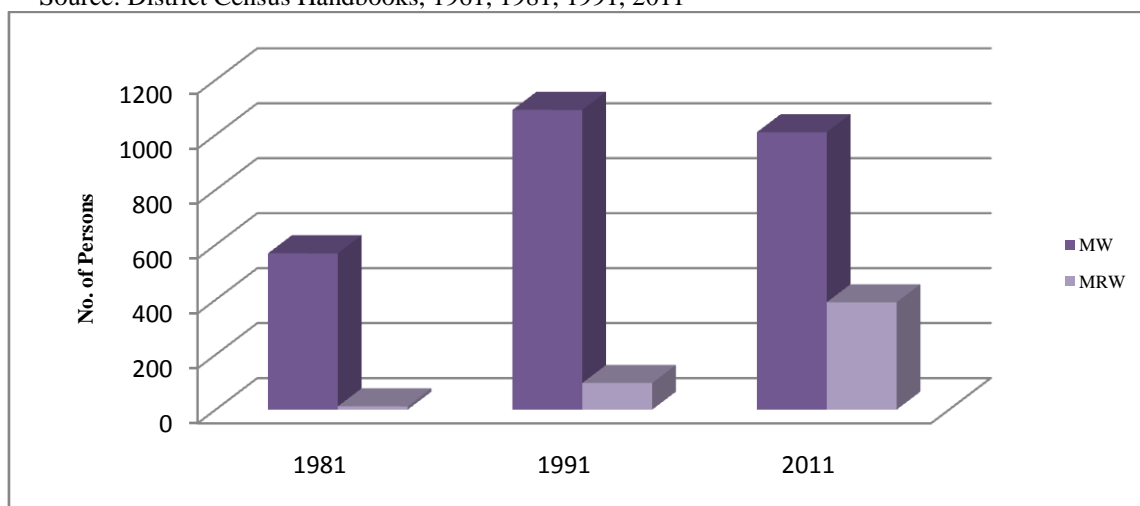
VI. ECONOMIC CHARACTERISTICS

The economic status of the population is tied up with economic, cultural and demographic attributes of an area which creates the overall ground of basic development. The basic function of all economic systems is to maximize satisfaction through an economic allocation of various resources. Resources are limited for the satisfaction of various needs which are unlimited (Das, 2014).Toto people mainly dependent upon the bringing of orange from Bhutan as laboring workers. They had been involved in practicing slash and Burn cultivation. Previously, there was no occupational division among the tribes of Totopara village. Due course of time, occupational diversification has appeared. Totos are directly involved in agricultural practices. They are also involved as agricultural laborers, constructional workers, in business and govt. services. Toto farmers can identify monsoon by observing germination of orange seedlings. Now, they have moved towards the propagation of Areca Nut. Bamboo is another important cash crop cultivated which is sold in the form of handicraft products (Dawn, 2014).

TABLE: 4 Economic Composition of Population of Totopara Village

Col.1	Col.2	Col.3	Col.4	Col.5
Year	Total Worker	Main Worker (MW)*1	Marginal Worker (MRW)*2	Non-Worker
1961	710	-	-	450
1981	581	569	12	916
1991	1191	1091	97	983
2011	1401	1010	391	1559

Source: District Census Handbooks, 1961, 1981, 1991, 2011



[Ref: Table 4, col.3 and 4]

Fig. 4: Year-wise distribution of Main and Marginal Workers

Further analysis of census data has revealed that the number of total worker has increased by 691 within last 50 years. The increment of Toto population has also shown a similar tendency (771 people added in last 50 years). But a noticeable decrease in total worker has been observed from 1961 to 1981 (-129 people). This incident related with a sharp increase in Non-Working population and 466 people increased in this category. A surprising unequal addition of population can be noticed in the categories of Total Worker (691 people in 50 years) and Non-Worker (1109 people in 50 years). The increment of population in Non-worker category shows comparatively high variation (COV= 1.30) than the Total worker category (COV=1.11). The Ginni co-efficient values for Main (0.07) and Marginal workers (0.40) have expressed that the rise of population in Marginal worker category is comparatively more inconsistent than the remaining category.

TABLE 5: Working place of Totos

	Place of Work					
	Totopara		Totopara & Bhutan		Other	
	M* ¹	F* ²	M	F	M	F
Dhumchi Gaon	30	63	37	0	4	2
Mitran Gaon	50	62	20	0	0	1
Puja Gaon	48	54	14	0	0	0
Mondal Gaon	32	54	19	0	0	0
Panchayat Gaon	124	118	12	0	6	0
Subba Gaon	150	130	20	2	6	0

Source: Dutta, 2014

[*¹Male, *²Female]

Totos are established cultivators and they are dependent on the production of agricultural crops.

In 2011, 30.90% workers of Totopara were involved in cultivation. They played the role of the transporter of orange from south Bhutan. These orange transporters continuously move between Totopara and Bhutan. Mainly males (98.39%) play the role as orange transporters. In Dhumchi, Mitran, Puja and Mondal Gaon female house-hold workers are abundant. The males are mostly moving between Totopara and Bhutan. But, Totos still have close racial affinity and unity. For that reason, they do not like to move farthest places to earn.

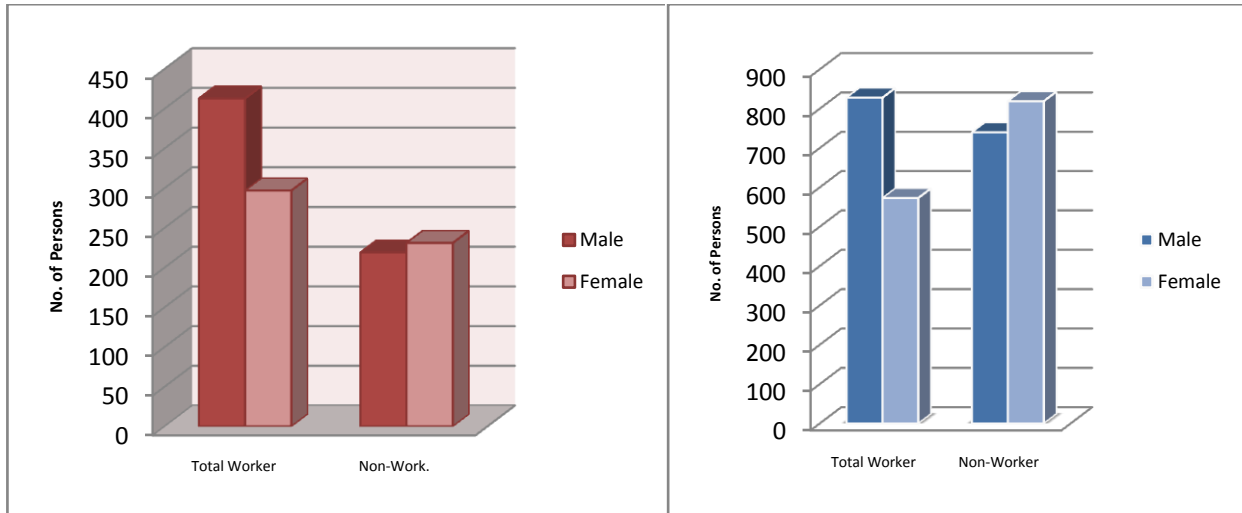


Fig. 5 & 6: Sex-wise Working Force of Toto-Villages in 1961 and 2011

VII. OCCUPATIONAL PATTERN

Presently Totopara villagers are solely dependent on agricultural activities. The occupational pattern of the tribes is mainly of two type viz. primary and secondary occupations. Considering primary occupational pattern, males are mainly engaged in agriculture, business, agricultural laborers, 100 day workers and govt. services. The females are mainly engaged in house-hold works, collection of fuel and fodder and sometimes in 100 days work. In case of secondary occupation, males prefer orange portorage from Bhutan, cultivation of Betel nuts and agro-forestry.

TABLE 6: Categories of Working Force and Sectoral Variations (2016)

Villages	Cultivators (including Orange Transporters)		Agricultural Labours		100 day workers		House-Hold workers		Govt. Service		Business		others	
	M* ³	F* ⁴	M	F	M	F	M	F	M	F	M	F	M	F
Dhumchi Gaon	4	3	1	1	4	3	8	5	1	0	3	1	2	1
Mitra Gaon	6	3	1	1	2	1	7	8	2	0	2	0	2	1
Puja Gaon	5	3	2	1	4	2	6	4	0	0	4	1	2	1
Mondal Gaon	4	3	2	2	3	3	3	8	2	0	2	0	5	2
Panchayat Gaon	11	4	2	1	3	2	6	7	3	0	3	0	2	2
Subba Gaon	10	5	1	1	2	1	8	6	3	0	3	0	3	2

Source: Primary Field Data, 2016. (N=60)

[*³Male, *⁴Female]

TABLE 7: Categories of Working Force and Sectoral Variations (2014)

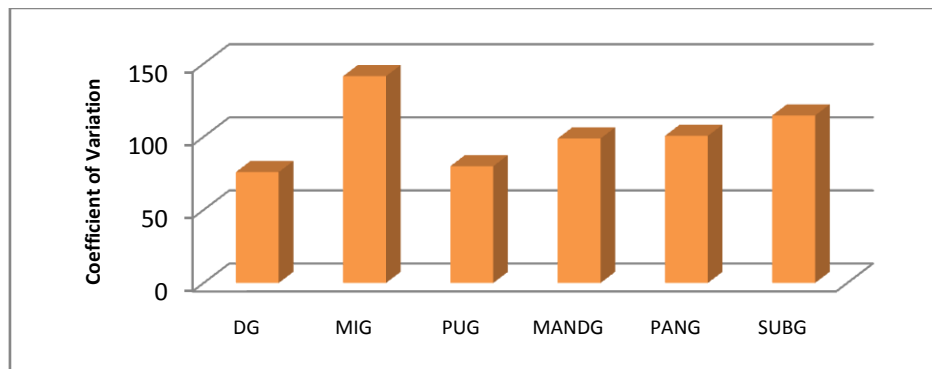
Col.1	Col.2		Col.3		Col.4		Col.5		Col.6		Col.7	
Names	Cultivators		Agricultural Labours		100 day workers		House-Hold workers		Government Service		others	
	M* ⁵	F* ⁶	M	F	M	F	M	F	M	F	M	F
Dhumchi Gaon(DG)	2	28	1	11	2	9	27	25	0	0	6	1
Mitran Gaon(MIG)	5	18	0	0	1	1	39	39	1	0	0	1
Puja Gaon(PUG)	31	21	0	0	0	0	4	17	0	0	2	1
Mondal Gaon(MANDG)	25	0	0	0	2	0	3	29	3	0	0	3
Panchayat Gaon(PANG)	41	3	3	0	5	0	2	72	16	2	8	1
Subba Gaon(SUBG)	69	38	2	0	2	5	12	47	7	3	10	4

Source: Dutta, 2014.

[*⁵Male, *⁶Female]

Thatching is the core of their livelihood. Totos were used to be associated with orange orchards, forest dwelling, hunting (“*Sinchako-Kobi*” festival), gathering, Slash-Burn cultivation, domestication of cattles, lather work and lac preparation (Sanyal, 1955). They also extract Silk cotton from Catechu plant and use it for their own sustenance. Toto people perform as minimum cost or almost free of cost labourers under the *Drukpa Royals* of Bhutan and such workers are previously known as ‘*Huiwa*’. They also served to ‘*Gapu*’ and ‘*Kaiji*’. Transportation of orange and spice was governed by ‘*Kaiji*’ and the reverse route by the political head ‘*Gapu*’ (Dutta, 2014). They also involve in the preparation of some Ethno-medicines and earn very low from that. In 1961 census, out of 413 male workers 62.71% was categorized as Cultivators and next to it was 30% involvement in category III (Mining, quarrying, Livestock, Plantations, orchards and allied activities). Among the female workers, 73.74% was involved as cultivators and 25.93% in category III activities. In 1981 census, the participation of males as cultivators (78.27%) increased as the effect of the increment of 146 male workers. In this census, category II (agricultural labours) counted for 3.69%. In 1991, category I workers showed a decline (74.44%). Also the participation in category II had been increased slightly (5.83%). In this phase the participation in category III (plantation, Livestock, orchards and allied) and IV (mining and quarrying) had been decreased quickly.

But 1991 census revealed some new work participants in Manufacturing-Processing-servicing-repairing (category V: 2.91%), Trade-Commerce (5.5%) and other are negligible. In 2011 census, main and marginal workers were divided into 4 categories each. Here also, the tendency in main work participation as cultivators declined sharply (41.88%). But, the number of agricultural labours increased abruptly (23.17%). On the other hand; the number (33.27%) of category IV (other services) has expressed the shift of traditional work participations. Most of the marginal workers were involved as agricultural labours (78.77%).



[Ref: Table 7; col.1 for village name(s) abbreviations]

Fig. 6: Sector-wise Variation in Work Participation

The results of the survey on their primary occupations have revealed high sectoral variations. Mitran Gaon tops the list with high COV (coefficient of variation) value of 141.48% and minimum variation has been observed in Dhumchi Gaon (75.84%). In the 6 hamlets, most of the workers are involved in house-hold industrial works (Dhumchi Gaon: 46.43%, Mitran Gaon: 74.29%, Puja Gaon: 27.63%, Mondal Gaon: 49.23%, Panchayat Gaon: 57.52% and Subba Gaon: 29.65%). In Subba Gaon, large amount of workers are involved in cultivations (53.77%). Surprisingly 48.37% Totos in Panchayat Gaon and 5% Totos in Subba Gaon are involved in government services. According to 2011 census, 38.67% workers were involved as agricultural labourers. In Totopara, 52.22% people have landholding below 1 acre and 25.56% people are landless (Das, 2014). These landless people are basically considered as agricultural labourers.

VIII. VARIATIONS IN SEX-WISE WORK PARTICIPATION

In Totopara, the work participation is not always dominated by the males. The work participation in house-hold industries among the females is quite high (72.47%). But the Toto males (87.1%) are presently moving towards government services and females remain busy in house-hold works and small industrial works (Table 7). In Mondal Gaon, the gender gap is high among the category I workers (Table 6). Surprisingly in Dhumchi Gaon 9.82% females are involved in category II type of work and male participation is negligible (Table 7). The number of male of orange transporters including cultivators are found high in Panchayat Gaon (25%) and in Subba Gaon (27.5%) (Table 6). The male involvement in other services (70.3%) is found high for all sectors (Table: 7). The increment in male work participants shows comparatively high consistency (COV 35.66%) than the female participants (COV 47.80%). The range of the data on male workers is comparatively low where the area of 1st quartile is almost negligible. The spread of the data on female workers are found higher than the males (range 401). But, there is a gradual decline of median workers from males (585 people) to

females (386 people). In case of Non-workers, the number of median workers is found high for the females (522 people) than the males (455 people). But the number of median class Toto female workers are observed less (Fig: 7). The gender gap in work participation is calculated positive for total workers. The highest increase of gender gap is observed as +255 persons from 1991 to 2011. The situation was negative for non-workers and maximum negative change has been observed as -154 persons from 1961 to 1981 (Fig: 8).

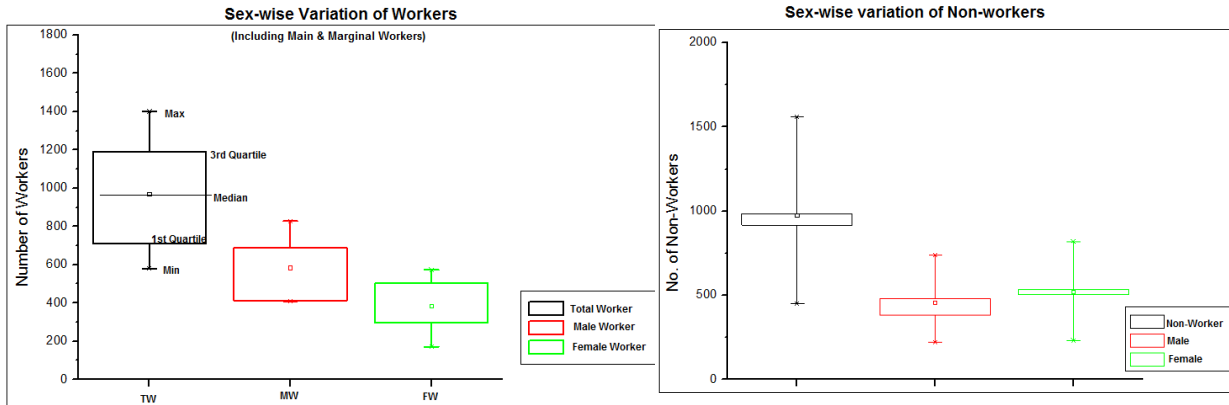


Fig. 7: Sex-wise Variation of Worker vs. Non-Worker inhabitants

Major Outcomes

1. The increase in Non-workers (1109 people in 50 years) at Totopara is due to the encroachment of their traditional working involvements (cultivation, Livestock, mining, orchard farming, plantation, thatching and Agro-forestry) by outsourced people.
2. The Sharp rise in Marginal workers in Totopara (379 people in 30 years) is because of increasing participation as agricultural labourers (78.77% in 2011).

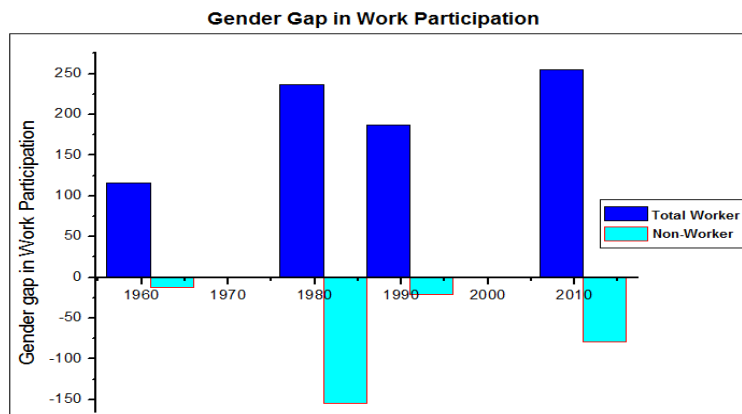


Fig. 8: Gender Gap in Work Participation

3. In non-working category, female workers (53.40%) are dominating than males.
4. The number of median class Main and Marginal workers (male and female) are comparatively high than non-workers (males and females).
5. In 1961, 28.30% workers included in Category III. But in 1991, only 0.91% workers are involved in Category III activities which were mostly traditional environment based activities.

IX. CONCLUSION

The present social context has compelled the Totopara villagers to depend on non-traditional works. The social changes have generated gender inequality in work participations. Toto women are mainly house-hold work participators and enjoy considerable liberty in the selection of work. Totos are the followers of clan exogamy and this causes the mixation of Totos with other tribes and communities in Totopara. The proper communication of Totopara village with Madarihath has enhanced the process of cultural diffusion. Their occupational diversification reflects in the rapid process of adaptation in non-traditional works. In 1956, the census first mentioned the figures of Totos but clubbed it with *Bhutia* (including Sherpa), *Toto*, *Drukpa*, *Kagatay*, Tibetan and *Yolmo*. So, the dynamics of Toto society and its essentiality should be considered for further research.

ACKNOWLEDGEMENTS

This paper could have not been possible without the valuable support of the residents of Totopara during our field visits. I shall remain thankful to Mrs. Rimi Dutta, a research scholar of Anthropology department, University of North Bengal, as her valuable thesis on Totopara encouraged us to carry out this type of research.

REFERENCES

- [1]. J Das, Factors Influencing The Socio-Economic Status of Toto Tribe In Madarihat, Block of Jalpaiguri District, West Bengal, *Geo-Analyst* (ISSN 2249-2909), 1(2), 2011, 66-69.
- [2]. A Dawn, A peep into the lifestyle of the endangered Toto tribe of Jalpaiguri district of West Bengal, *International Journal of Modern Research and Review*, 2(4), 2014, 161-164.
- [3]. District Census Hand Book, (1961, 1981, 1991, and 2011), Jalpaiguri, Village and Town directory, pp. 48-49, 100-101, 112-113, 193.
- [4]. R Dutta, Concept of Health, Disease and Treatment among The Totos of Totopara in Jalpaiguri District, West Bengal, Doctoral Thesis, Department of Anthropology. University of North Bengal, 2014, 52-55, 62, 71, 76, 90-143.
- [5]. G A Grierson, Linguistic survey of India (Tibeto-Burman family, Part-I, Vol. III, 1926) [<https://archive.org/details/in.ernet.dli.2015.32103>].
- [6]. J F Grunning, Eastern Bengal and Assam Gazetteers- Jalpaiguri (Allahabad Pioneer Press, 1911). [<http://dspace.wbpublibnet.gov.in:8080/jspui/handle/10689/10543>].
- [7]. Md Z Hoque and Md K Ansar , Socio- Cultural and Economic Distinctiveness and Transformation of The Toto Tribe, *International Journal of Innovative Research and Advanced Studies*, ISSN: 2394-4404, 2 (5), 2015, 30-33.
- [8]. B Majumder, A sociological study of Toto folk tales (Calcutta, India: The Asiatic Society, ISBN no. 9789381574096, 2013). [<http://www.exoticindiaart.com/book/details/sociological-study-of-toto-folk-tales-NAG552/>]
- [9]. L Starkel, S Sarkar, R Soja, P Prokop, Present Day Evolution of the Sikkimese-Bhutanese Himalayan Piedmont, *Instytut Geografii Przestrzennego*, Poland, PLISSN 0373-6547, ISBN 978-83-61590-09-5, 2008, 80-82.
- [10]. C.C. Sanyal, The Totos: A Sub Himalayan Tribe, *Journal of Asiatic Society Science X (XI)*, No. 2, 1955, 59-126.

IOSR Journal Of Humanities And Social Science (IOSR-JHSS) is UGC approved Journal with Sl. No. 5070, Journal no. 49323.

Debarshi Ghosh. "Transformations of traditional livelihood and Economic composition of population: A case study of Totopara Village (West Bengal)." *IOSR Journal Of Humanities And Social Science (IOSR-JHSS)* 22.7 (2017): 01-08.