Original Research Article

Dynamics of Livelihood Diversification: A Study on Rural Tribal Youth of Tripura, India

ABSTRACT

Aims: As fall out of transforming land use pattern coupled with the factors like resettlement, exposure to alien environment and effort to adjust with the new socio-agro-economic order, based upon their capability and resource endowment status, the tribal youth of North East Indian state of Tripura are in the look for various alternative occupations for their livelihood.

Study design: In this backdrop, a study was conducted in two tribal dominated districts of the state, Dhalai and Gomati, to trace out the mechanism of interplay of various socio-personal factors over livelihood vis-a-vis occupational diversification of the tribal youth.

Methodology: Primary data were collected from 120 tribal youths following multistage sampling. Correlation and multivariate path analysis was undertaken for analysis of data.

Results: The delineation of decomposition of total effects against each of the perceived explaining variables into their respective direct, indirect and via effects as outcome of multivariate path analysis showed that while land holding size, annual expenditure and economic motivation had the three highest order positive direct as well as indirect effect on the occupational diversity for resource poor category, whereas, asset endowment, land holding size and economic motivation were of highest order for their resource endowed counterpart. Moreover, while annual income, achievement motivation and social inclusiveness revealed first three highest order negative direct as well as indirect effects on the occupational diversity for resource poor category, those were annual income, decision making ability and cosmopoliteness for the resource endowed category. Still further, handful of variables was also found to have substantially interplayed in channelling their indirect effects through one or the other predictor variables.

Conclusion: Occupational diversification appeared to be the consequence of a complex interplay of multiple factors. However, appearance of substantial residual values as outcome of path analysis called for inclusion of more supplementary contextual explainers for any such future study.

Key words: Livelihood, Occupational diversity, Multivariate analysis, Tribal youth, Tripura

1. INTRODUCTION

Livelihood comprises the capabilities, assets (including both material and social resources) and activities required for a means of living; it is sustainable when it can cope with and recover from stresses and shocks, maintain or enhance its capabilities and assets, while not undermining the natural resource base [1]. Livelihood diversification signifies the process by which rural households constructs an increasingly diverse portfolio of activities and assets in order to survive and improve their living [2]. While discussing the reasons that compel the rural households in low income countries to diversify their livelihood, seasonality, risk, labour markets, asset strategies, and coping strategies were identified as major determinants of diversification activities [3]. From several empirical studies, non-farm diversification have been customarily found to be more remunerative and opening up of the choice vis-a-vis opportunity for diversification of the rural people's livelihood [4; 5; 6; 7]. Contrarily, it was also observed that the reasons for diversification in rural households are diverse and hence a simple typology of diversification to discuss everything can be erroneous and misinforming [8]. In fact, the reasons for livelihood diversification in rural households are influenced by a multitude of factors like level of education, social participation, age, size of land holding, credit orientation, access to natural and financial capital, off-farm income, ability to identify and access alternative income sources and so on [9; 10; 11; 12; 13; 14;15].

The tiny North East Indian state of Tripura is inhabited by 19 different scheduled tribes/sub-tribes and as of 2011 Census, 31.8 per cent of the total population of 36.71 lakh in the state was represented by tribal communities. Earlier, the tribal people remained grossly dependent on shifting cultivation (*Jhum*) and orange orchards [16]. As fall out of such *jhum* based subsistence lifestyle, the tribal agro-economic order has become stagnant. *'Jhumia'* rehabilitation started in the state around 1930-31 and further up-scaled in 1943 with the establishment of Immigration and

Reclamation Department [17]. Setting up of reserved forests, banning *Jhum*, decreased economic returns and persistent effort from the Government towards settled agriculture gradually gave rise to emergence of a changed land-use pattern in the areas inhabited by the tribal dwellers. And such transforming land use pattern coupled with the factors like resettlement, exposure to alien environment and, of course, adjustment in the patterns of occupation as a means of livelihood provisioning or improvement, various tribal communities of Tripura in general and the resource poor tribal families in specific had to pay uptight look for alternative scavenging means of occupation in order to cater to their subsistence needs. Simultaneously, due to their greater economic affluence and access to the fruits of civilization like education, employment, proximity to cities and/or townships, etc., the new progeny of resource rich counterpart were also observed to be showing increasing bent towards different blue and white collar jobs by disassociating themselves from their ancestral occupations. Further, there is a school of thought that rurbanization has been impacting the choices of livelihood of the rural youth because of larger job markets in the cities and their agglomerations. It was in this light that a research endeavour was put forward to trace out the interplay of various antecedent socio-economic and socio-personal factors over livelihood diversification of the tribal youth communities.

2. METHODOLOGY

2.1 Research Methods

Since the study was purposed at dealing with the rural tribal communities, it was conducted in Dhalai and Gomati districts of the state Tripura as these districts were having the largest tribal population in the state. Therefore, after identification of districts, firstly, one block nearest to district headquarters and one farthest from it was identified from each of the two selected districts. This was done with the assumption that, proximity or farness of the block to a town, having higher infrastructural facilities and civic amenities, may influence the access to resources by the respondents, which may in turn influence the occupational choices made for attaining livelihood by those who stay nearer to towns or those who stay far from it. Accordingly, Ambassa Rural Development Block (nearest) and Durga Chowmuhani Block (farthest) was selected from Dhalai district and for Gomati district, Matabari (nearest) and Killa (farthest) Rural Development Blocks were selected. Then, the areas falling under Tripura Tribal Areas Autonomous District Council (TTAADC) within those blocks were identified and there from random selection of village councils were made.

The present study focused on the areas under TTAADC as the population of these areas are dominated by the tribal people, for larger comprehension, it is to be explained here that in Tripura, TTAADC was set up in 1982 to function in accordance with the Sixth Schedule of the Constitution of India in order to protect the tribal ways of life through self-governance. The Sixth Schedule allowed administration of notified areas as autonomous. The Autonomous District Councils (ADCs) have wide ranging legislative and executive powers and have complete freedom to run village bodies according to customary laws within their territories [18]. Under operational jurisdiction of TTAADC, village councils operate as lower tier units.

For the study, two village councils KIlla and Purbamog Pushkarini were selected from Killa and Matabari Rural Development blocks respectively in Gomati District. From Dhalai district, Srirampur and Kamalacherra village councils from Durgachowmuhani and Ambassa Rural Development Blocks were selected respectively. It was with the assumption that household's well-being and/or resource endowment status impacts over the nature of livelihood vis-à-vis occupational diversification of the youth as a transitional occupational *vis-a vis* livelihood pattern, at the first instance 60 number of tribal youth were identified as respondents from each of both resource endowed and resource poor social category by resorting to well-being analysis and then gender disaggregation of those selected youth was made as part of multi-stage sampling technique. Primary survey was conducted using pre-tested structured schedule and following ex-post facto research design. The total sample was comprised of 120 rural tribal youth in the age group of 18 to 35 years. A detailed account of district, block, village council, sex and well-being status wise distribution of respondents is furnished hereunder through Table 1.

2.2 Method of Analysis

In the present study, various socio-economic and socio-personal factors were assumed to have interplayed as causal/explaining variables over livelihood choices and the manifestation of such interaction was perceived to have taken place in the form of occupational diversification as a means of livelihood provisioning or improvement. Therefore, the occupational diversity index for a given respondent was considered to be the dependent/consequent variable (Y) and attempt was made to

110 comprehend the mechanism of interaction and influence of the following 12 perceived
111 causal/explaining variables on the said dependent/consequent variable through multivariate analyses:

1. Land holding size (X_1)
2. Asset endowment (X_2)
3. Annual income (X_3)
4. Annual expenditure (X_4)

5. Education (X_5)
6. Dependency ratio (X_6)
7. Economic motivation (X_7)
8. Decision making ability (X_8)

9. Achievement motivation (X_9)
10. Cosmopoliteness (X_{10})
11. Social participation (X_{11})
12. Social inclusiveness (X_{12})

112 As perceived consequent/dependent variable of the study, occupational diversity was
113 operationalized as the measure of diversification of sources of income of the respondents from
114 various on-farm, off-farm, and non-farm occupational choices available before him/her to obtain a
115 secure livelihood. Simpson index of Diversity (SID) is widely used to measure diversification of
116 crop/income/livelihood sources [19; 20; 15]. For the present study, SID was utilized to figure out
117 occupational diversity. The formula for calculating SID is:

118
$$SID = 1 - \sum Pi^2$$

119 Where, Pi is the proportion of income coming from the source i.

120 The value of SID ranges from 0 to 1, where SID=0 indicates only one source of income or
121 Pi=1. As the number of sources increase, their share in Pi declines, so that the value of SID
122 approaches to 1. If there are k sources of income, then SID falls between zero and 1-1/k. The
123 households with largest number of diversified income will have the highest SID and the less
124 diversified incomes are associated with the smallest SID.

125 Distribution of diversification among the resource endowed respondents showed 32, 57, and
126 11 percent of them were having low, medium, and high diversification respectively. For the resource
127 poor category, it was 20, 57 and 23 percent in the low, medium, and high category respectively.

128 In order to measure systematic association between the variables, firstly inter-correlation
129 statistics was utilized separately for both the resource poor as well as resource endowed category of
130 selected tribal youth; and secondly, path co-efficient analysis was done to determine the direct as well
131 as indirect effects of causal/explaining variables (as exogenous variables) on the
132 consequent/dependent variable (as endogenous variables) [21; 22; 23]. The path co-efficient analysis
133 involves a method of partitioning the total correlation between the dependent and independent
134 variable and the independent component variable and its indirect effect via other variables on
135 dependent variable. Path co-efficient can be defined as the ratio of the standard deviation of the effect
136 due to a given cause to the total standard deviation of the effect, *i.e*., if Y is the effect due to a given
137 cause to the total standard deviation of the effect, i.e., if Y is the effect and X_1 is the cause, the path
138 co-efficient for the path from cause r_1 to effect Y is $\sigma X_1 / \sigma Y$. The statistical analyses were carried out
139 by using the SPAR (Version I) data analysis software. For more clarity in comprehending the
140 interplaying of various causal/explaining variables over occupational diversity in the forms of their
141 direct effects, indirect effects and via effects, the path analysis matrices as output of software based
142 data analysis was appropriately rearranged and presented in a tabular form [24].

3. RESULTS AND DISCUSSION

3.1. Inter-correlation between causal/explaining variables and diversity index for resource poor category of tribal youth

146 It transpired from Table 2 that many of the correlation coefficient values were having positive
147 significant relation with each other. While land holding size (X_1) was observed to have significant
148 correlation with as many as seven variables like annual income (X_3), annual expenditure (X_4),
149 education (X_5), economic motivation (X_7), decision making ability (X_8), achievement motivation (X_9)
150 and social inclusiveness (X_{12}); asset endowment (X_2) was found to have significant correlation with
151 five variables like land holding size (X_1), education (X_5), economic motivation (X_7), cosmopoliteness
152 (X_{10}) and social participation (X_{11}). Side by side, annual income (X_3) had significant correlation with six
153 variables like land holding size (X_1), annual expenditure (X_4), education (X_5), economic motivation
154 (X_7), achievement motivation (X_9) and social inclusiveness (X_{12}). Likewise, education (X_5), economic
155 motivation (X_7), decision making ability (X_8), achievement motivation (X_9), cosmopoliteness (X_{10}),
156 social participation (X_{11}) and social inclusiveness (X_{12}) etc. were also detected to have significant
157 positive correlation with as many as seven [land holding size (X_1), asset endowment (X_2), annual
158 income (X_3), economic motivation (X_7), decision making ability (X_8), achievement motivation (X_9) and
159 social inclusiveness (X_{12})]; five [land holding size (X_1), asset endowment (X_2), annual income (X_3),
160 education (X_5), decision making ability (X_8), achievement motivation (X_9) and social inclusiveness

161   (X_{12})]; five variables [land holding size (X_1), education (X_5), economic motivation (X_7), achievement
162   motivation (X_9) and social inclusiveness (X_{12})]; seven [land holding size (X_1), annual income (X_3),
163   annual expenditure (X_4), education (X_5), economic motivation (X_7), decision making ability (X_8) and
164   social inclusiveness (X_{12})]; two [asset endowment (X_2) and social participation (X_{11})]; two [annual
165   income (X_3) and cosmopoliteness (X_{10})]; and seven [land holding size (X_1), annual income (X_3),
166   annual expenditure (X_4), education (X_5), economic motivation (X_7), decision making ability (X_8) and
167   achievement motivation (X_9)] other selected causal/explaining variables respectively. It requires a
168   further mention here that diversity index (Y) as perceived dependent/consequent variable was also
169   having positive significant correlation with land holding size (X_1). Thus, it is understood that apart from
170   the variable dependency ratio (X_6), there existed varying forms of inter relationship among the
171   explaining variables as well as between the consequent and explaining variables for the resource
172   poor category of selected tribal youth.

173   **Table 2. Inter-correlation between perceived explaining and consequent variables for resource
174   poor category (N=60)**

	Y	X_1	X_2	X_3	X_4	X_5	X_6	X_7	X_8	X_9	X_{10}	X_{11}	X_{12}
Y	1.000	0.263*	0.030	-0.099	-0.067	-0.052	-0.1724	-0.100	-0.017	-0.221	-0.003	0.081	-0.174
X_1	-	1.000	-0.206	0.537**	0.317*	0.372**	-0.022	0.326*	0.367**	0.372*	-0.068	0.108	0.361**
X_2	-	-	1.000	-0.208	-0.011	-0.504**	-0.061	-0.330*	-0.077	-0.207	0.333**	0.310*	-0.185
X_3	-	-	-	1.0000	0.693**	0.290*	0.001	0.516**	0.234	0.514**	-0.013	0.093	0.366**
X_4	-	-	-	-	1.000	0.057	0.227	0.236	0.101	0.428**	0.227	0.229	0.395**
X_5	-	-	-	-	-	1.000	-0.043	0.388**	0.316*	0.301*	-0.234	-0.062	0.359**
X_6	-	-	-	-	-	-	1.000	-0.138	-0.102	-0.035	0.030	-0.087	-0.065
X_7	-	-	-	-	-	-	-	1.000	0.429**	0.587**	-0.193	0.005	0.274*
X_8	-	-	-	-	-	-	-	-	1.000	0.398**	0.099	0.148	0.298*
X_9	-	-	-	-	-	-	-	-	-	1.000	-0.092	0.168	0.482**
X_{10}	-	-	-	-	-	-	-	-	-	-	1.000	0.307*	0.067
X_{11}	-	-	-	-	-	-	-	-	-	-	-	1.000	0.004
X_{12}	-	-	-	-	-	-	-	-	-	-	-	-	1.000

175

176   **Significant at 1% level; *Significant at 5% level of probability

177   **3.2. Inter-correlation between causal/explaining variables and diversity index for resource
178   endowed category of tribal youth**

179   Keeping parity with the trend of inter-correlations among selected causal and consequent
180   variables as observed from Table 2 meant for the resource poor category of selected tribal youth, in
181   case of their resource endowed counterpart also many of the selected variables were found to have
182   positive significant correlation coefficient values among themselves (Table 3). It became apparent
183   from the table that diversity index (Y), as perceived consequent variable, was having positive
184   significant correlation with three numbers of causal/explaining variables namely, land holding size
185   (X_1), annual income (X_3) and economic motivation (X_7). Among the selected explaining variables,
186   while land holding size (X_1) was observed to have significant correlation with four variables like asset
187   endowment (X_2), annual expenditure (X_4), economic motivation (X_7) and social inclusiveness (X_{12}); for
188   asset endowment (X_2) existence of significant correlation was found to be with even higher number of
189   six variables like annual income (X_3), annual expenditure (X_4), decision making ability (X_8),
190   achievement motivation (X_9), cosmopoliteness (X_{10}) and social inclusiveness (X_{12}). Side by side,
191   annual income (X_3) also had significant correlation with two variables like asset endowment (X_2) and
192   annual expenditure (X_4). Similarly, annual expenditure (X_4), achievement motivation (X_9) and
193   cosmopoliteness (X_{10}) were also found to have significant correlation with few amongst each other.
194   But, compared to their resource poor counterpart, in case of resource endowed category of tribal
195   youth the variables were found to have much lesser extent of inter-correlations among themselves.

4

196 **Table 3. Inter-correlation between perceived explaining and consequent variables for resource**
197 **endowed category (N=60)**

	Y	X_1	X_2	X_3	X_4	X_5	X_6	X_7	X_8	X_9	X_{10}	X_{11}	X_{12}
Y	1.000	0.456**	0.246	-0.346**	-0.018	-0.212	-0.136	0.283*	-0.182	-0.060	0.126	0.148	0.205
X_1	-	1.000	0.282*	0.043	0.273*	0.231	0.135	0.305*	-0.132	0.053	0.142	0.117	0.318*
X_2	-	-	1.000	0.376**	0.587**	-0.101	0.092	0.214	0.284*	0.319*	0.360**	0.130	0.388**
X_3	-	-	-	1.000	0.597**	0.192	0.025	0.131	0.075	0.107	-0.005	0.033	0.116
X_4	-	-	-	-	1.000	0.348**	0.046	0.191	0.247	0.185	0.190	0.017	0.489**
X_5	-	-	-	-	-	1.000	0.056	0.126	0.118	0.164	0.006	-0.112	0.146
X_6	-	-	-	-	-	-	1.000	0.034	-0.090	0.044	-0.003	-0.034	0.043
X_7	-	-	-	-	-	-	-	1.000	0.130	-0.119	0.214	-0.133	0.138
X_8	-	-	-	-	-	-	-	-	1.000	0.057	0.184	0.181	0.124
X_9	-	-	-	-	-	-	-	-	-	1.000	0.353**	0.029	0.057
X_{10}	-	-	-	-	-	-	-	-	-	-	1.000	0.180	0.382**
X_{11}	-	-	-	-	-	-	-	-	-	-	-	1.000	0.093
X_{12}	-	-	-	-	-	-	-	-	-	-	-	-	1.000

198 **Significant at 1% level; *Significant at 5% level of probability

199   Thus, the inter-correlation webs as presented through correlation matrices of Tables 2 and 3,
200 made it apparent that in spite of variations between the two categories of respondents, with regard to
201 mode of inter-correlations across the categories of tribal youth separately as well as in combination,
202 there had been existence of wide range of multiplicity of significant relationships among the selected
203 causal/explaining variables. In order to get clearer picture of the mechanism of direct and indirect
204 effects of those perceived predictor variables on the dependent/consequent variable in consideration,
205 hence, the researcher resorted to path analysis.

206 **3.3 Path analysis of causal/explaining variables and diversity index for resource poor category**
207 **of tribal youth**

208   Table 4 reflects the total effects, direct effects and total indirect effects of twelve perceived
209 causal/explaining variables of occupational diversity as perceived consequent variable for resource
210 poor category of selected tribal youth. Alongside, in order of importance, it also indicates of the
211 coefficients of those variables through which substantial indirect effects were channeled to influence
212 the said consequent variable. The delineation of decomposition of the total effects against each of the
213 twelve causal/explaining variables into their respective direct, indirect and via effects revealed that
214 land holding size (X_1) had the highest positive direct as well as indirect effect on the diversity index
215 and in case of smaller such positive direct as well as indirect effect, the standing of other
216 causal/explaining variables in descending order were annual expenditure (X_4), economic motivation
217 (X_7) and social participation (X_{11}). Interestingly, on the contrary, annual income (X_3) came out to have
218 highest negative direct as well as indirect effect on the diversity index which was followed in
219 descending order by achievement motivation (X_9), social inclusiveness (X_{12}), dependency ratio (X_6),
220 education (X_5), cosmopoliteness (X_{10}), and decision making ability (X_8). Further, for all the explaining
221 variables, barring one, the direct effects channelled by them were found to be smaller in values than
222 the corresponding values of indirect effects. This implied existence of their mutual dependencies
223 among themselves. Thus, occupational diversification emerged to be the consequence of a complex
224 network based performance of several antecedent factors.

225   It also became evident from Table 4 that a handful of variables had substantially interplayed
226 in channelling their indirect effects through one or the other important predictor variables. While the
227 variable achievement motivation (X_9) channelled highest indirect effect of as many as eight other
228 variables to establish its immense networking with them, the variables like annual income (X_3), annual
229 expenditure (X_4) and education (X_5) were also detected to have networking with six other variables
230 apiece. Side by side, each of both the variables like land holding size (X_1) and economic motivation
231 (X_7) were observed to be having networking with five others. Still further, networking with three others
232 were found remaining for each of the variables like asset endowment (X_2), decision making ability (X_8)

5

233 and social inclusiveness (X_{12}). Thus, the contention that the whole process of occupational
234 diversification of the resource poor tribal youth in the areas under investigation is the consequence of
235 an explicit network based influence of socio-economic and socio-personal variables became
236 established. However, still there remained an important pointer to add that the residual value of path
237 analysis being 0.693 to indicate that the constellation of perceived predictor variables could not
238 explain as high as 69.3 per cent of variations in the consequent values. And such revelation went
239 suggestive to include more number of contextual relational variables in terms of careful socio-agro-
240 economic characterization of the given local setting, even if the focus of study would be on tribal youth
241 *per se*.

242 **Table 4.** **Path coefficients showing effects of explaining variables on diversity index for**
243 **resource poor category tribal youth (N=60)**

Independent variables	Total effect	Direct effect	TIE*	Variables through which substantial indirect effects are channeled
Land holding size (X_1)	1.9051	0.5499	1.3552	0.2950(X_3), 0.2048(X_9) 0.2044(X_5), 0.2020(X_8)
Asset endowment (X_2)	0.0098	-0.0675	0.0773	0.0340(X_5),0.0222(X_7) 0.0141(X_3), 0.0140(X_9)
Annual income (X_3)	-1.5230	-0.3785	-1.1445	-0.2622 (X_4), -0.2031(X_1) -0.1954(X_7), -0.1947(X_9)
Annual expenditure (X_4)	1.0591	0.2715	0.7876	0.1881(X_3), 0.1163(X_9) 0.1074(X_{12}), 0.0862(X_1)
Education (X_5)	-0.1362	-0.0609	-0.0753	0.0307(X_2), -0.0236(X_7) -0.0226(X_1), -0.0219(X_{12})
Dependency ratio (X_6)	-0.1711	-0.2427	0.0716	-0.0552(X_4), 0.0336(X_7) 0.0210(X_{11}), 0.0248(X_8)
Economic motivation (X_7)	0.1262	0.0407	0.0855	0.0239(X_9), 0.0210(X_3) 0.0175(X_8), 0.0158(X_5)
Decision making ability (X_8)	-0.0483	-0.0150	-0.0333	-0.0065(X_7), -0.0060(X_9) -0.0055(X_1), -0.0048(X_5)
Achievement motivation (X_9)	-1.0757	-0.2747	-0.8010	-0.1612(X_7), -0.1413(X_3) -0.1323(X_{12}), -0.1177(X_4)
Cosmopoliteness (X_{10})	-0.0496	-0.0339	-0.0157	-0.113(X_2), -0.104(X_{11}) 0.0080(X_5), -0.0077(X_4)
Social participation (X_{11})	0.1121	0.0504	0.0617	0.0156(X_2), 0.0155(X_{10}) 0.0116(X_5), 0.0084(X_9)
Social inclusiveness (X_{12})	-0.7388	-0.2201	-0.5187	-0.1060(X_9), -0.0870(X_4) -0.0805(X_3), -0.0795(X_1)

244 * TIE = Total Indirect Effect   Residual = 0.693

245

246 **3.4 Path analysis of causal/explaining variables and diversity index for resource endowed**
247 **category of tribal youth**

248   The description of decomposition of the total effects against each of the twelve
249 causal/explaining variables into their respective direct, indirect and via effects, as transpired from
250 Table 5, gave the impression that as against six such variables which were having positive direct and
251 indirect effects on the occupational diversity, the six remaining variables were having negative direct
252 as well as indirect effect on that perceived consequent variable i.e. occupational diversification. In that
253 respect, asset endowment (X_2) had the highest positive direct as well as indirect effect on the diversity
254 index followed by land holding size(X_1); economic motivation (X_7); social participation (X_{11}); annual
255 expenditure (X_4); and social inclusiveness (X_{12}). On the contrary, annual income (X_3) emerged to have
256 highest negative direct as well as indirect effect on the occupational diversity and that was followed in
257 descending order by decision making ability (X_8); cosmopoliteness (X_{10}); education (X_5); dependency
258 ratio (X_6); and achievement motivation (X_9). Another important revealing feature of the path coefficient
259 values was that excepting for the variables like dependency ratio (X_6) and social participation (X_{11}),
260 the direct effects channelled by all other explaining variables were smaller in values than the
261 corresponding values of indirect effects to imply their mutual dependencies among themselves and,
262 thus, to establish that for the resource endowed category of tribal youth also occupational
263 diversification had been the consequence of a complex interplaying of the causal/explaining variables.

264   Table 5 was further suggestive that the variables like asset endowment (X_2), annual
265 expenditure (X_4), cosmopoliteness (X_{10}), dependency ratio (X_6), social inclusiveness (X_{12}) etc. had
266 substantially interplayed in channelling their indirect effects through the important predictor variables.
267 While asset endowment (X_2) channelled highest indirect effect of as many as eight other variables to
268 establish its immense networking with others, the variables like annual expenditure (X_4) by way of
269 proven networking with seven others; cosmopoliteness (X_{10}) with five; education (X_5) and social
270 inclusiveness (X_{12}) four each; and land holding size (X_1), annual income (X_3) and economic
271 motivation (X_7) – all with three variables apiece - came out to be the other valuable ones in the whole
272 process of occupational diversification. But, the residual value being 0.3916, it might be inferred that
273 the constellation of antecedent variables could not explain 39.16 per cent of variations in the values of
274 consequent variable i.e. occupational diversification.

275

276 **Table 5. Path coefficients showing effects of perceived explaining variables on diversity index**
277   **for resource endowed category of tribal youth (N=60)**

278

Explaining variables	Total effect	Direct effect	TIE*	Variable through which substantial indirect effects are channeled
Land holding size (X_1)	0.7753	0.2801	0.4952	0.0890(X_{12}), 0.0854(X_7) 0.0791(X_2), 0.0765(X_4)
Asset endowment (X_2)	1.3598	0.3459	1.0139	0.2030(X_4), 0.1344(X_{12}) 0.1300(X_3), 0.1247(X_{10})
Annual income (X_3)	-1.4445	-0.5368	-0.9077	-0.3204(X_4), -0.2017(X_2) -0.1032(X_5), -0.0705(X_7)
Annual expenditure(X_4)	0.4184	0.1003	0.3181	0.0599(X_3), 0.0589(X_2) 0.0491(X_{12}), 0.0349(X_5)
Education (X_5)	-0.3135	-0.1442	-0.1693	-0.0501(X_4), -0.0333(X_1) -0.0277(X_3), -0.0237(X_9)
Dependency ratio (X_6)	-0.2953	-0.2188	-0.0765	-0.0296(X_1), -0.0202(X_2) 0.0196(X_8), -0.0123(X_5)

8

Explaining variables	Total effect	Direct effect	TIE*	Variable through which substantial indirect effects are channeled
Economic motivation (X_7)	0.6027	0.2701	0.3326	0.0824(X_1), 0.0578(X_2) 0.0576(X_{10}), 0.0516(X_4)
Decision making ability (X_8)	-0.6098	-0.2799	-0.3299	-0.0794(X_2), -0.0690(X_4) -0.0516(X_{10}), -0.0508(X_{11})
Achievement motivation (X_9)	-0.0814	-0.0362	-0.0452	-0.0128(X_{10}), -0.0115(X_2) -0.0067(X_4), -0.0059(X_5)
Cosmopoliteness (X_{10})	-0.3059	-0.1019	-0.2040	-0.0389(X_{12}), -0.0367(X_2) -0.0360(X_{10}), -0.0218(X_7)
Social participation (X_{11})	0.2483	0.1653	0.0830	0.0300(X_8), 0.0298(X_{10}) -0.0220(X_7), 0.0214(X_2)
Social Inclusiveness (X_{12})	0.1567	0.0475	0.1092	0.0233(X_4), 0.0185(X_2) 0.0182(X_{10}), 0.0151(X_1)

279

280 * TIE = Total Indirect Effect   Residual = 0.3916

281   As observed from Table 4 and 5 above, size of land holding (X_1) had significant effect on
282 livelihood diversification for both resource poor and resource rich respondents, though the effect was
283 higher for the former because of their livelihood more dependent on land. Tribal livelihood has always
284 been more or less dependent on land, but with redistribution of forest land with Forest Rights Act,
285 increased restriction on jhum cultivation, and non-remunerativeness of solely agriculture-based
286 livelihood, there is a need to rethink the use of land among the tribal communities, especially the
287 youth. Because of its limited availability and restricted use, farm-based agricpreneurship opportunities
288 promoting sustainable livelihood and eco-friendly agricultural practices needs to be promoted for
289 better income along with sustainable livelihood portfolio of the tribal youth. Consequently, it also
290 highlights the future research needs for identification of further explaining variables for proper policy
291 formulation and programme planning to increase income sustainability among rural tribal youth.

292 **4. CONCLUSION**

293   No society remains completely static. As the wheel of time moves on, many varying
294 combinations of occupation for livelihood emerges in accordance with temporal variations in scope of
295 movement of factors of production from one type of productive environment to the other. And in
296 accordance with the basic tenets of such dynamism of human society, these combinations of
297 occupations are subjected to take newer forms under the influence of determinants like economic
298 environment, socio-cultural factors, political system, land use pattern, etc. Now, in the face of a
299 presumably transforming intergenerational occupational pattern across the tribal youth of Tripura in
300 the face of newer socio-agro-economic order and contextual to no denying learning experience of the
301 study that definitely there had been complex interplaying of various socio-economic and socio-
302 personal determinants which singularly or in combination with a handful of other mutually
303 interdependent variables were regulating and/or influencing the occupational diversification of the
304 rural tribal youth, it has become imperative for the contemporary social scientists to study the
305 intricacies of such transformational process within this social milieu. From that perspective,
306 appearance of substantial residual values as outcome of path analysis exercises especially for the
307 resource poor category of tribal youth was indicative of the insufficiency in comprehensive inclusion of
308 causal/explaining variables. And being come across with such reflection, inclusion of supplementary
309 contextual explainers like land ownership vis-a-vis land use pattern, income seasonality, farm income
310 efficiency, efficiency of local/peripheral labour market, gender disaggregated access and entitlement
311 to resources etc. for throwing even better light on the issue is being called for while pursuing any such
312 future research endeavour.

313

9

314   **CONSENT**

315

316   Purpose of the study was explained and verbal consent was taken from the respondents before
317   collecting the data.

318

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