

Reang Women: Development, Autonomy and Fertility

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KEYWORDS Agency. Education. Family. Tribes. Tripura

ABSTRACT Using primary data collected through multistage random sampling design from 400 women respondents, this paper investigates the determinants of fertility among the Reang tribe of Tripura. Building on the demand theory of fertility which emphasizes the crucial role of socioeconomic development for fertility decline, and incorporating the effect of women's autonomy on fertility behavior; Poisson regression analysis has been employed to discern the determinants of children ever born, as a measure of fertility. Results indicate that Reang women with more years of formal education and higher autonomy levels bear fewer children, even after adjusting for other factors such as age at marriage, socioeconomic status and women's work status. Hence, policies aimed at promoting higher education of Reang women have to be implemented efficiently. Also, this study emphasizes the need to support processes and factors that increase women's autonomy as a route to reducing fertility among the Reangs.

INTRODUCTION

High population growth rates are one of the primary factors perpetuating poverty trap, and reducing fertility rates has been identified as a precursor to rural economic transformation and development (see for instance, Canning 2011). A large body of work reveals that fertility rates started to decline in India since the early 1970s (see for instance, Adlakha and Kirk 1974; Rele 1987). However, there are significant disparities in the level and rate of fertility decline among social groups in India. Not surprisingly perhaps, the fertility rates of India's tribes are the highest amongst various social categories and tribal fertility still remains above replacement level (IIPS 2017). Literature survey on the causes of fertility decline reveals that it has been the role of socioeconomic development, rooted theoretically in the 'demand' theory of fertility, which has been extensively examined in this context. Indeed, the demand theory of fertility has been the foundation of much of the empirical research on developing countries, including India (McNicoll 1992; Das Gupta 1995).

Research on fertility decline focuses on variables such as women's education, women's work

participation rate, urbanization, infant/child mortality and economic status; increases/improvements in which have been found to precipitate fertility decline primarily through reduction in 'demand' for offspring (Shapiro and Tambashe 1997; White et al. 2008; Guo et al. 2012; Brinker and Amonker 2013; Van den Broeck and Maertens 2015). However, it has been noted by several scholars that there is a strong possibility of bidirectional causality between infant mortality and fertility, and also that there is inconsistency in the relationship between women's paid work and fertility (Doepke 2005; Matysiak and Vignoli 2013; Kreyenfeld and Andersson 2014; Ahmed and Muftawu 2018). With regard to the latter, women's work tends to reduce fertility under circumstances where there is a potential conflict between women's paid work and childcare responsibilities (typically characterized by lack of Government or private childcare arrangements), but no such effect has been found where the possibility of conflict is minimum (which is typically the case in home-based work) (see for instance, Brewster and Rindfuss 2000). Remarkably though, among the various factors, women's literacy/education stands out as consistently significant in reducing fertility. In fact, the importance of women's education remains practically undiminished even in recent literature on fertility decline across nations including India (Brinker and Amonker 2013; Dharmalingam et al. 2014; Chandio et al. 2016; Mahanta 2016; Mohanty et al. 2016; Piotrowski and Tong 2016). However, fertility declines globally have hardly been limited to the socioeco-

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nominically better-off, but have rather cut *across* socioeconomic categories. Even in the case of India, fertility rates have declined sharply among the poor and uneducated (see for instance, Nagaraj 1999; McNay et al. 2003).

The theory of ideational diffusion has been advanced as an alternative explanation to the aforesaid phenomenon (Cleland and Wilson 1987; Montgomery and Casterline 1998). It essentially proposes that the fertility rate declines due to changes in attitudes (ideational diffusion) and behavioral innovation (use of modern contraceptives) in favor of the small family norm. The innovative “attitudes and behaviors become more prevalent in a population through their spread from some individuals to others, through informal face-to-face social interaction or at a distance through the mass media” (National Research Council 2001: 2), and thus bring about fertility decline at societal level. Even though, the routes through which diffusion of the small family norm occurs are not always entirely clear, apart from media exposure (television, radio, and hoardings), community interaction and cultural affinity have been put forth as potential channels of diffusion (Basu and Amin 1992; Guilmoto and Rajan 2001; Dev et al. 2002; Maharatna 2007). Having said that however, in nearly every society substantial fertility differentials do exist among socioeconomic groups, and overall evidence suggests that the demand and diffusion theories are best seen as supplementary/complementary explanations of fertility decline, and the innovation diffusion hypothesis expands the fertility decline theory by way of adding further independent determinants to it (National Research Council 2001; Maharatna 2007).

Remarkably, while mainstream demographic literature recognizes the role of women’s education and non-domestic work in fertility transition, it focuses on the household as a *single decision making unit*, assuming that all family members have similar reproductive preferences (see for instance, Becker 1981; Mason 1986). However, intra-household decision-making process such as fertility decisions must be analyzed in terms of *non-congruent* preferences. In addition to women’s financial/tangible resources (such as income and property ownership), this perspective emphasizes the role of non-financial factors such as sociocultural ones. “Social norms often define

how household members should conduct themselves, mediated by gender, age, marital status, and other social categories” (Schneebaum and Mader 2013). Indeed, several studies report significant effect of age, duration of marriage, kinship structure and social/religious group in determining fertility (see for instance, Malhotra et al. 1995; Govindasamy and Malhotra 1996; Unisa and Bhagat 2000; Dadoo and Frost 2008; Adhikari 2010). With the aforesaid changes, attention has largely shifted to women’s agency and autonomy as a critical factor affecting fertility decline. Research in recent decades has incorporated the multidimensional view of women’s autonomy (the standard dimensions being autonomy in household decision-making and movement). Majority of the studies find that higher autonomy leads to lower fertility/ children ever born (Kabir et al. 2005; Muhammad and Fernando 2010; Goni and Saito 2010 among others), though not without exceptions. Overall, while most models of fertility decline have emphasized the key role of economic resources equated with income and assets, other less tangible sociocultural factors, such as social capital and kinship ties, and the overall gender ideology of particular societies reflected in women’s autonomy, have emerged as crucial determinants of fertility decline.

On that front, one finds relatively scarce research on the subject of tribal fertility and its determinants, especially for tribes of Northeast, not merely from the historical viewpoint, but in the contemporary sense as well. In fact, the region as a whole has been left out of studies on fertility transition in India (exceptions being Rele 1987; Visaria and Visaria 1994; Guilmoto and Rajan 2001; Retherford and Mishra 2001; Sinha 2015 among a few others). Indeed, so far as the subject is concerned, studies on the fertility of tribes of Northeastern region appear few and far between and call for further serious research on the topic. Here, it could be mentioned that the ongoing Sanskritization/acculturation among tribes jeopardizes the historical high status and autonomy of women among them (see for instance, Hutton 1921; Furer-Haimendorf 1933; Chakravarti 1998; Elwin 1961; Maharatna 2005; Ellena and Nongkynrih 2018). In this connection, it is particularly imperative to examine the part played by women’s autonomy in determining fertility among the tribes, with a view

to comment on possible repercussions of declining women's autonomy on fertility.

Objectives of the Study

Given the crucial importance of investigating the determinants of fertility among the tribes of Northeast India, this study tries to fill the void by examining the factors shaping the fertility of Reang tribe of Tripura. The Reangs are one of the most socioeconomically backward tribes of India and in fact, the only particularly vulnerable tribal group of the state of Tripura, identified by the Government of India. There are no previous studies on the fertility behavior of Reangs to the best of the researchers' knowledge. Given this background, the main objectives of the study are:

- (i) To investigate the socioeconomic factors that determines fertility among the Reangs.
- (ii) To specifically examine and comment on the impact of Reang women's autonomy on their fertility.
- (iii) To determine if, and to what extent, fertility is influenced by sociocultural factors among the Reangs.

MATERIAL AND METHODS

The paper is based mainly on primary data collected on Reang women. However, standard secondary data sources viz., the Census of India and National Family Health Surveys, have been used to support data collection and findings. The Reangs (or *Bru*) are the second largest tribe residing in Tripura after the Tripuris, inhabiting three erstwhile districts of the state- North Tripura, Dhalai and South Tripura. This particularly vulnerable tribal group with a total population of nearly 1.89 lakh constitutes nearly 5 percent of the total population and around 16 percent of the total tribal population of Tripura (Registrar General 2013). The Reangs also inhabit other North-eastern states viz. Arunachal Pradesh, Assam, Manipur, and Mizoram and the Chittagong Hill Tracts (CHT) in Bangladesh. However, 93 percent of the Reang population within India is concentrated in Tripura alone.

Information has been collected from 400 Reang women residing in two erstwhile districts of Tripura- South Tripura and Gomati districts using multistage random sampling design. Data col-

lection started during August 2017 and ended on December 2018. At present, South Tripura and Gomati districts contain 16 Blocks, out of which 10 blocks (Amarpur, Karbook, Matarbari, Ompi, Kakraban, Bokafa, Jolaibari, Rajnagar, Hrishyamukh, and Bharat Chandranagar) are inhabited by the Reangs. Out of these 10, 4 blocks (Kakraban, Rajnagar, Hrishyamukh and Bharat Chandranagar) have negligible number of Reang families (Reang 2018). Therefore, these blocks have not been considered for data collection. Out of the remaining 6 blocks, 4 blocks with the highest level of rural female literacy rate, viz., Matarbari, Amarpur, Bokafa and Jolaibari have been selected for data collection. From each of the selected blocks, one village council has been randomly chosen (viz., Chandrapur R.F., Paharpur, Laxmichhara and Kalshimukh). Finally, 100 Reang women respondents (between 15 and 49 years of age) have been randomly chosen from each village council distributed over the numerous hamlets/villages. Informed consent was obtained from all respondents.

Method of Statistical Analysis

In this paper, Poisson regression has been used to model fertility, measured as children ever born (CEB). Since, the dependent variable (CEB) is non-negative and discrete, the Poisson regression model is most suited for the analysis, even though researchers have used ordinary least squares regression in many instances (Cameron and Trivedi, 1998). In Poisson regression, it is assumed that children ever born (Y) follow the Poisson distribution:

$$\Pr\{Y=y\} = \frac{e^{-\mu} \mu^y}{y!}$$

where μ is the mean for $\mu \geq 0$, and $y = 0, 1, 2, \dots$

The Poisson regression is a log-linear model that assumes the form:

$$\ln(\mu(X)) = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \dots + \beta_n X_n$$

Here, α is the intercept term and β 's are the Poisson regression coefficients and μ is an exponential function of the independent variables, such that

$$\mu = e^{(\alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \dots + \beta_n X_n)}$$

The regression coefficient can also be expressed as $Exp(\beta)$, called the incidence rate ratio (IRR). The IRR represents a multiplicative effect

such that one unit increase in X leads to increase in the mean of the dependent variable by a factor of $\exp(\beta)$.

Informed by the aforementioned theoretical perspectives and empirical research on fertility determinants, the independent variables used in the Poisson regression include basic demographic and socioeconomic variables viz., duration of marriage, age at marriage, household structure, education of woman, working status of woman, husband's education, husband's occupation, women's household decision-making autonomy and asset category of the household. The primary reason of choosing this particular measure of women's autonomy is comparability with other studies. Increases/improvements in all these factors are hypothesized to have a depressing effect on fertility. Dowry and consanguineous marriage reflect sociocultural influences on the number of children born. Acculturation and thus the payment of dowry is hypothesized to reflect acceptance/diffusion of a more patriarchal/non-egalitarian mindset and hence increase number of children born, whereas consanguinity is expected to increase fertility by reducing opportunity cost of child-rearing by sharing childcare responsibilities with natal family. Due to the influence of age on the work status of women, an interaction term of these two variables has also been introduced in the model. Media exposure has been factored in as a variable capturing diffusion of the idea of small family norm and knowledge about family planning methods. Alongside, a dummy for district has been included to control for the effect of various developmental factors that differ by district but have not been included in the model. It should be mentioned here that contraceptive use has not been included as an independent variable because practically all Reang women have been found to use contraceptives, both permanent and temporary methods, only after reaching desired family size. Hence, contraceptive use cannot be included as an independent variable in this study. All the independent variables are categorical except age at first marriage, conjugal duration and educational attainment of woman and husband. All the categorical variables are coded as binary variables except husband's occupation and media exposure. Husband's occupation has three categories, viz. cultivators, agricultural laborers and salaried. Media exposure also has three categories- exposure to television/radio daily, at least once a week and less than once a week.

Even though the other variables are self-explanatory, the construction of the standard of living index and household decision-making autonomy index deserve explanation. The standard of living index has been constructed using the following assets: type of house (*kaccha/pacca*), ownership of house/land ownership, gas stove, bicycle, motor cycle, mobile, refrigerator, color television, electric fan, table, chair, bed, and ownership of livestock. The weight attached to each of the asset is as suggested in the National Family Health Survey (Smith et al. 2003). The asset index value of the Reang households ranged from 8 to 26. In this study the households have been classified into two categories, viz., high and low standard of living households, based on the median value of 17 of the asset index. Classification using the median value resulted in 73.3 percent of the households falling in the low standard of living category.

Further, the questions included for constructing the household decision-making are (1) Who regularly takes decisions about major household purchases (2) Purchases for daily needs (3) Visit to family and friends (4) Own health care and (5) How to spend family's total income. The responses vary among three possible (pre-coded) ones, that is, decisions made by husband and/or others (coded 1), decisions taken jointly by husband and wife (coded 2) and decisions made solely by woman (coded 3). Principal component analysis has been used to generate regression scores. Cronbach's alpha value for the household decision-making index is 0.77 and shows acceptable degree of reliability of the constructed index.

RESULTS

Basic Description of the Sample

Tables 1A and 1B presents the demographic, economic and, sociocultural profile of the Reangs based on this study's sample. An examination of Table 1A reveals that the mean age of the women in the sample is around 30 years and that of the husbands is higher at around 34 years. As can be seen from the table, the educational attainment of Reangs is distressingly low. On average, Reang women have been found to have obtained merely 6 years of formal schooling while their husbands are only just slightly more educated. Remarkably

Table 1A: Basic demographic characteristics of Reang sample

<i>Variables</i>	<i>Minimum</i>	<i>Maximum</i>	<i>Mean</i>	<i>Median</i>	<i>Mode</i>
Age of woman	15	48	30.3	30	25
Woman's years of formal education	0	17	6.1	7	0
Children ever born	1	7	2.1	1.8	2
Age at first marriage (overall)	14	35	18.9	18	18
Age at first marriage (<i>Consanguineous marriage</i>)	14	27	19.1	18	18
Age at First Marriage(<i>Non- consanguineal marriage</i>)	13	35	18.8	18	18
Husband's Age	19	60	33.7	33	30
Husband's years of formal education	3	17	7.2	9	10
Duration of marriage	2	30	11.0	10	8

Source: Field survey 2017-18

though, the modal year of education for the Reang men (husband) is 10 years, while for women it is zero, highlighting the lack of education among a large proportion of Reang women. The average figure for children ever born (CEB) is relatively modest at 2.13 children per woman. However, there are significant divergences in the average CEB among various age-groups. While the average CEB for the age-group 25-29 years is around 1.7, that for the age-groups 35-39 and 40-44 is 2.23 and 2.43 respectively (not shown in Table 1A). Also, it is particularly remarkable that the minimum age of marriage among the Reang women has actually decreased overtime, and is around 14 years in the sample, as against 17 years reported in earlier studies (for instance, Acharyya 1995). This finding points towards negative repercussion of acculturation among the Reangs, wherein they have adopted the norm of early marriage as practiced by their non-tribal counterparts, as anticipated by scholars (see for instance Maharatna 2005). In fact, as can be seen from the table, the mean age at marriage among women with traditional consanguineous marriage is slightly higher (19.1 years) as compared to others (18.8 years) (Table 1A). Needless to say there also appears to be a strong connection between declining age at marriage and lack of higher education and/or job opportunities among Reang women, which could be reinforcing the acculturation process.

Coming now to Table 1B, it is seen that the majority of the men are employed in the agricultural sector. While 58 percent till their own land, around 28 percent are employed as agricultural laborers. The remaining men (around 13%) are engaged in the services sector. However, it is quite alarming to note that that among the Reang wom-

en, 29 percent have reported themselves as not engaged in any directly productive/income-generating activity. In fact, Census data reveals that there has been a sharp decline in work participation rate among Reang women at least since 1961, and what is more, there has been a continuous decline in proportion of cultivators and increase in agricultural laborers among them (Sinha 2020). The present study finds that the proportion of cultivators is around 40 percent and a significant 22 percent of women are working as agricultural laborers (Table 1B). Also, standard of living measured by asset ownership reveals that more than 70 percent of the Reang women belong to the lower standard of living category.

Table 1B: Economic and sociocultural characteristics of Reang sample

<i>Variables</i>	<i>Percentage n=400</i>
<i>Occupation of Woman</i>	
Cultivator	39.6
Agricultural labourer	22.0
Service	9.3
Not working	29.0
<i>Occupation of Husband</i>	
Cultivator	58.0
Agricultural labourer	28.2
Service	13.7
Relatively lower standard of living	73.3
Dowry payment	17.4
Consanguineous marriage	30.3
High household decision-making autonomy (index)	51.8

Source: Field survey 2017-18

Acculturation among the Reangs is also evident in the adoption of the dowry system. Nearly 17 percent of the respondent women said that

dowry, in the form of cash or household items like television, sofa set, and wardrobe, was proffered by their parents. This is glaringly different from the traditional system of bride-price prevalent among them. However, a high proportion of Reang women (around 30%) also report consanguineous marriage, which is equally true of young women (15-30 years). Finally, the household decision-making index reveals that nearly half of the Reang women in the sample have high autonomy (primarily reflecting joint decision-making with husband; percentage of women reporting sole decision-making being extremely small). However, as expected, there are sizeable differences in the proportion of women who express high autonomy for individual household decisions. Specifically, while nearly 90 percent of the Reang women report joint decision-making in the case of visit to family and friends and decisions regarding their healthcare, the proportion is much smaller in the case of decisions regarding pur-

chase of expensive items and those concerning disposal of total family income. Thus, for decisions concerning purchase of expensive items, women report joint/sole decision-making in around 30 percent of the cases, and on the question of disposal of total family income, 55 percent of women report joint/sole decision-making (not shown in Table 1B).

Results from Regression Analysis

Table 2 reports the results of Poisson regression. SPSS 21 has been used for the analysis. The dependent variable in the regression is children ever born. Conjugal duration, not unexpectedly, has a significantly positive effect on the number of children borne by Reang women. Every one year increase in the conjugal duration is found to increase the number of children by around 3.7 percent. Woman's education turns out as statistically significant and decreases the number of

Table 2: Results of Poisson regression analysis: Determinants of children ever born among Reang women

Independent variable	Raw coefficient <i>a</i>	95 percent Wald confidence interval		Incidence rate ratio <i>exp</i> (β)	95 percent Wald confidence interval	
		Lower	Upper		Lower	Upper
District South Tripura (Ref: Gomati district)	-0.064	-0.061	0.605	0.938	0.860	1.022
Age at marriage	0.001	-0.014	0.013	1.000	.986	1.014
Duration of marriage	0.037***	0.027	0.047	1.037***	1.027	1.048
Education of woman	-0.012**	-0.022	-.001	0.988**	0.978	0.999
Woman working(Ref: Not working)	0.191	-0.149	0.532	1.211	0.862	1.702
Asset Group: High (Ref: Low)	-0.134***	-0.220	-0.047	0.875***	0.802	0.954
<i>Media Exposure (Ref: Daily)</i>						
At least once a week	0.021	-0.059	0.101	1.021	.943	1.106
Less than once a week	0.018	-0.095	0.132	1.019	.909	1.141
Husband's Education	0.000	-0.012	0.011	1.000	.988	1.011
<i>Husband's Occupation (Ref: Cultivator)</i>						
Agricultural labourer	0.004	-0.111	0.120	1.004	0.895	1.127
Salaried	-0.065	-0.152	0.021	0.937	0.859	1.022
Household decision-making autonomy high (Ref: Low)	-0.151***	-0.230	-0.071	0.860***	0.795	0.931
Household structure: Joint (Ref. category: Nuclear)	0.052	-0.035	0.140	1.054	0.966	1.150
Dowry: Yes (Ref. category: No)	-0.117*	-0.217	-0.017	0.890*	0.805	0.984
Consanguineous marriage: Yes (Ref. category: No)	0.102**	0.023	0.180	1.107**	1.023	1.197
Work and age interaction term	-0.002	-0.013	0.009	0.998	0.987	1.009
Intercept	0.272*	-0.061	0.605	1.312*	0.941	1.831

Note: *** indicates significance at 1 percent level;

** indicates significance at 5 percent level; * indicates significance at 10 percent level

children, with every one year increase in education leading to decrease in the children ever born by 1.2 percent. Socioeconomic status (asset category) of the household has a significant impact on number of children and it is found that higher standard of living reduces CEB by 13.4 percent. However, any significant effect of work status on fertility is not found. This is perhaps not surprising as Reang society is primarily agrarian with most of the women engaged as cultivators or agricultural laborers to accentuate family income. In such a case it is less difficult to substitute women's labor due to omnipresence of disguised unemployment among them.

Interestingly, dowry payment is associated with lower number of children, and payment of dowry reduces the CEB by nearly 12 percent. Nonetheless, it must be mentioned here that interaction with Reang men and women revealed that the payment of dowry is till date not obligatory. In fact, families that are relatively well-off have adopted the custom of dowry payment to the daughter's affinal family and here it has been found that a significant relationship exists between occupation of parent and dowry payment. While nearly 40 and 20 percent of salaried and settled agriculturist parents respectively were found to pay dowries, just around 7 and 2 percent of daily laborers and those primarily working as shifting cultivators were found to pay dowries (not shown in Table 2). In a way then, this association reveals that women whose natal families are relatively rich have a greater power in decision-making in the affinal family too (which could also be affected by current and future expectations of wealth flow from the bride's family). Also, consanguinity is found to have a significantly positive effect on CEB. Those women, who have been married with cognates, bear 10.2 percent more children as compared to others (but more on this in the following section). However, household structure and media exposure do not have any significant effect on children ever born. Likewise, husband's characteristics, viz. husband's education or occupational category do not have any significant effect on the number of children born, after controlling for other factors.

Finally, the household decision-making variable is also highly significant and women who have high decision-making autonomy have 15.1 percent less children as compared to those with

low autonomy. In fact, many studies have reported highly significant negative associations of household decision-making autonomy and number of children (Audinarayana 1997; Hindin 2000), even though there are a few exceptions (see for instance, Jejeebhoy 1991). Household decision-making autonomy turns out to be significant even after taking various demographic and socioeconomic variables into account, and underlines the importance of self-efficacy in determining fertility outcomes.

DISCUSSION

In this paper, an attempt has been made to shed light on the key determinants of fertility, defined as children ever born, among the Reangs of rural Tripura. The results broadly support the findings of earlier work on the determinants of fertility. However, results from regression analysis provide stronger support for the demand theory vis-à-vis the diffusion hypothesis of fertility decline. Socioeconomic factors viz., woman's education and socioeconomic status of household along with woman's autonomy have been found to be significant determinants of children ever born among Reangs, whereas media exposure has no significant effect on it. Nevertheless, it should be mentioned here that education has been hypothesized in literature not only as embodying socioeconomic development *but also as* a conduit of ideational diffusion. In fact, education has been conceptualized within the diffusion hypothesis framework as facilitating fertility decline through 'cognitive' changes rather than actual change in socioeconomic circumstances because even a few years of formal schooling, which cannot have a perceptible influence on women's work or status is found to be associated with significantly lower fertility (Cleland and Wilson 1987). In this context, given that the average educational attainment of Reang women is little more than primary schooling, it may be argued that woman's educational attainment can hardly change family dynamics through economic incentive (in terms of prospective loss in income) or through improving bargaining power (by opening up alternatives for self-sustenance). Hence, the likelihood that woman's education actually lowers fertility through ideational change and diffusion of the small family norm cannot be denied.

Be that as it may, even after adjusting for a multitude of socioeconomic variables, such as standard of living of the household and husband's occupational characteristics, female education remains a significant determinant of the number of children born. Indeed, research on the determinants of fertility decline, particularly in the case of developing countries, greatly emphasize the importance of female education in reducing fertility (Ushie et al. 2011; Kamal et al. 2012; Moeeni et al. 2014; Chandio et al. 2016; Mohanty et al. 2016). Therefore, women's education has an equally significant role to play in fertility decline in every social group/category (tribe/non-tribe). In fact, many studies have indicated that even after including other indicators of women's autonomy, education remains significant (see for instance, Woldemicael 2009).

Interestingly, alternative conceptualizations of the pathways through which women's education impacts fertility, have theorized it as impacting fertility *through* its effect on women's autonomy. However, women's autonomy has been discovered to have an independent effect on fertility even after controlling for education and work status (Hindin 2000; Samari 2015), as is the case in this study. There is a significant negative impact of women's household decision-making autonomy on children ever born. However, the evidence on the impact of woman's autonomy on fertility in literature is largely mixed. While several studies have noted significant negative effect of woman's autonomy on fertility (Dyson and Moore 1983; Hindin 2000); insignificant or positive associations of women's autonomy and fertility have also been noted in literature (see for instance, Jejeebhoy 1991; Upadhyay and Karasek 2012). To explain the contradictions, scholars have noted that the relationship between autonomy and fertility has been found to differ depending upon "the measure of empowerment used, sociopolitical or gender environment, or sub-population studied" (Upadhyay et al. 2014: 111). Indeed, women's autonomy can reduce fertility via several mechanisms, such as providing the capability to women to implement their fertility desires, assert their health needs within and outside the household, and reducing gender-based violence (Samari 2015). The results from this study support the proposition of independent influence of autonomy on fertility, even though lack of addi-

tional information prevents hypothesizing about the exact channel through which autonomy reduces fertility among the Reangs. Hence, economic or social changes that diminish women's autonomy among Reangs would lead to higher fertility among them, everything else remaining constant. Indeed, several scholars have noted that the historically high status and autonomy of tribal women is rooted in their economic contribution within the socio-economic organization that revolved around swidden agriculture (Boserup, 1970). However, this scenario is changing fast and tribal women are found to withdraw from directly productive activities and limit themselves to household work (Chakravarti 1998; Registrar General 2004; Registrar General 2013; Sinha 2020). From this perspective, it becomes important to ensure that the source of Reang women's autonomy in terms of their economic contribution to the household economy remains undiminished.

Also, sociocultural factors such as dowry and consanguineous marriage have an important function in fertility decline. Interestingly, as noted earlier, dowry payment has a significantly negative impact on fertility which runs contrary to the *a priori* hypothesis. This finding rather supports the argument that by increasing the resources of the affinal family and women's command over resources, dowry raises the position of the woman within the household and provides more voice/leverage in fertility related decisions (Srinivasan and Bedi 2007). However, that consanguinity should be associated with higher fertility is not unexpected and indicates that with 'modernization' and decline in traditional consanguineous marriages, fertility could be expected to decline significantly among the Reangs.

CONCLUSION

The present study identified several socioeconomic and cultural factors that shape rural Reang women's fertility. Women's education, women's autonomy, socioeconomic status of the household, consanguinity and dowry payments have been found to have a statistically significant effect on children ever born. The study finds that women's education and autonomy, along with socioeconomic status of household are crucial factors that reduce fertility of Reang women. Therefore, policies aimed at increasing the edu-

cation levels of Reang women have to be implemented proficiently. Further, as this study brings out, fertility is strongly influenced by women's autonomy, and therefore processes and factors that increase women's autonomy have to be supported as a route to reducing fertility among the Reangs. The study also brings out that with continuing modernization and changing marriage practices from consanguineal to non-consanguineal, fertility rates can be expected to fall to a large extent among the Reangs. Finally, socio-economic status of the household has been found to significantly reduce fertility among the Reangs. Hence, it is not just welfare of Reang women, in terms of improvement in their educational attainment and autonomy that has to be prioritized, but it is also the overall development of the Reangs that holds the key to successful transition to low fertility (and mortality) among them. However, this study also cautions against the regressive changes that might be afoot among the Reangs such as increasing prevalence of dowry and declining age at marriage, the latter being related to low educational attainment and/or lack of gainful employment among Reang women. Overall, the results emphasize the need to focus on the development of Reangs in general and the women in particular, as the viable route to completing the demographic transition.

RECOMMENDATIONS

The findings from this study emphasize the need for spreading education, especially higher education among Reang women. Women's education is the key factor behind fertility decline as indeed supported by related research cited in this paper. Also, women's autonomy has been found to play a significant role in lowering fertility, even after incorporating various socioeconomic and cultural factors in the analysis. As discussed in this paper, tribal women's productive work outside the household historically has had a crucial role in determining their relatively high autonomy within the household. Therefore, policies and programmes with a well-defined objective of empowering Reang women are required for the overall progress of Reang women, including reducing the burden of repeated child-bearing and caring. The lack of significance of women's work status in affecting fertility, indicates that in its present

form, agricultural work even on one's family land does not lead to any significant difference to women in terms of leverage in decision-making in critical dimensions such as fertility. This situation could be changed in at least two ways which are complementary. The first approach is to recognize Reang women as farmers in their own right so as to ensure that Reang women, who eke out a living by tilling land, and form the majority of the group of working women can avail of institutional opportunities in terms of loans and related items, and this could further their capability to negotiate outcomes that affect their wellbeing directly such as fertility. The second one is to diversify the skills of Reang women so that they may find jobs in the secondary and tertiary sectors, the independent income from which will similarly improve their bargaining capability within the household.

ACKNOWLEDGEMENT

I express my deepest gratitude to the Reang women of Tripura who took out time to answer my numerous queries. I wish to acknowledge Indian Council of Social Science Research for the Postdoctoral fellowship grant for this research work. I thank ICFAI University Tripura for providing me the facilities to complete the research paper. I also wish to express my sincere appreciation for my esteemed teacher Prof. Arup Maharatna, University of Allahabad, for valuable remarks on the paper.

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Paper received for publication in August, 2020
Paper accepted for publication in November, 2020