

Migration in remote tribal areas : Evidence from Bundelkhand region of Madhya Pradesh

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ABSTRACT: The paper makes an attempt to analyze and evaluate the migration in remote tribal areas, Bundelkhand region of Madhya Pradesh. The objective of this paper is to analyze the observations relating to seasonal migration from two villages Pospur and Kirchali located in respectively, Pati and Sendhwa Tehsil of Barwani district of Madhya Pradesh. We have used both qualitative and quantitative methods in data collection. The quantitative data were generated for 84 sample households during the year 2010-11. Study reveals that the seasonal migration resulted in about 20 to 33 percent of family members remaining out of the village for 4 to 9 months. Females usually migrate along with the male in the area, the female migration was about 43 and 50 percent of total migration from Pospur and Kirchali villages, respectively. On an average, a migrant family earns an additional sum of Rs.11160 per year from migration. After meeting the day to day expenditure at the destination and some purchases (clothes, shoes, transportation expenses etc.) the net saving accrued due to migration was about Rs. 5984 per family. However, in case of the resource poor (i.e. those with limited land as well as irrigation resources) migration is clearly a more effective option because of the limited “credit worthiness”. In fact migration in a dynamic context might help in enhancing the credit worthiness especially by improving the repayment schedule among these households. This would imply that given the limited land base and the uncertainty associated with the stream of income flowing from the land based activities.

Key Words: Migration, households, agriculture, tribal, Sadguru Water and Development (SWD) foundation.

A large part of chronic poverty is due to access failure to production resources, population pressure and shrinking size of landholding, recurring droughts and access failure to land-based livelihood, lack of off-farm employment avenues and consumption loan from the money-lenders resulting in a debt-trap that pulls people into chronic poverty. Seasonal migration in this tribal belt is regarded as an essential coping mechanism especially in response to shock including crop failure son's marriage, serious sickness etc.

Migration is a coping mechanism that provides means for debt servicing for the well-endowed it increases household's earnings, creditworthiness and ability to manage crisis. Breaking away from the neo-classical interpretations of determinants of migration, Mosse *et al.* (2002) argue that migration is not an external factor impinging upon or undermining agrarian society. The existing social relations and inequalities which define differential opportunities, constraining experiences and social outcome, profoundly shape it. Moreover, migration contributes to continuation and intensification of agriculture and social networks on which it depends, insufficient land, larger dependency within family and the poor are more likely to seasonally migrate than others, Sah (1999) argues that access failure to resources as well as constraints on markets influences seasonal migration. In the resource poor economy, the existing economic hierarchy collapses

during a shock like crop failure, droughts, sickness, death, son's marriage, gift in social ceremonies, dispute settlement, population pressure etc. In this situation, the heads of even larger landholding households also have to borrow to meet the eventualities. In order to repay such loans some of the family members of the household have to migrate. In what follows, we try to establish that during a shock depletion of assets and related borrowings has strong positive influence on intensity of migration. We have tried to establish in this paper that (i) a shock can induce a complex socio-economic process like access failure to food, debt-trap and depletion of assets, short-term land transactions, withdrawal of children from school and migration (ii) all locations and households do not respond in the same pattern, for some migration means livelihood option for others it means saving, asset information and technology transfer (iii) locational disadvantage in a shock can be overcome by investment in agriculture.

Materials and Methods

The objective of this paper is to analyze the observations relating to seasonal migration from two villages Pospur and Kirchali located in respectively, Pati and Sendhwa Tehsil of Barwani district of Madhya Pradesh. The study pertains to the year 2010-11. We have used both qualitative and quantitative methods in data collection. The qualitative data provided and understanding

on the extent and patterns of migration and its consequences which were developed using wealth ranking exercise, case studies and group discussions. The quantitative data were generated for 84 sample households that provide information relating to incidence and intensity of seasonal migration, income and saving from migration and the correlates of migration.

The variation in intensity of migration across households is explained by variation in the following explanatory variable: family size, dependency ration of the family, depletion of own agricultural land due to drought, bullock loss and cereal consumption during rainy season as percentage to normal cereal consumption. We have not attempted to run a logit model for, the question we are interested is why some households decide to migrate for longer duration with more migrant members rather than just their decision to migrate or not. Regression analysis is a better option in this situation. The regression analysis is done for all the 84 households irrespective of the states of migration, as well as for 60 migration households. About 33 percent of the total variation of the dependent variable is explained by the explanatory variable, when all households were considered in the analysis. On the other hand, the explanatory power improves if the analysis is done only for migrating household over 57 percent of the total variations in intensity of migration amongst the migrating households are explained the explanatory variable considered.

Results and Discussion

There are evidences that even in the early 1970s, up to 40 percent of the total working population of Eastern tribal belt of Gujarat migrated seasonally in search of livelihood (Government of India, 1974). Agriculture is the main economic activity in both Kirchali and Pospur village during normal years. But agriculture does not provide sustenance for the whole year for a sizeable number of households even during normal years. Poor quality of land, insufficient land holdings and low productivity are the main reasons that forced households to resort to laboring in and around the villages. This also forces some households to work in cotton gins in Sendhwa or migrate seasonally. In abnormal situation like 2010-11 about 92 percent of households from Pospur and about 40 percent of the households from Kirchalli have reported seasonal migration of some of their family members. The major reasons for larger migration from Pospur in comparison to Kirchali of remoteness, its difficult and undulating terrain, poor soil and indifferent agricultural productivity, lack of employment opportunities and larger borrowings. Relative remoteness of Pospur in terms of its physical dis-

tance from agro-processing and industrial markets has resulted in significantly higher reliance on the seasonal migration of households, where as in Kirchali, which is relatively less remote. Non-farm employment opportunities in Sendhwa are important economic support that provides cash to the households for about 5-6 months after the kharif harvest. In comparison to the adjoining tribal areas, the south western belt does not seem to be much different in terms of extent of migration about 48 per cent of the tribal households in 2010 in Jhabua (West Madhya Pradesh), Banswara (South Rajasthan) and Panchmahals (East Gujarat) had to opt for seasonal migration for their livelihood (Buch, 2012). Drought not only has repercussion that disrupts the economy but also has socio-cultural implications. Apart from depletion of milch animals, reduction in availability of food and fodder and increased debts coupled with increased intensity of seasonal migration, the households also face serious non-economic problems like withdrawing children from school, doing work that in normal situation they would not have preferred, sending out old members of the family to relatives, inability to settle hospitalization bills etc.

Table-1 reveals that the migration owing to drought, with whole family and taking care of siblings were the main reasons for withdrawal of children from schools. Significantly, drought affected families, opted for larger out migration both in terms number of members migrating and duration of migration. Some migrants, in distress, remained outside the village even during festivals like Diwali and holi. Food availability alarmingly reduces during monsoon when food stock depletes and current harvest would reach the hearth after nearly four months. For a large number of poor households, boiled cereals called Rab becomes staple food. Non-availability of fodder and mol nutrition resulted in loss of milch animals where as goat and sheep herds deplete because of additional demand for cash. Borrowing from Bonia located in market increases in order to repay the loans, the intensity of migration during of migration and number of family members who would migration increases as the effects of drought was significantly harsh in Pospur than Kirchali. It would be worthwhile to understand the pattern separately in Pospur and Kirchali. The odd-ratio for withdrawal of children from school reveals the households located in Pospur and 4 times more likely to withdraw their children from school rather than not compared to Kirchali. Similarly the incidence of old family members being sent out, reduction in food consumption, depletion of milch animals and increased migration was 3 to 5 times more in Pospur than Kirchali. The adverse effects of drought on migrant families were much harsher than

Table-1: Drought and its implication for household's livelihood.

Particulars	Percentage households	Odd ratio	Difference	of
Withdrawing child from school	17	4	(+)***	
Started doing degrading jobs	26	NS	(+)*	
Old family members sent out	12	4	(+)**	
Increased land mortgage	29	NS	NS	
Reduction in food consumption	77	3	NS	
Depletion in milch animals	78	5	NS	
Increased debt	74	NS	(+)**	
Increased intensity of migration	60	5	(+)***	
Unpaid hospital bills	37	NS	NS	
Fodder availability reduced	5	NS	NS	
Sort term land transitions	7	NS	NS	

Source – Sah and Shah (2003)

Notes: (a) odd ratio of incident taking place rather than not in Pospur compared to Kirchali = (frequently event taking place / frequency of event not taking place in Pospur, frequently of event taking place / frequently of event not taking place in Kirchali), (b) significant difference between migrant and non migrant households + those who *** and ** significant at 10, 5 and 1 percent level respectively.

NS = Not significant.

non-migrating families. Withdrawal of child from schools, during odd jobs that they would not have preferred to normal circumstances, old family members being sent to relatives, increased their debt and increased intensity of migration etc. were reported significantly more in the case of households that had resorted to migration than those they did not migrate. Although both remoteness and bad agriculture super impose each other in forcing migration. Subsequent analysis would establish that it is falling agriculture which is relatively more important than relative remoteness in explaining the migration.

As the implication of shock for some households are more adverse than others, it can be argued that those affected more may decide to migrate if the case may be so, examining the asset distribution within the sample is warranted. In a resource poor economy like south western Bundelkhand and Madhya Pradesh, where the concept of asset are synonymous to possession animal and silver. We find that asset position of migrants is significantly poor compared to non-migrants. The evidences relating to drought indicate that a social process of indebtedness, repayment, short term loan transaction and migration starts when savings are not enough to sustain the current consumption.

The seasonal migration resulted about 20 to 33 percent of family members remaining out of the village for 4 to 9 months. Females usually migrate along with the male in the area. The female migration was about 43 and 50 percent of total migration from Pospur and Kirchali, respectively. But the high female migration is not abnormal studies (Mosse *et al.*, 2002; Sah, 1999 and Breman, 1996) have also found that migration of family groups in order to maximize the productivity of their labour is quite common to the western tribal belt. Although the member of households and total members who migrate was relatively higher in Pospur and Kirchali, the duration of migration was more in the latter. On an average, intensity of migration was 13 person -Month in Pospur and 18 person-Month in Kirchali (Table-2). The findings relating to pattern of migration can be summed up as follows: (a) seasonal migration in the study villages is forced by access failure to food and falling agriculture. The move the un-sustainability in agriculture, the more is seasonal migration (b) average migration is about 2-3 members per households and such households that resorted to migrate, remain out for about 13 to 18 man-months per household. (c) the remoteness of the area creates paucity of off-farm employment in the nearby areas, forcing the migrants to move

Table-2: Migrant households and their resource position.

Particulars	Pospur	Kirchali	Difference between	
			Village*	Migrant-Non-migrant
Total households	250	212	-	-
Surveyed households	47	37	-	-
Size of family	7.1	8.1	-	NS
Tribal male workers household	2.2	2.4	NS	NS
Tribal female workers households	1.9	2.3	NS	NS
Per capita land (acre household)	0.63	0.57	NS	*
Silver (Kg/household)	0.15	0.32	NS	NS
Loss of silver (Kg/household)	1.2	3.2	NS	NS
Size of farm (acre/household)	4.3	4.4	NS	-
Percentage of holding irrigated	19	41	**	NS
Loss of land due to drought	0.8	1.7	NS	NS
Food consumption as per cost of normal				
2012-13	85	93	*	-
2011-12	77	90	**	-
2010-11	69	90	***	-
Percentage of households migrating	92	46	***	*
Percentage of family members migrating	33	20	**	-
Female as percent of total migrant	43	1.2	**	-
Migration per households	2.3	50	**	-
Migration intensity (Main month)	13	18	**	-

NS= Not significantly different

***, **, * significantly difference at 1, 5 and 10 percent level

Table-3: Income and savings from migration.

Size-class of holding	Income	Saving
Marginal	6352	2409(11)
Small	1189	6867(37)
Medium	13304	6540(12)
All	11060	5984(60)
Factors land holding size-class	NS	

Figures in parentheses are the member of households

to agriculturally vibrant Nimar plains and sugarcane fields of South Gujarat and Northern Maharashtra (d) migration in the last ten years is more for survival rather than for supporting capital formation (e) female migration is as high as male migration (f) migration is a group activity which attracts households in distress taking certain decision-relating to choice of destination, movement, stay and coming back between to look after remaining family members in the village-together.

Bulk of migrants from the study villages is engaged in on-farm employment. In most distressed situation,

they work on farms as contract labour-family for whole year in Maharashtra, termed as 'saalee'. About 70 percent of the migration is around the fertile Nimar valley with in 40 km to 80 km from the village. Patidars, who settled in the fertile plains around a century back, employ the migrants as farm labourers. The remittance back home depends on the extent of migration in man-months a family has the number of days the migrants could find employment and cost of stay at the destination. Household income and saving from migration are significantly higher if total number of migrants was

Table-4: Factors explaining intensity of migration.

S.No.	Explanatory variables	Within households	
		All	Migrants
X ₁	Size of family	0.994**t(III)	2.446***(I)
X ₂	Dependency ratio	-2.3125***	-4.671***(III)
X ₃	Change in silver possession	-1.725***(I)	-1.452***(II)
X ₄	Change in own land		4.125+
X ₅	Change in Bullock possession	4.446***	4.573**
X ₆	Gap in expenditure	4.495**(II)	-1.684
	Constant	2.267	-7.582***
D ₁	Remote investment	-7.517***	-4.679
D ₂	Not so remote No. of investment	-5.936**	3.656
D ₃	Not so remote, investment	-5.101*	2.642
	R bar square (per cent)	39	65
	F	7.76***	14.56***
	Number of households	84	60

Notes- The regression equation is: $Y = a + b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4 + b_5x_5 + b_6x_6 + a_1 + a_2D_2 + a_3D_3 + e$

X₁ = Number of family member

X₂ = Percentage dependent to total numbers in the household

X₃ = Silver position to day-silver possession 5 yrs back in kg.

X₄ = Land to day in acre-land 5 yrs in back

X₅ = Number of Bullocks to day –number of bollocks 5 yrs back

X₆ = Expenditure today

e = error (or residual) value

***, **, * significantly difference at 1, 5 and 10 percent level

more. However, the income and saving across different size-class of holding is not significantly different (Table-3). On an average, a migrant family earns an additional sum of Rs. 11160 per year from migration. After meeting the day to day expenditure at the destination and some purchases (clothes, shoes, transportation expenses etc.) the net saving accrued due to migration was about Rs. 5984 per family.

Those migrants who opted to stay within 80 km radius earn much less as wages rates are depressed in the Nimar valley. But those who had moved to sugarcane fields in Gujarat and Maharashtra earn more for, each one could earn up to Rs. 160 per day. Female members however earn Rs. 10 to Rs. 15 less per day compared to male members. The savings from migration are usually created in harsh environment; humiliation by landowners, unhealthy and inhospitable staying many times under open sky, poor health facilities, isolated living, lack of educational facilities for children etc. Besides these,

the opportunities for getting employment for longer period of time area also doubtful. Hence, most of the households do not prefer to migrate for a longer time if the option for borrowing is still open. There are however, a few households which reported permanent migration of their close relatives in the last 20 years. The proportion of such households is 13 percent. Credit and migration work as supplement as well as substitute each other (Sah and Shah, 2003). Absence of good credit support is seen to be the major cause of migration, at last of distress type. However, in case of the resource poor (i.e. those with limited land as well as irrigation resources) migration is clearly a more effective option because of the limited "credit worthiness". In fact migration is a dynamic context might help in enhancing the credit worthiness especially by improving the repayment schedule among these households. This would imply that given the limited land base and the uncertainty associated with the stream of income flow-

ing from the land based activities migration becomes inevitable for most of the poor households. A 'good' credit support could reduce the burden of migration, where as a 'bad credit' system might increase it. But credit support per case can hardly be a substitute for migration unless both the household's resource base and the corresponding 'credit worthiness' are enhanced.

Table-4 presents the findings of linear regression analysis taking total person-months of migration from the households as dependent variable. The regression analysis is done for all the 84 households irrespective of the states of migration, as well as for 60 migration households. About 33 percent of the total variation of the dependent variable is explained by the explanatory variable, when all households were considered in the analysis. On the other hand, the explanatory power improves if the analysis is done only for migrating household over 57 percent of the total variations in intensity of migration amongst the migrating households are explained the explanatory variable considered.

We had considered land holdings and expenditure of the households as explanatory variables but the variation in size of holding and variation in total expenditure of households do not emerge significant explanatory variables in the analysis. This indicates that during an abnormal year larger agricultural land could not contain seasonal migration. What these findings. However, reconfirm is that unless a critical minimum area is available in dry land conditions. Many of the households even with relatively larger cropped area but without enough credit worthiness or savings to meet the implications of a shock like crop failure may have to resort to migration. It is also reveals that in distress situations, family with larger members could support large out-migration for more months than smaller families. Other factors remaining the same, as dependents increase in the households the intensity of migration reduces. This is not surprising for, with high dependency ration, larger work force will be needed to work on depleted agriculture as well as looking after the dependents. This

is a negative imperative of the workforce in the family during a shock, the resource poor households that have been larger intensity of the migration. The consumption behavior during a shock is revealing. The findings indicate that those households that had not resorted to migration during the references year were households whose gap in total expenditure compared to normal was higher. This implies that those who stay put had to suffer a welfare loss in terms of total expenditure. More migrants from a family and migration for longer duration tend to help in making a household's expenditure in distress period towards normal.

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