A Profile of Migrants and Analysis of Remittances In Smallholder Households in the Village of Molalatau -Botswana

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Abstract

At present, migration occurs almost only within the national borders. About one third of the interviewed families have reported receiving regular remittances. Remittances went mainly to resource-poor households, and do represent an important component of the incomes of the households in the bottom income group. They are found to have an equalising effect on rural income distribution. Therefore, education, as a means of attaining a job and income, remains a key livelihood strategy in rural Botswana. According to the results of the empirical model, the motivation to remit is induced and tempered altruism.

Keywords: Rural Botswana, migration, livelihoods, remittances.

1. Introduction

The paper is based on empirical research on smallholder¹ households' livelihood strategies in the village of Molalatau in Eastern Botswana². In that drought prone region, agriculture is risky and unreliable. Therefore, diversification and adoption of different livelihood strategies is the logical response by rural households to ensure a smooth stream of income throughout the year. Investment in the education of children, with the aspect for them in the future to find employment in the formal non-farm sector is a common strategy. In the next section, the paper provides a profile of the members of the study households who live outside the village, the profile will serve as an introduction to the main focus of the paper that will be the analysis of remittances to the study households.

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¹ In Botswana, the proxy for poverty is cattle holding. Those households with less than 40 heads of cattle are considered to be poor. In the village, the random sample was taken from those households. However, the 48 sample households have been divided into three income groups (very poor to better off).

² The study was conducted over a six months period, during which a random sample of 48 households was interviewed and studied in-depth. Unit of study is the household. However, in Botswana this alone would be inadequate to capture the diverse possibilities available to the households to make both ends meet. Therefore, data on absentees have also been collected.

Only regular private cash transfers to the household will be regarded. That is due to the cross-sectional character of the data. The share of remittances in the overall income portfolio of the different income groups among the households is presented in section 3. The focus of scrutiny, however, is on analysing the migrants' motives to remit. An appropriate multiple regression analysis model is used and is described in section 4. The paper ends with conclusions and policy recommendations.

2. Socio-economic characteristics of the migrants

Exactly tow thirds of the sample households have reported having members living elsewhere. According to the household definition of the study, these are not real household members, and therefore considered to be migrants. The total number of these migrants was 87, 30 females and 57 males (that of their households was 261 members, 114 males and 147 females). In contrast to the village population, the migrants were young and far better educated (table 1). This result is very expected and in fact almost axiomatic.

Table 1. Age and Education of Migrants and HH Members in years

_	Age in years		Years of Education		
	Members	migrants	Members	Migrants	
Mean	27,4	26,6	4,8	8,8	
Minimum	0,1	19,0	0,0	0,0	
Maximum	89,0	39,0	15,0	16,0	

As to the destination of migrants, 99% chose to live in urban areas. Over 50% of the females went to places not far away from home, like the nearest town of Selibe Phikwe and the nearest big village of Bobonong. Two thirds of the males were to be found in the capital Gaborone, in other towns and even in South Africa. Many of the families have houses and close relatives in the nearest town and the nearest big village. It seems that females, especially those with children, prefer to stay near their families, and/or that families simply do not allow the girls to stay far away from home, beyond any control.

Table 2. Place of residence of migrant members * gender of migrant Cross-tabulation

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place of residence		Gender of	Total	
of migrant				
members		Female	male	
Capital city	Count	9	26	35
	% within gender of migrant	30,0%	45,6%	40,2%
Nearest town	Count	12	13	25
	% within gender of migrant	40,0%	22,8%	28,7%
Other town	Count	5	11	16
	% within gender of migrant	16,7%	19,3%	18,4%
Nearest big village	Count	3	3	6
	% within gender of migrant	10,0%	5,3%	6,9%
Other village	Count	1		1
	% within gender of migrant	3,3%		1,1%
South Africa	Count		4	4
	% within gender of migrant		7,0%	4,6%
Total	Count	30	57	87

3. The Role of Remittances in the Household Income

In the past, migrant labourers in the mines and the commercial farms of the Republic of South Africa had formed a sizeable proportion of the Botswana adult male labour force. The cash amounts remitted by those migrant labourers back to Botswana had provided a substantial source of income to their relatives and families. Since the 1970s, new opportunities for employment have grown in Botswana's towns, as the hitherto stagnant economy underwent rapid growth. This is caused by the discovery and exploitation of diamonds and other mineral resources in the 1970s and 80s, and the related growth of the public and the service sectors. At present, migration occurs almost only within the national borders. About one third of the interviewed families have received regular amounts of money. The average was P 211,25 (Std. deviation 419,75) for all households. The relative share and importance of remittances to the livelihood of rural households compared to other household income sources are presented in table 3.

Table 3. % Share of different sources of income in the total income of the village households, by income tercile.

НН	Arable	Livestock	Other non-farm	Public	Remittances	% of
income	farming		income*	transfers		all
groups						income
Lowest IG	1,0	20,1	47,6	10,3	21,0	12,7
Middle IG	3,0	17,3	43,2	32,0	4,5	35,7
Highest IG	1,6	37,1	58,5	2,3	0,5	51,6
All groups	2,0	27,0	52,5	14,0	4,5	100,0

^{*} Includes wage, enterprises and property and rental incomes.

Though account only for 4% of the overall income of all groups, remittances, nevertheless, are received mainly by the lower-income groups, and do represent an important component of the incomes of households in the bottom income tercile, i.e. 21%. Therefore, remittances serve to mitigate income inequality. Remittances are, thus, found to have an equalising effect on rural income distribution. Coming entirely from internal migrants, the results are very much in line with the international literature own migration, that internal remittances are blamed only for a small proportion of the overall income inequality (see Adams 1996, and the literature cited there), which is very high in Botswana with 0,638 GINI coefficient for disposable cash income at the national level (HIES 1995, p. 59).

4. Empirical model

The central question of the paper is which variables explain the differences in amounts of remittances received by rural families. The theoretical discourse on the motivations to remit reaches from pure altruism to pure self-interest on the side of the senders of remittances. Using evidence form the study village, the paper seeks to explain these motivations. For this purpose, a multiple regression analysis was conducted. Each observation is one household with the total of 48 households in the sample. The dependent variable is the cash remittances received at the household in one year measured in Pula (in 1999, the exchange rate was 1US\$ = 4,45 P).

The independent variables are:

- Gender of the head of the household; female (FHH) = 1, and male (MHH) = 0.
- Age of household head in years.
- Number of goats died or lost because of the drought in that year, 1999.
- Public transfers in Pula received at the household in that year.
- Size of cattle holding reported by the households.
- Number of household rooms.
- Average years of education of the migrants of each household taken together.

Regression results

The results of the estimated coefficients on the explanatory variables are presented in table 4. The linear combination of the predictors is significantly related to the amount of remittances received at the households, F $_{7,47}$ = 5,632, p = ,000. The sample multiple correlation coefficient is ,70, indicating that 50% of the variance of remittances in the sample can be accounted for by the linear combination of the explanatory variables.

Table 4. Results of the regression model.

Variables	Coefficients	t-Values	
Gender HH head, f = 1	257,685	2,597**	
Age HH in years	9,164	1,763*	
Goats lost to drought	6,442	2,656**	
Public transfers	-0,182	-2,699**	
Cattle holding	-10,938	-2,041**	
No. Of HH rooms	49,685	1,204	
Migrants education	8,127	2,404**	

 $R^2 = .496$, adj. $R^2 = .40$

F = 5,632 Sig.,000

Dependent Variable: Remittances to HH in Pula last year.

^{**, *.} Significant at 5%, 10%, levels respectively.

Gender Aspects and Age of Household Head

Fifty-four percent of the sample households are female-headed. Male-headed households have higher incomes relative to the households of their female counterparts. The disparity in the mean disposable cash income between the two groups of households is quite apparent in table 5.

Table 5. Household income last year, in Pula

Gender of HH Head	Mean	N	Std. Deviation
Female	3535	26	2393
male	5973	22	5504
Total	4653	48	4253

It is clear from the model that the gender of the household head has a statistically significant effect on the amount of remittances sent to the household. 73% of the households receiving remittances are femaleheaded. FHH also account for 66,7% of the households within the lowest income tercile, but only 7,7% of the households within the highest income group. The effect of age is also positive and statistically significant. One explanation is simple and direct; it is usually not expected to find very young women having children older than 19 years. On the other hand, having a lonely old mother in the village is a kind of a social pressure on the children to care more for her well-being, and in the village that even has some bearings on the social status and prestige of the migrants of that household.

While female heads of households generally have few assets to bequeath, old men usually distribute their cattle among their children before reaching a high age. This leads us directly to the issue of inheritance.

Household Assts and the Aspiration to inherit

In Botswana, cattle is thought to be a good indicator of the availability of inheritable wealth in the household. Land (except for free hold land and state land) is a common property and is allocated by land boards. Under customary law, all Batswana (people of Botswana, men and women) irrespective of sex are entitled to land for their own use. The number of cattle holding in a household does negatively and significantly affect the annual amount of remittances send to that household. Hence cattle

holding is the indicator for wealth in rural Botswana, it follows that migrants tend to remit extremely more to resource poor households. The total number of household rooms has nothing to do, as an asset, with inheritance. Although not significant but having the right sign, it reveals a good deal of social behaviour when it comes to interaction between migrants and the village social arena. Therefore, it is kept in the model, and taken to reflect the intent by migrants to return home, permanently, some time in the future. In fact, migrants continue to maintain strong links with their areas of origin over extended periods of time, and family and other personal networks are crucial in maintaining these links between areas of origin and destination. The intention of young migrants, several years later in the future, to return home in a decent manner, or to invest in any sort of business in the village, or to get involved in grass roots organisations, or even in local politics depend predominantly on such contacts. Having a respectable place to stay in during visits to the village is for many migrants the first step to realise these plans.

Impact of Drought

Drought, generally, exposes the extent of poverty in arid and semi-arid rural Africa. In Botswana, those farmers who are comparatively wealthy, by the virtue of their cattle ownership or reliable access to wage incomes, are best able to cope with drought. Poor farmers usually don't have cattle, instead, they keep small stock. Goats are resistant to drought compared to cattle and have the function of saving banks for the poor. 1998 and 1999 happened to be years of drought in Botswana. The interaction between number of goats lost to drought and amount of remittances represents the response to drought by migrants. The effect is positive and significant, indicating that vulnerable households receive more remittances in the wake of such calamities like drought. This underpins the role of migrants as insurer to farming families in the face of natural risks like drought, which in no way a stranger to Botswana. The correlation of number of cattle lost to drought with remittances is small, negative and not significant, leaving no chance to trace any similar

reaction by migrants to the plight of wealthier households under conditions of drought.

Public Transfers

These are government provided funds that comprise old age pension (P110,00 monthly) which is paid to all Batswana older than 65 years of age, and the annual value in Pula of destitute help paid monthly to the very poor, in cash and in-kind. The effect of public transfers on remittances is negatively significant. Being aware of these payments, it seems that migrants carefully judge where and when to assist. However, elder people in rural areas have sparsely other needs than food and some beverages, needs that are well covered by the old age pension. And to qualify for destitute help, the household is presumed to have no support from the extended family, a situation that could add more to the explanation of the negative impact of public transfers on remittances.

Investment in the Education of Migrants

To test whether remittances are connected to migrants education in recognition of sacrifices made by the family during the long years of schooling, the impact of the sum of years of education of each household migrants on the amount of remittances to that households has been examined. The effect is positively significant. The result, however, does not reflect the widely acceptable statement that incomes increase with the level of education. As we can see from table 6, having attained more years of education is not *per se* a guarantee of good jobs.

Table 6. type of schooling* type of occupation Cross-tabulation

	*Occupation		•		Total
Type of	Not working	Small job(a)	Company(b)	Government(c)	
schooling					
No schooling		2			2
Primary	5	6	5	4	20
Junior	10	15	11	15	51
secondary					
Senior	3	1	2	3	9
secondary					
High				1	1
education					
Total	18	24	18	23	83

a) small job = shop assistant, filling station, etc.; b) company = construction, security service, etc.; c) government = soldier, police, teacher, driver, etc.

^{*} occupation by the government is better paid and more secured than by a company, that in turn is better than a small job.

Fifteen to twenty years ago, secondary school graduates were not many in Botswana. And during the period of the economic expansion, the public sector (the largest employer in the country) had absorbed almost all of them. Today, unemployment rates are very high in the urban centres of the country, 31% (Todaro 2000, p. 263). And the heavy influx of educated rural migrants has resulted in rising selection criteria of new employees. For the same wage, employers will prefer to hire people with more education, even though extra education may not contribute to better job performance (jobs that could formerly be filled by those with a primary education now require secondary training, and so on). And sectors like construction, that used to employ many of the youth are now stagnating. Nevertheless, the amount of remittances increase positively with the increase in number of years of schooling enjoyed by the household migrants. Because many families have mentioned that remittances are sent alternately by the migrants, the nearest explanation for this behaviour is that there is an understanding among the migrants to recompense the head of the household or the family for their efforts and forgone consumption to render migrants' schooling possible.

Reasons to Remit: Induced and Tempered Altruism?

There exist no rigorously derived answers to basic questions such as why do migrants remit. However, and without neglecting the mere human urge to care for the own family as the most common answer to the question, the following argument based on the regression results tries to gain an insight into reasons to remit in rural Botswana.

An aspiration to inherit can rightly be excluded as a justification for migrants remittances. The results show that larger amounts of remittances go to resource poor households. If the intention of migrants were to maintain favour in a line of inheritance, then they should have remitted more to families with greater amounts of inheritable wealth, cattle in this case.

The case for altruism is clear; migrants remit disproportionately more to FHH, that are generally poorer than MHH; they respond to the plight of poorer families caused by drought. But, migrants weigh their transfers against those of the government, received by the family, before sending

money back home. Also, aspects of self-interest are softly manifested in the sense that migrants tend to make arrangements for a possible future return to the village. All that lead us to the conviction that motivations to remit are induced and "tempered" (to borrow the expression of O. Stark, Stark 1991, p. 239) **altruism**. Induced by feelings of gratitude towards the sacrifices made by the family for their upbringing and schooling, by social sanctions at the village level, and tempered by a certain degree of self-interest and a guided economic rationale on the side of the migrants.

5. Conclusions and Policy Recommendations

Remittances are a crucial source of income for the poor in rural Botswana. Private cash transfers to the lowest income group in the village are twice as much as public transfers to the same group of households.

Education, as a means of attaining a job and income, remains a key strategy in rural Botswana for maintaining and increasing the general welfare of individuals and families. In spite of high rates of unemployment in the urban areas of Botswana, private investments by the rural households in secondary and higher education for their children can be considered as rational. For the poorest group in the study village, income from remittances is twenty times higher as that from arable farming under drought conditions like the season of 1999, and accounts for 21% of total household income. Bearing in mind that the survey was not designed as a migration/remittances study. This data limitation, in all likelihood, tends to underestimate the actual value of remittances – defined as money, goods and savings – received by migrant households. The conviction that the reason to remit is induced and tempered altruism, let us expect that this source of income will persist in the future. For the society as a whole, options of vocational training and job creation in the rural areas could be far better than the present policies. Indiscriminate educational expansion will lead to further migration and unemployment. The majority of the households are asking for the government to create jobs in and around the village area. In light of the scourge of aids (mainly among the youth in urban centres) and road accidents, this is a dire wish, and the old prescriptions of decentralisation and spatial allocation of development projects and investments are still valid for Botswana. On the other hand, the current debate in the parliament on the need to introduce cost-recovery and cost-sharing measures in the provision of education is largely uninformed, "Government's policy of free education is no longer sustainable, education minister G. Kgoroba said in Parliament (Botswana Press Agency ONLINE, 21/7/00)". And it is very much advisable to consider the impact on poor rural households before adopting such a move.

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