PACIFIC STUDIES

Vol. 9, No. 1 November 1985

MOTIVES FOR MIGRATION AND LAND PRESSURE IN SIMBU PROVINCE, PAPUA NEW GUINEA

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Internal migration is an important variable in the process of social and economic development. Accordingly, a number of social scientists have studied the causes and consequences of internal migration in Papua New Guinea (PNG). Studies have been carried out in single villages, rural regions, and urban areas, and include several comprehensive studies. Most were completed in the early to mid-1970s.[1]

Several survey articles review the literature written up until the early 1970s (Harris 1974; May and Skeldon 1977). In the period between December 1973 and January 1974, a major study of some 18,000 persons in 17 towns was carried out in the *Urban Household Survey (U.H.S.);* the major results are reported in Garnaut, Wright, and Curtain (1977), and May (1979). The *U.H.S.* revealed, inter alia, the importance of the Simbu Province as a source of urban migrants (Garnaut, Wright, and Curtain 1977, 34), and their relatively low mean incomes and high unemployment. Accordingly three Simbu villages, all located in the Gumine District, were among those chosen for intensive study by *The Rural Survey* 1975 (R.S.), which covered 50 villages and was carried out during December 1974 and January 1975.

The major results of the *R.S.* are reported in Conroy and Skeldon (1977), and its aims and methods are discussed in Clunies Ross, Cur-

tain, and Conroy (1975). The results for the three Simbu villages differ in some important respects from those for the rest of the nation. In particular, the rate of absenteeism was relatively low in Simbu and the propensity for migrants to return was relatively high. The predominant motive for migration from aI1 villages was economic and this was more pronounced in Simbu than elsewhere. The availability of land was a greater constraint than elsewhere, but even in Simbu it had only a minor influence on migration.

Simbu has the highest population pressure of any province in PNG, although by world standards its crude population density is modest. Average figures tend to hide considerable variation within the province, but the median crude density for the 22 census divisions in the early 1970s was about 50 persons per sq km. Several studies have attempted to monitor demographic changes and their relation to pressure on land (e.g. Howlett et al. 1976). A study covering the period 1957 to 1974 found evidence suggesting that pressure on land encouraged people to stay home (or to return home) in order, perhaps, to protect their land rights (Harris 1978).

This paper reports a study of migration patterns since the *R.S.* was carried out, that is, between 1975 and 1980. The three villages included in the *R.S.* were restudied, together with another four villages.

Methods and Definitions

The 1980 survey was carried out in seven villages with the field assistance of seven undergraduates from the University of Papua New Guinea. The survey was based on questionnaires broadly similar to those used in *The Rural Survey* 1975.[2] There are disadvantages in such an approach in village studies (e.g. Hill 1970; Harris 1975), but these were mitigated to some extent by the existence of considerable background knowledge of the villages and province, previous experience with the questionnaires, and the availability of field assistants able to communicate in the local languages.

The villages were selected in consultation with the Simbu Land Use Programme; three villages studied in the *R.S.* were also included. A degree of arbitrariness may have affected the drawing of boundaries to villages, which in some cases may have differed from boundaries used in the *R.S.* and in the Provincial Data System (P.D.S.) Census.

For the purposes of this survey, a migration was defined as an absence of more than a month, for reasons other than visiting other villages or medical treatment. Five categories of adults (defined as 15 years and over) were distinguished according to their migration experience:

1 those who have never migrated;

2A returned migrants whose migration experience ended before Independence;[3]

2B returned migrants whose migration experience ended after Independence;

3 those absent at the time of the survey;[4]

4 people from outside the village who settled there to grow food.

Particular attention was paid to categories 2B and 3, since considerable information on categories 1 and 2A is already available from the *R.S.* In addition to completing a questionnaire on each adult according to his/her migration category, the surveyor completed a questionnaire for each household. From the seven villages, a total of 239 households and 1376 persons (of whom 920 were aged 15 and over) were surveyed. Fifty-nine percent of the households produced export crops in 1980, resulting in median earnings of K59, and 35 percent produced food crops for sale, with median earnings of K7 in 1980. Of the 177 households with coffee, the median planting was 172 trees and almost 30 percent of trees had been planted since Independence.

Results

This section presents the major results of the survey for adults at the village level, together with comparisons between the situation in 1975 and 1980 for the villages of Mul, Kaukau-Omkalai, and Moramaule. Data from Bongugl have been omitted because of incompleteness.

Absenteeism. Table 1 presents the basic data on adults by migrant categories. It indicates that 13 percent of all adult males and 7 percent of adult females were absent. The combined figures for categories 2A and 2B, male and female, are 14 and 4 percent respectively; and 70 percent of males and 87 percent of females had never migrated.

A comparison of village absentee rates in Table 1 with those reported by the P.D.S. Census indicates considerable differences, although it should be noted that the P.D.S. Census reports total population data, whereas Table 1 covers only adults. Major divergences between the two sets of figures occur in the case of Kenama and Nogar. Two explanations may be offered. First, as discussed above, the sampling procedure adopted did not cover all households. Second, households not represented in the village (e.g. nuclear families with all their members absent either long term or temporarily--as in Moramaule and Alaune, because of food shortages) were included in the absentee and total populations in the P.D.S. Census, even if they had been absent for many years. The

TABLE 1 **Adults by Migrant Categories**

	1		2A		2B		3		4		Total	
	M	F	M	F	M	F	M	F	M	F	M	F
Kenama	20	28	12	0	0	2	4	4	1	0	37	34
Wogar	46	37	7	1	2	2	9	2	3	2	67	44
Mul	42	54	4	2	5	2[a]	11[a]	7[a]	0	0	62	65
Alaune	48	50	2	1	2	0	9	4	4	4	65	59
Kaukau-Omkalai	53	60	2	0	7	3	7	3	0	0	69	66
Moramaule	56	58	1	0	10	1	10	2	1	0	78	61
	265	287	28	4	26	10	50	22	9	6	378	329
	(70.0)	(87.2)	(7.4)	(1.2)	(6.9)	(3.0)	(13.2)	(6.7)	(2.4)	(1.8)		

Note: Figures in parentheses are percentages of row totals.
[a]Subsequent analysis of category 2B and 3 migrants includes only those persons for whom detailed information was collected, i.e. 68 of the 76 males and 31 of the 32 females. The missing data all relate to Mul.

survey collected data on these households to a limited extent only, but there appeared to be numbers of such "absentee households," particularly in Kenama and Nogar, in addition to temporary absences due to food shortages. In order to maintain comparability with the *R.S.,* absentee household data from the present survey are not included in the tabulations. I estimate that absentee households amounted to around 5 percent of all households.

A comparison of the proportion of adult males in categories 2 and 3 in 1975 and 1980 is presented in Table 2.

TABLE 2 **Adult Male Absentees, 1975 and 1980 (percent)**

	1975	1980
Mul	19	17.7
Kaukau-Omkalai	14	10.1
Moramaule	15	12.3

The proportion of absent males was lower in each case in 1980; this is consistent with evidence presented later that employment opportunities in 1980 were fewer than they were in the 1970s, that economically-motivated migration had diminished in importance (although it remains the most important motive), and that the length of time spent away had decreased.

Modal time away since Independence was a little over 20 months,

with another concentration (presumably those visiting friends and relatives) falling between one and three months. The number of migrations made since Independence by category 2B adult males was one in 80 percent of cases, and two in 17 percent of cases. The migrants were spread throughout the country in 1980; relatively few were absent within Simbu.

Motives for migration. Table 3 presents data on the main motives for the most recent migration of category 2B and 3 adults. Given the likely bias in favor of "economic motivations," the practice established in the *R.S.* of not including it specifically on the questionnaire was followed in the present survey. An economic motive was attributed to a respondent if his response was listed under "other reasons" and further specified as "to get a job," "to earn money," or '"to sell goods." Table 3 indicates that 48.5 percent of males were economically motivated, 20.6 percent migrated in order to visit friends and relatives, and 13.2 percent gave "education" as their main motive, with smaller proportions migrating to accompany a relative, or for other reasons.

These data may be compared with the results of *The Rural Survey 1975* where the proportion of economically motivated males from the Simbu villages was 81 percent. Despite the dramatic reduction in the proportion of males migrating for predominantly economic reasons, that remained the most important motive. There were corresponding increases in the proportions migrating to visit friends and relatives, obtain education, or for other reasons.

The 33 males who gave an economic motive as their main motive were questioned further as to why they needed to migrate to get money. Twenty-six said they had no opportunities to raise cash crops and 7 said they could save more quickly while away; none indicated that it was

TABLE 3 **Main Motives for Most Recent Migration, Category 2B and 3 Adults (percent)**

	Males	Females
Accompany husband or parent	7.4	58.8
Educational	13.2	12.9
Visiting friends, relatives	20.6	12.9
Economic[a]	48.5	6.5
Other	10.3	12.0
Total	100.0	100.1

[a]I.e. for money, for job, to sell goods.

because there was no land available. When asked why they needed money, 15 indicated the bride price, and there was a range of other responses. When asked how they intended to get money, 21 signified a job, and 8 indicated selling goods. Some of those whose major motive was not economic still wanted or hoped to find a job, and half of the economically motivated migrants had a job arranged in advance.[5]

Two other factors appear to have influenced the decision to migrate. Category 2B and 3 adults were found to be significantly more likely to have had primary or secondary education than category 1 adults. Absentees were concentrated in the 15- to 24-year age category; over 20 percent of males in this age range were absent and these made up over 80 percent of all male absentees.

In order to shed more light on motivations, an attempt was made at the village level to regress absentee rates against several potentially influential variables. The independent variables considered were modal village earnings from export crops, the proportion of primary and secondary educated persons in each village, and village population pressure.[6] Three dependent variables were tested: the proportion of category 3 adults, the proportion of category 2B plus 3 adults, and the P.D.S. 1980 Census absentee rates. It was hypothesized that absentee rates would be negatively related to cash crop earnings (as suggested for Omkalai by Kuange 1977, 127-128), and positively to population pressure and to the proportion of educated persons. However, such relationships as were found between the absentee rates and these independent variables were non-significant, both singly and in combination. In the case of population pressure (measured by occupational density) the relationship was negative, albeit non-significantly, which confirms previous research in the province (Harris 1978).

Table 4 presents the responses of category 1 males to the question why

TABLE 4 **Reasons for Not Migrating (category 1 males)**

	No.	Percent
Too young, still at school	15	6.0
Physically incapacitated	21	8.4
Care for aged relatives or young children	49	19.7
Lack of money to finance migration	46	18.5
Protect land rights	36	14.5
Other	27	10.8
No obvious reason	55	22.1
Total	249	100.1

they had not migrated. One important response was to protect land rights, an issue considered in the next section. More important motives were the need to care for relatives and lack of money to finance a migration.

Land Shortage. Of particular interest to this study was the collection of information on the extent and nature of land shortages as perceived by villagers; such information could be added to objective data being collected by the Simbu Land Use Project. At the household level, 88 households (37 percent) claimed they were short of land, and 54 of these (61 percent) reported it to be their main problem. An interesting range of reasons was given as to why land shortage was being experienced. The most common reason (reported by 49 percent of households) was too many sons in the household for the amount of land available, which resulted in the elder sons receiving most of the land. A second common reason (32 percent) was that the land inherited by the household from its forefathers was limited; this was sometimes related to the eviction of a group from land through warfare. Some households from which the male head was absent were said to have "no land"; the causal link was difficult to ascertain in these cases--did the person lose land rights as a result of his absence, or did he migrate because he had no land? The latter appears to be more common, and to be related to elder brothers receiving land and younger brothers losing out.[7]

Householders were questioned about the main ways in which they were affected by land shortage. Inadequate food for household consumption was mentioned by 24 percent (or 51 percent if the rather large number of households that did not mention any particular effect or did not know are omitted),

This study sought information on the land rights of male absentees. Almost all absentees had clear unchallenged rights to land, a situation very similar to that reported in 1975.

In individual villages there was substantial variation in the proportion of households reporting themselves short of land in general, and short of land for food and export crops. Bongugl and Alaune had the highest proportions in all three categories and Mul and Kenama the lowest. It is interesting and perplexing to note that these proportions have almost no correlation with the Occupational Index calculated by the Simbu Land Use Programme and presented in the last two columns of Table 5.[8] Whereas Bongugl and Alaune had the highest reported land shortage, their occupational densities were both less than one, indicating that the population was so great as to be placing excessive pressure on the land's productive potential. The opposite was true for Mul and

TABLE 5 **Village by Nature of Land Shortage (percentage of households)**

				Occupational Density	
	Short of Land	Short for Export Crops	Short for Food Crops	Based on village book pop.	Based on resident pop.
Kenama	25	10	5	2.70	1.99
Nogar	42	17	37	1.04	0.70
Mul	15	15	18	1.45	1.15
Alaune	54	50	50	0.85	0.74
Bongugl	55	48	48	0.79	0.43
Kaukau-Omkalai	27	24	19	0.48	0.39
Moramaule	40	34	28	0.68	0.61

Kenama, with low reported shortages but occupational densities of greater than one. Given a non-equal distribution of land between households, pressure could be felt by particular households and yet not by the village as a whole.

Finally, a comparison was made of the land shortage position of "non-migrant households" (defined as households with no persons in categories 2 and 3) and "migrant households" (with one or more members in categories 2 and 3).[9] There was very little difference of opinion between these two groups concerning land shortage.

Absentees' contact with home village. Data were also collected on the nature and extent of absentees' links with their villages. However, I have reservations about the quality of the data collected, largely because of the research methods used. For example, it proved difficult to get an accurate picture of cash flows to and from absentees using the questionnaire approach, and particularly to identify flows going to individuals as distinct from households. As a result, I have recorded generalizations in this section rather than numbers. This applies particularly to money flows.

First, strong links were/are maintained by previous/current migrants. Close to 90 percent of category 2B and 3 adult males sent money back to their villages either regularly or (more usually) occasionally or for special purposes. A slightly lower proportion received gifts of food from the village during their absences. The exception to both these generalizations was Alaune, whose absentees (mainly in Lae) neither received food nor sent money. Second, absentees used a variety of ways to keep in contact apart from sending money. In order of importance these

were sending goods, providing accommodation, and sending letters. Short visits to the village during the period of absence were uncommon, made by less than 10 percent of adult absentees. Third, it was not at all uncommon for villagers to send money to absentees. As suggested above, it was difficult to avoid double counting of both receipts and payments (i.e. several individuals might report receiving/sending the same money), but the ratio of money received by villagers to that sent by them appears to be of the order of 5 or 6 to 1. About three times as many villagers received remittances as sent money.

Summary and Conclusions

The changes in migration patterns in Simbu between 1975 and 1980 were fairly minor and can be explained in terms of limited growth of employment opportunities outside the village sector. The most important changes detected were:

1. Smaller proportions of adults were away from the three villages restudied in 1980 than had been in 1975.
2. Economic motivations for migration still predominated in 1980 but seemed much less important than in 1975. There was a corresponding increase in the proportion of absences due to visiting relatives and obtaining education. At the same time, some of those whose main motive for migration was not economic, still hoped for a job.

The data on motives, combined with information about numbers in categories 2B and 3, support Todaro's (1969) explanation of migration--that a potential migrant's decision to migrate is jointly influenced by the wage he expects to earn and his expectation of getting a job. It is apparent from Table 6 that the number of jobs available in urban areas and on plantations increased only to a limited extent during the latter half of the 1970s.[10] Thus the subjective probability of being employed, as perceived by the potential migrant, is likely to have fallen.

The data presented in Table 6 derive from a number of different sources which were obtained by different methods. Hence they cannot be directly compared with one another. However, the meaning of each column is clear: the rate of expansion of employment opportunities in all sectors of the economy during the latter half of the 1970s was very modest. Total employment of citizens in June 1979 was estimated at 132,600 (National Planning Office, 1981).

Subjective data on land pressure were collected at the household

TABLE 6 Employment Trends during the 1970s (citizens)

Year	Agricultural Largeholdings[a]	Secondary Industries	Government Employees[b]
1969-1970	53,989	11,378	25,520
1974-1975	47,990	14,357	37,893
1975-1976	43,493	15,950	36,978
1976-1977	45,503	16,565	39,043
1978	45,512	17,889	n.a.
1979	50,103	21,243	33,610[c]

Sources: Column 1: Bureau of Statistics, *Rural Industries 1973-74* (1977) and National Statistics Office, *Agricultural Largeholdings (Preliminary Year Ended 31 December 1979)*, Port Moresby, September 1981. Column 2: Bureau of Statistics, *Seconday Industries*, various issues. Column 3: Manpower Planning Unit, National Planning Office, *Manpower Trends* 3 (March 1979); National Planning Office, *National Manpower Assessment 1979-1980*, August 1981.

[a]I.e. plantations.

[b]Excludes laborers and casual workers.

[c]Excludes 11,000 Education Sector workers and 22,500 Central Government workers. Not comparable with pre-1978 figures.

level, and 37 percent of households claimed to be short of land. The main reason given for land shortages was the existence of too many sons for the available land. There was virtually no evidence of absentees losing their rights to land as a result of their absence and land pressure.

NOTES

This study was carried out with the friendly cooperation of the Simbu Land Use Programme, and I am grateful to the Programme's leader, Paul Wohlt. Anton Gois performed sterling work in arranging with village leaders for the placement of field assistants, and provided diverse aid and support during the course of the study. Seven field assistants--Rose Bolgi, Emily Dirua, Joe Gende, John Indoro, Alphonse Kee, Andy Kua, and Joe Kimark--collected the bulk of the data with an impressive degree of competence and persistence. John Alkin and Mary Henning provided valuable coding and computing services respectively. Finally, I am grateful to the Office of Environment and Conservation for its financial support, and to several referees for comments.

1. Examples of more recent work include Morauta and Hasu (1979) and Morauta (1980).

2. The *R.S.* questionnaires were based on those devised by the author and Anthony Clunies Ross for a pilot survey in 1972-1973 (Harris and Clunies Ross 1975).

3. Independence (16 September 1975) was chosen as a point in time which people could readily identify, and which roughly coincided with the *R.S.*

4. Members of the household provided information on any absent members.

5. All but one of those with a job arranged in advance gave an economic reason as their main motive.

6. The first two variables derive from the present study. Population pressure was measured by the proportion of households reporting themselves to be short of land, and on an "occupational density" index provided by Paul Wohlt of the Simbu Land Use Programme. The index, discussed later in this article, relates village population to the carrying capacity of the village's land area.

7. Kelly (1968) notes that in Simbu individual household heads hold full title to their land. This has resulted in less effective adjustments to local imbalances than in Enga, for example, where clan power dominates land tenure decision making.

8. This index is a ratio of population to the carrying capacity of the relevant land area. The carrying capacity includes allowances for uses of land other than food crops and variations in yields of sweet potato according to altitude and soil quality. An index value of one indicates a balance between population and carrying capacity.

9. It would have been preferable to have a less general categorization of households, but there were many households with both category 2 and 3 members, and this prevented a more precise definition.

10. There is no comprehensive set of statistics available on total employee numbers (Bank of Papua New Guinea 1979, 28) and this is particularly true for the 1970s.

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