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ASPECTS OF LABOUR USE IN RURAL LEBOWA

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1. INTRODUCTION

The availability and use over time of family labour is probably a key to understanding much of traditional African agricultural systems. Before consideration can be given to possible developments on smallholdings and the means by which these can be brought about, it is necessary to determine what farmers are now doing, what factors govern their actions, their work-sharing, labour availability and use (Collinson, 1972:197). Until recently most discussions on labour use in agriculture in the less developed world have centered on the existence or non-existence of disguised or non-disguised underemployment, and the focus of interest has mainly been whether labour could advantageously be transferred to industry without scarcities developing in agriculture. It has however become increasingly obvious that some problems of underdevelopment centre around "urban bias" together with the failure of industry and /or other sectors to provide enough employment opportunities (Lipton, 1977). Interest has now swung toward the capacity of agriculture not only to release labour for alternative uses, but also to absorb it (Cleave, 1974:31). According to Grant (1973:12) the major differences between productivity and labour intensity in countries is not so much a result of cultural attitudes toward work, but rather whether the agricultural sector is organised in a way that gives farmers access to agricultural support services (technical advice, credit, organised marketing, etc.)

Japan and the U.S.A. serve as good examples of opposing but effective approaches to agricultural production (Hayami and Ruttan, 1971:112-127). In 1965 the working population per 100 ha of land in Japan outnumbered that of America by 87 to 1.

According to Bruwer (1977:2-3) the average farmer in the U.S.A runs a farm of 156 ha single-handed. In Central Africa, where 20 000 tractors were imported in the sixties, 1,13 ha was cultivated per labourer on large mechanised farms, while small-holders without machinery managed to cultivate 1,40 ha per labourer. The corresponding figure in Lebowa is 1,72 ha per labourer, using an 8 hour working day converted into man equivalents:

For family and hired labour, man equivalents are calculated as follows:

Age group	10 - 14	15 - 19	20 - 50	Over 50
Male	0,25	0,67	1	0,67
Female	0,25	0,50	0,67	0,50

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Anthony *et al* (1979:41) noted that in large parts of tropical Africa the scope for increasing labour absorption in farming was substantial because of the traditional division of labour by sex, which left men a good deal of time to spend on activities that were no longer possible or needed as European influence spread, or on activities that were readily compressible when more attractive alternatives become available. In many societies women and children were responsible for most of the work in producing and preparing food crops while the farm work of men was limited to heavy tasks such as felling trees and clearing bush plots. Where cash crop production took hold, the traditional restrictions related to the division of labour by sex have generally been modified and the new cash crop has most often been a "man's crop". The time devoted to hunting has declined as game became less abundant. Time devoted to farming increased when transportation facilities improved.

In Lebowa, the influences of Whites also changed traditional roles, but the free time which became available for men was mostly used to take up wage earning employment outside Lebowa. Farming was left for old men, women and children. Nattrass (1981:4) states that the migrant labour system has been fully institutionalised as a way of life amongst workers employed elsewhere and their families in the Black rural areas. She refers to Mayer (1980) as saying that most Black rural families should be viewed as spatially dislocated urban dwellers.

One must however recognise that migration of human population is generally accepted as an integral part of the process of socio-economic development. Largely because of the communal land tenure system, an African generally has claim to his land even when residing in the city. Most studies on migration (both permanent and circular) in Africa have found economic motives to be the primary determinants of the quantity and direction of migration flows (Caldwell, 1969; Elkan, 1967; Gugler, 1968; Panofsky, 1963; Hutton, 1970). This is also the case in Latin America (Thomas, 1970) and in the USA (McDonald, 1971). Some authors classify economic factors into "push" and "pull" factors (Elkan, 1960; Mitchell, 1970; Wilson, 1972) and thus, demand and supply concepts.

Attempts are sometimes made to categorise determinants of migration as either push or pull factors without recognising that both are important and that they tend to be interdependent. Regression equations (Beals *et al.*, 1967; Mabogunje, 1970;

Sabot, 1971) do generally not explain causative relationships well, although rural-urban per capita income differentials sometimes show significant effects.

Given the general inconclusiveness of these results, the highly aggregative nature of the data, and statistical problems in using regression techniques for this purpose, great caution must be exercised in interpreting migration analyses based on African census data. Although Van der Berg (1981) presents a conceptual framework for fitting such data, no serious empirical testing of the Todaro model in either its original or its refined form (Johnson, 1971) has been undertaken in Africa. Given the social costs of urbanisation, incentives to encourage higher returns from agricultural work and the development of agro-based small-scale industries in the rural areas such analyses would seem particularly important in a territory like Lebowa because of the relatively early stage of urbanisation.

Traditional roles can be changed and the availability of agricultural labour further reduced by the increased school enrolment and a low image of agricultural work especially amongst young males. This may be intensified by an often stated phenomenon (Beals *et al.*, 1967; Todaro, 1971; Sabot, 1972) for returns to education to be lower in rural areas than in urban areas. Van Rooyen (1980), Hutton (1970), Foster (1968) and McQueen (1969) however found no prejudice of school leavers against agricultural work if sufficient economic incentives are provided. These incentives are presently almost completely absent in Lebowa.

In this article, findings on these phenomena as related to Lebowa will be reported. The conclusions are based on a survey (one with larger scope) done in Lebowa, (Fényes, 1982), on a sample of 350 small-holder farmers. Following Mosher's (1971:21-22) guidelines Lebowa was divided into three regional types according to growth potential:

- (i) Immediate growth potential areas (IGP)
- (ii) Future growth potential areas (FGP)
- (iii) Low growth potential areas (LGP)

Further in the text these areas will be referred to as Group A (IGP) Group B (FGP). The LGP areas are thought to be fairly small and form a subset of Group B. These areas also include non-agricultural land such as residential areas, industrial sites and mountainous land.

2. DIVISION OF TASKS

Results obtained in this investigation clearly reflect the demise of the traditional division of tasks (Table 1). Responsibility for decisions regarding food crop production is mainly that of the husband (Table 2), while decisions regarding food storage is more a joint (husband and wife) task with the husband still in a decisive role (Table 3).

Data from the survey show that slightly more than half of the families (53,8 per cent) are involved in full-time agricultural production and/or

communal activities. Fewer farmers in Group A farms could be classified as full-time (49,9 per cent as against 58,3 per cent in Group B). Migrant workers were excluded but commuters included in the calculation. The underutilisation or underemployment situation thus appears to be serious especially in immediate growth potential areas.

Part-time participants were defined as scholars or those engaged in off-farm employment, but who support the agricultural efforts of the family after hours or during weekends. Only 60 such cases were encountered (19 in Group A, and 41 in Group B) thus indicating a low level of part-time farming involvement.

3. AN ANALYSIS OF TIME SPENT ON FARMING ACTIVITIES

Few attempts have been made to record the time spent by rural people on farming and non-farming employment activities. Records of farming activities often include only time spent on the field. Cleave's (1974:32-34) examination of farm surveys in English-speaking countries on both sides of tropical Africa shows that time actually spent in farming proper (by adult males) ranges from 530 to 3 135 hours per year, with all areas but one reporting less than 1 700 hours.

Earlier studies (e.g. Clark and Haswell, 1967) found that in some of the remoter parts of Africa men devoted less than 1 000 hours per year to agricultural work. Baldwin (1956) sampled two cocoa-farming villages in north-west Nigeria and found that the average number of working hours per adult male per year were 997 and 1 327 respectively. Martin (1956) found in southern Nigeria that men averaged only 4 hours per day in agricultural work throughout the year.

Collinson (1972:36) presents data based on Pudsey's survey in Uganda, that account for 7,1 to 9,6 hours per day, assuming 300 working days in the year. They show non-farm activities (such as visiting neighbours, visitors, school, building work, etc.,) to account for between 4,5 and 8,7 hours per day. Heyer's (1965:3-11) study in Machakos was perhaps the first in East Africa to quantify the importance of non-crop operations in absorbing labour. Using a standard 48 hours work week, her small sample of 14 farmers used 37 per cent of available time over the year on crop production work and a further 26 per cent on non-specific work directly associated with agriculture, leaving another 37 per cent of available time to beer brewing, marketing, craft work and contract services. She recorded no use of hired labour in Machakos.

In Lebowa, calculated on the basis of the data presented in Tables 4 and 5, the average hours per day spent by four age groups amounts to 7,46. There were 238,74 working days and thus the average hours per year per worker are calculated as 1 781 as against the 954 hours found by Martin. The

TABLE 1 - Family labour: Division of agricultural tasks according to enterprises

TABLE 1 - Family labour distribution by agricultural tasks													
Tasks													
Family member	Number	Crop production: soil preparation		Crop production: planting, weeding		Crop production: harvesting		Crop processing: storage		Animal production: herding		Animal production: milking	
Group A N = 298		Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Husband	89	37	41,6	0	0,0	7	7,9	0	0,0	42	47,2	3	3,4
Wife	80	10	12,5	33	41,3	8	10,0	24	30,0	1	1,3	4	5,0
Son	72	5	6,9	1	1,4	4	5,5	1	1,4	57	79,2	4	5,5
Daughter	55	8	14,5	31	56,4	9	16,4	1	1,8	2	3,6	4	7,3
Husband's mother	1	0	0,0	0	0,0	0	0,0	1	100,0	0	0,0	0	0,0
Grandson	1	0	0,0	0	0,0	0	0,0	0	0,0	1	100,0	0	0,0
Group B N = 255													
Husband	103	44	42,7	3	2,9	7	6,8	0	0,0	44	42,7	3	2,9
Wife	73	9	12,3	35	47,9	1	1,4	16	21,9	6	8,2	6	8,2
Son	45	1	2,2	1	2,2	8	20,0	4	8,9	26	57,8	4	8,9
Daughter	33	6	18,2	10	30,3	10	30,3	1	3,0	2	6,1	4	12,1
Husband's mother	0	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0
Grandson	1	0	0,0	0	0,0	0	0,0	0	0,0	1	100,0	0	0,0
Total (A+B) N = 553													
Husband	192	81	42,2	3	1,6	14	7,3	0	0,0	86	44,8	6	3,1
Wife	153	19	12,4	68	44,4	9	5,9	40	26,1	7	4,6	10	6,5
Son	117	6	5,1	2	1,7	12	10,3	5	4,3	83	70,9	8	6,8
Daughter	88	14	15,9	41	46,6	19	21,6	2	2,3	4	4,5	8	9,1
Husband's mother	1	0	0,0	0	0,0	0	0,0	1	100,0	0	0,0	0	0,0
Grandson	2	0	0,0	0	0,0	0	0,0	0	0,0	2	100,0	0	0,0

TABLE 2 - Responsibility for decisions regarding food crop production

Responsible person(s)	Group A		Group B		Total (A+B)	
	Number of responses	%	Number of responses	%	Number of responses	%
	N = 156		N = 185		N = 341	
Husband	83	53,2	141	76,2	224	72,0
Wife	44	28,2	28	15,1	72	21,1
Husband and wife	22	14,1	9	4,9	31	9,1
Extension officer	1	0,6	4	2,2	5	1,5
Kgoši, (Chief)	0	0,0	0	0,0	0	0,0
Husband, wife and children	5	3,2	0	0,0	5	1,5
Wife and children	1	0,6	0	0,0	1	0,3
Husband and extension officer	0	0,0	0	0,0	0	0,0
Kgoši, husband and wife	0	0,0	3	1,6	3	0,9
Children	0	0,0	0	0,0	0	0,0

TABLE 3 - Responsibility of decisions regarding food storage

Responsible person(s)	Group A		Group B		Total (A+B)	
	Number of responses	%	Number of responses	%	Number of responses	%
	N = 156		N = 180		N = 336	
Headman/Kgoši,	2	1,3	2	1,1	4	1,2
Husband	95	60,9	94	52,2	189	56,3
Wife	57	36,5	78	43,3	135	40,2
Extension officer	0	0,0	1	0,6	1	0,3
Husband and wife	1	0,6	0	0,0	1	0,3
Children	0	0,0	1	0,6	1	0,3
Husband, wife and children	0	0,0	0	0,0	0	0,0
Wife and children	1	0,6	0	0,0	1	0,3
Husband and extension officer	0	0,0	0	0,0	0	0,0
Kgoši, husband and wife	0	0,0	4	2,2	4	1,2

corresponding figure in Lebowa for adult males only is 1917,5. The markedly low seasonal variations can probably be explained by the unusually large number of crops cultivated in Lebowa and the prevalence of livestock enterprises.

4. TIME USED FOR ALTERNATIVE PURPOSES

It is well known that many of the off-farm

work activities and even schooling was made possible by Europeans but that this was not always recognised as advantageous by tribal leaders. Read (1938) quotes the Paramount Chief of the Nguni in Nyasaland who expressed regret at the reduction in the variety of foods enjoyed by his people (cf. Collinson, 1972:37-40): "Formerly there was no other work than taking care of their work affairs. When the Europeans came, they came with other work for the people such as tax and work to receive cloth. When they were busy with such things they forgot

TABLE 4 - Family labour: Frequency of sex, age groups and mean number of days per month spent on agricultural enterprises

Group A			Fre- quency	J	F	M	A	M	J	J	A	S	O	N	D
Male	<	20	47	21	17	18	18	18	18	20	18	18	18	18	20
Male	>	20	94	23	21	21	21	21	22	23	21	21	21	22	22
Female	<	20	20	19	15	15	14	19	18	19	16	16	16	16	21
Female	>	20	43	27	24	25	25	25	25	26	24	24	25	24	27
Group B															
Male	<	20	53	17	16	17	16	20	20	20	18	18	18	18	20
Male	>	20	91	23	22	22	22	21	20	19	20	20	21	22	21
Female	<	20	18	16	15	15	14	27	14	17	17	17	16	15	15
Female	>	20	39	23	21	22	22	21	20	20	19	19	19	22	22
Total (A+B)															
Male	<	20	100	19	17	17	17	19	19	20	18	18	18	18	20
Male	>	20	185	23	21	22	22	21	21	21	21	21	21	22	21
Female	<	20	38	17	15	15	14	23	16	18	16	17	16	16	18
Female	>	20	82	25	23	24	23	23	23	23	22	22	22	23	24

TABLE 5 - Family labour allocation of tasks (number of persons) according to age, groups, sex and average time (hours per day) spent on each task

Group A - Tasks	Male <20	Female <20	Male >20	Female >20	Average time
Collection of water, wood, washing, cooking	13 12,3	84 14,9	10 45,4	126 41,3	5,9
Bricklaying, thatching, roofing	0 0,0	0 0,0	4 46,5	0 0,0	8,3
Herdling, milking,	15 12,7	1 20,0	14 43,2	2 41,5	6,7
Crop production in general	7 13,9	1 20,0	14 43,2	2 41,5	7,6
Weeding	1 14,0	1 18,0	1 25,0	7 41,7	8,6
Harvesting	4 13,8	3 14,3	6 42,8	1 25,0	7,1
Marketing or going to the market	8 13,9	4 16,0	3 45,3	6 37,8	4,2
Employed	0 0,0	0 0,0	0 0,0	2 45,0	9,0
Scholar	8 13,1	3 15,0	2 24,0	0 0,0	6,5
Cleaner	0 0,0	0 0,0	0 0,0	1 48,0	9,0
Driver	1 20,0	0 0,0	0 0,0	0 0,0	8,0
Fence and road worker	0 0,0	0 0,0	1 60,0	0 0,0	8,0
Church activities	0 0,0	0 0,0	0 0,0	1 60,0	3,0
Extension adviser	0 0,0	0 0,0	1 53,0	0 0,0	8,0
Teacher	0 0,0	0 0,0	0 0,0	2 23,5	8,0
Woodworker	0 0,0	0 0,0	1 33,0	0 0,0	10,0

Group B					
Collection of water, wood, washing, cooking	5	87	10	108	6.2
Bricklaying, thatching, roofing	10,6	14,8	48,9	39,0	
Herding, milking, livestock	3	0	7	0	4,7
Crop production in general	14,0	0,0	37,8	0,0	
Weeding	27	0	27	5	7,3
Harvesting	13,2	0,0	49,6	40,8	
Sweeping looking after children	10	9	27	14	6,0
Marketing or going to the market	15,4	17,9	46,3	41,0	
Employed	1	1	0	7	6,7
Scholar	14,0	20,0	0,0	49,8	
Driver	0	0	1	1	7,5
Community activities	0,0	0,0	42,0	55,0	
Church activities	0	0	1	4	4,6
	0,0	0,0	65,0	41,5	
	1	2	11	2	4,1
	18,0	5,0	50,3	55,5	
	4	0	7	2	9,1
	15,0	0,0	35,8	28,5	
	6	9	2	0	12,0
	13,2	13,4	31,5	0,0	
	0	0	1	0	1,0
	0,0	0,0	59,0	0,0	
	0	0	1	0	14,0
	0,0	0,0	22,0	0,0	
	0	0	1	0	10,0
	0,0	0,0	47,0	0,0	
Total Group A+B					
Collection of water, wood, washing, cooking	18	171	20	234	6,0
Bricklaying, thatching, roofing	11,8	14,8	47,1	40,2	
Herding, milking, livestock	3	0	11	0	5,7
Crop production in general	14,0	0,0	41,0	0,0	
Weeding	42	1	61	5	7,0
Harvesting	13,0	20,0	50,4	40,8	
Sweeping, looking after children	17	10	41	16	6,4
Marketing or going to the market	14,8	18,1	45,2	41,1	
Employed	2	2	1	14	7,7
Scholar	14,0	19,0	25,0	45,8	
Driver	4	3	7	2	7,2
Community activities	13,8	14,3	42,7	40,0	
Church activities	0	0	1	4	4,6
	0,0	0,0	65,0	41,5	
	9	6	14	8	4,2
	14,3	12,3	49,2	42,3	
	4	0	7	4	9,1
	15,0	0,0	35,8	36,8	
	14	12	4	0	4,0
	13,1	13,8	27,8	0,0	
	0	0	0	1	9,0
	0,0	0,0	0,0	48,0	
	1	0	1	0	10,0
	20,0	0,0	59,0	0,0	
	0	0	1	0	14,0
	0,0	0,0	22,0	0,0	
	0	0	1	0	8,0
	0,0	0,0	60,0	0,0	
	0	0	1	0	10,0
	0,0	0,0	47,0	0,0	
	0	0	0	1	3,0
	0,0	0,0	0,0	60,0	
	0	0	1	0	8,0
	0,0	0,0	53,0	0,0	
	0	0	0	2	8,0
	0,0	0,0	0,0	23,5	
	0	0	1	0	10,0
	0,0	0,0	33,0	0,0	

Note: First row: Frequency. Second row: Average age

the work of the ancestors". Read makes the important point that cultural contact has destroyed the traditional channels of agricultural instruction: the Nguni people have drifted away from the traditional practices and became confused and

disorganised. In this state they are not receptive to advice or improvements (Collinson, 1972:40). It may also be significant that although the Lebowa small-holders had spent some 18 years on average as labourers on White farms (Table 6), only about 25

per cent said experience gained on White farms or knowledge gained from White agricultural officers were their major source of knowledge of farming. Black agricultural officers score the highest mark (47,4 per cent) but this answer may be biased since these officers were the enumerators for the survey. Little hired labour is used in Lebowa. Surprisingly in only 7 of the total of 55 cases where labourers were hired, did it occur in Group A which is supposed to be the more enterprising group (see Tables 7 to 9).

Some 10 per cent of the small-holders stated

TABLE 6 - Average number of years of farming experience (percentages of replies)

Experience	Group A	Group B	Group A+B
On own farm	27,0	19,7	23,4
Labourer on White farm	19,1	16,6	17,9
Formal agricultural training	0,7	0,2	0,5

TABLE 7 - Use of regular hired farm labour according to tasks

	Group A		Group B		Total (A+B)	
	Num-ber	%	Num-ber	%	Num-ber	%
	N=2		N=6		N=8	
Loading kraal manure	1	50	0	0,0	1	12,5
Planting	1	50	1	16,7	2	25,0
Kitchen work	0	0,0	2	33,3	2	25,0
Ploughing	0	0,0	0	0,0	1	12,5
Weeding	0	0,0	0	0,0	0	0,0
Harvesting	0	0,0	0	0,0	0	0,0
Hoeing	0	0,0	0	0,0	0	0,0
Transporting	0	0,0	0	0,0	0	0,0
Crop production in general	0	0,0	1	16,7	1	12,5
Night chief	0	0,0	1	16,7	1	12,5
Building	0	0,0	0	0,0	0	0,0
Fence and dam repairing	0	0,0	0	0,0	0	0,0

TABLE 8 - Use of hired seasonal farm labour according to tasks

	Group A		Group B		Total (A+B)	
	Num-ber	%	Num-ber	%	Num-ber	%
	N=0		N=17		N=17	
Loading kraal manure	0	0,0	0	0,0	0	0,0
Planting	0	0,0	2	11,8	2	11,8
Kitchen work	0	0,0	0	0,0	0	0,0
Ploughing	0	0,0	1	5,9	1	5,9
Weeding	0	0,0	9	52,9	9	52,9
Harvesting	0	0,0	1	5,9	1	5,9
Hoeing	0	0,0	1	5,9	1	5,9
Transporting	0	0,0	1	5,9	1	5,9
Crop production in general	0	0,0	1	5,9	1	5,9
Night chief	0	0,0	0	0,0	0	0,0
Building	0	0,0	0	0,0	0	0,0
Fence and dam repairing	0	0,0	1	5,9	1	5,9

that they run own businesses separate from farming, the most important being trading and contract ploughing.

Details of the wide range of off-farm employment situations are provided in Table 10. Only 9 small-holders of Group A are engaged in off-farm work and only two of them in industrial work. 45 of Group B farmers hold employment outside the farm and 25 of them are employed in industrial skilled or semi-skilled employment. The situation is similar in connection with occasional off-farm labour and income (Table 11). Only 9 of Group A farmers do occasional work away from the farm while 57 of Group B farmers do so (Table 11). Another small group indicated that they have part-time (not every day) standing business commitments in White areas (Table 12). Here again more Group B farmers participate in such ventures.

TABLE 9 - Use of hired casual farm labour according to tasks

	Group A		Group B		Total (A+B)	
	Num-ber	%	Num-ber	%	Num-ber	%
	N=7		N=23		N=30	
Loading kraal manure	0	0,0	2	8,7	2	6,7
Planting	0	0,0	1	4,3	1	3,3
Kitchen work	0	0,0	0	0,0	0	0,0
Ploughing	0	0,0	6	26,1	6	20,0
Weeding	6	85,7	10	43,5	16	53,3
Harvesting	0	0,0	1	4,3	1	3,3
Hoeing	0	0,0	0	0,0	0	0,0
Transporting	0	0,0	1	4,3	1	3,3
Crop production in general	0	0,0	0	0,0	0	0,0
Night chief	0	0,0	0	0,0	0	0,0
Building	1	14,3	0	0,0	1	3,3
Fence and dam repairing	0	0,0	2	8,7	2	6,7

TABLE 10 - Kind of off-farm employment

	Group A		Group B		Total (A+B)	
	Number of re-spon-ses	%	Number of re-spon-ses	%	Number of re-spon-ses	%
	N=9		N=45		N=54	
Household tasks	1	11,1	0	0,0	1	1,8
Marketing	1	11,1	0	0,0	1	1,8
Nurse	1	11,1	1	2,2	2	3,7
Clerk	1	11,1	0	0,0	1	1,8
Driver	0	0,0	3	6,7	3	5,5
Road worker	0	0,0	1	2,2	1	1,8
Religious worker	1	11,1	0	0,0	1	1,8
Plumber	1	11,1	1	2,2	2	3,7
Selecting seed	1	11,1	2	4,4	3	5,5
Chasing birds	0	0,0	4	8,9	4	7,4
Extension worker	0	0,0	3	6,7	3	5,5
Teacher	0	0,0	5	11,1	5	9,3
Woodworker	0	0,0	1	2,2	1	1,8
Trader	0	0,0	3	6,7	3	5,5
Painter	0	0,0	1	2,2	1	1,8
Industrial worker	2	22,2	20	44,4	22	40,7

TABLE 11 - Family labour: Occasional off-farm employment

Group A	Number	Average age	Average number of months
Male	4	44,3	1,5
Female	5	36,6	3,0
Group B			
Male	36	34,8	2,5
Female	21	38,0	2,0
Total (A+B)			
Male	40	35,7	4,0
Female	26	37,8	5,0

TABLE 12 - Family labour: Off-farm business activities

Group A	Number	Average age	Average number of days
Male	9	48,4	17
Female	3	42,0	12
Group B			
Male	15	45,9	15
Female	4	32,4	10
Total (A+B)			
Male	24	46,7	16
Female	7	35,1	11

According to this survey therefore farmers in Lebowa do not have, or utilise, outside opportunities to the same extent as reported in a five-year study of rural employment in Tropical Africa by Michigan State University which states that "non-farm activity in the rural areas provides a source of primary or secondary employment for 30-50 per cent of the rural male labour force in Tropical Africa". Byerlee *et al* (1977:22,24) estimate that trading and manufacturing account for more than 70 per cent of employment, presumably of men, in the rural non-farm sector. Anderson and Leiserson (1980:229) present data on 15 developing countries, where the percentage of the rural labour force primarily engaged in non-farm work falls between 20 per cent and 30 per cent. The composition of non-farm employment (excluding mining and quarrying) in Zambia in 1975 was as follows:

Manufacturing	10,4
Construction	12,1
Utilities	2,8
Commerce	34,9
Transport	5,1
Services	31,3
Miscellaneous	3,5

(Anderson and Leiserson, 1980:245)

Historical evidence in many countries reveals a rising share of the rural labour force engaged in non-farm work. According to Anderson and

Leiserson (1980:241) this is partly a result of the slow growth of labour absorption in agriculture and partly of the increasing division in rural areas between farm and non-farm work, induced by high elasticities of demand for non-food goods and services with respect to changes in rural income and agricultural output.

Non-farm activities in rural areas are an essential element in the process of economic and social development, and therefore rural development policies, in addition to providing the support necessary to raise agricultural productivity, should also be addressed to the needs of and for non-farm activities. A study by Swanepoel (1980:294-320) on 97 small-scale rural industries in Gazankulu and Lebowa point to future possibilities to combine those elements necessary for spreading the benefits of development to lower-income groups through growth of employment and wage incomes. These deserve close attention in the formulation of economic development policies with the aim to assist these groups in performing their role in the process of rural transformation

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