

SECOND CARNEGIE INQUIRY INTO POVERTY
AND DEVELOPMENT IN SOUTHERN AFRICA

Poverty in the Pretoria-Witwaters-
rand-Vereeniging area: A survey
of research
by

P N Pillay

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POVERTY IN THE PRETORIA-WITWATERSRAND-VEREENIGING AREA:

A SURVEY OF RESEARCH

P. N. PILLAY

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1. INTRODUCTION

The purpose of this paper is to determine the extent of poverty in the Pretoria-Witwatersrand-Vereeniging (PWV) area as reflected in the research up until 1982. The emphasis is on research carried out between 1970 and 1982 although reference is occasionally made to earlier periods for reasons of continuity. The area under consideration is illustrated in Fig 1.

The approach used here is to evaluate the research under several categories to determine who the poor are. These categories are :

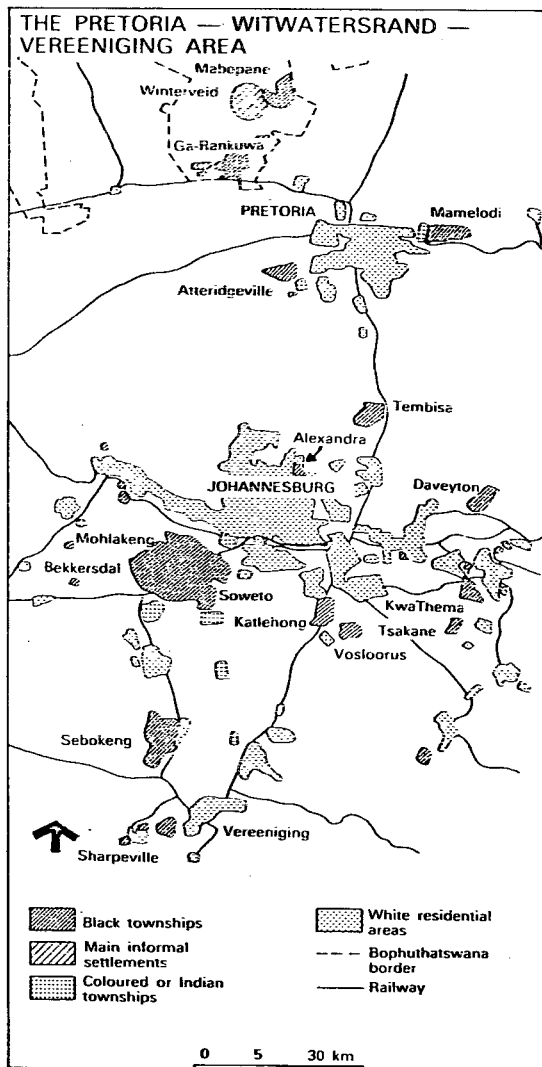
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The PWV area is the dominant core of the South African economy. It has steadily increased its share of the country's Gross Domestic Product (GDP) derived from all sectors to 40 per cent of the total (Fair, 1979). The PWV population in 1980, however, constituted only 18,7 per cent of the country's population (Dorida, 1981). A study of poverty in the PWV area is thus really a study of poverty amongst affluence.

2. POPULATION DENSITY AND HOUSING

In 1970 the population in the PWV area was estimated at 3,65 million (Van der Horst, 1981). By 1980 it had increased to 5,2 million (Dorida, 1981). The population in this area is expected to reach more than 13 million by the year 2020 (Dorida, 1981). The racial composition of the PWV population for these periods is given in Table 1. According to Fair (1979) in the Witwatersrand alone, the 1970 population

FIG. 1



TAKEN FROM : MORRIS, P., A HISTORY OF BLACK HOUSING IN SOUTH AFRICA (AFRICA FOUNDATION, 1981).

will have more than doubled by the year 2000 from 2,5 million to 5,25 million of whom Whites will constitute 2 million and Blacks (Africans, Coloureds, Indians) 3,25 million.

TABLE 1 : RACIAL COMPOSITION OF THE POPULATION IN THE PWV AREA:
ACTUAL AND PROJECTED (THOUSANDS)

	1970	1980	2020
Africans	2060,8 (56,4%)	3125,7 (60,1)	8726,5 (66,5)
Whites	1394,4 (38,2)	1800,1 (34,6)	3602,9 (27,5)
Coloureds	130,7 (3,6)	179,4 (3,4)	491,2 (3,7)
Indians	67,0 (1,8)	97,4 (1,9)	305,6 (2,3)
Total	3652,9 (100,0)	5202,6 (100,0)	13126,2 (100,0)

Sources : Van der Horst (1981),
Dorinda Management Services (1981).

It has also been estimated that in 1970 the PWV area contained 2,7 million out of 5,6 million of the country's non-agricultural economically active population (University of Pretoria, 1979). Of this figure, Africans made up 65,6 per cent, Whites 30,8 per cent, Coloureds 2,6 per cent and Indians 1,0 per cent.

Population figures for specific African areas all reveal high population densities. Several estimates of the population have been made for Soweto. Official figures given were 587970 for 1970 (Hellman and Goldblatt, 1973) and 860 000 (Morris, 1981a). Official figures, however, do not include "illegal" residents, i.e. those not in possession of Section 10(1) rights. Morris (1980) estimates this group numbering 30 per cent of the population in Soweto. On this basis she estimated the population to be in excess of 1 million in 1980. Other estimates are 1,465 million by the Urban Foundation (Human Awareness Programme, 1982) and 1,25 million (SAIRR, 1982). Boaden has projected that the population will increase to 1,62 million in 2000 from approximately 1 million in 1978 (Morris, 1980).

Soweto has an area of 8200 ha (Financial Mail, 1983). If the SAIRR population of 1,25 million for 1982 is accepted this gives a population density of 152 persons/ha. On the basis of expected growth rates it is expected that double the area of Soweto today will be needed by the year 2000 (Morris, 1980). But only 733 ha. remain for further development (Morris, 1981b).

Alexandra, the African township to the north of Johannesburg has a much higher population density. This township is situated on only 80ha. and supports a population of between 50000 and 70000 (Lamont, 1979; Financial Mail, 1982a). This gives a population density of between 625 and 875 persons per hectare. Sandton, the white suburb nearest Alexandra, has a population of 730 000 on 14 300 ha.(Financial Mail, 1982a) giving a population density of 51 persons/ha.

Estimates of the population in Winterveld, a squatter settlement 35km. outside Pretoria, inside Bophuthatswana, vary between 250 000 and 800 000 in an area 225 km² (Matsetela 1978; Harrop-Allin, 1979; Yawitch, 1979; Perlman, 1982). However, seven-eighths of the population are concentrated in Setakeneng which comprises only one-eighth of the area of Winterveld (Matsetela, 1978).

HOUSING

The housing situation in the PWV area is characterised by chronic shortages and overcrowding in the Black areas. The growth of so-called squatter communities or informal shack settlements is another index of the housing crisis.

Housing is normally assumed to be central in the determination of the overall quality of life (Schlemmer and Moller, 1982). Since the 1960s however, the government has emphasized the construction of bachelor hostels for single Africans rather than family housing which was reserved for the homelands (Kane-Berman, 1978; Morris, 1980). A tightening of influx control regulations, the weight placed on migratory labour and the "development" of the homelands were further manifestations of the policies

reinforcing the "temporary sojourner" status of Africans in the "white areas" (Morris, 1980).

HOUSEHOLD SIZE

The housing shortage manifests itself in the overcrowding of township houses. The Urban Foundation (1977) has produced housing occupancy rates for various PWV African townships (Table 2).

It should be noted that the figures in Table 2 are official ones obtained from the relevant Bantu Administration Boards and that other unofficial figures are likely to be substantially higher.

The number of persons per dwelling should be compared to the size of the house and to family size. (Average family sizes for Africans according to the Urban Foundation were 5,10 for Johannesburg and 5,66 for Pretoria in 1975). Most of the houses in urban African areas are of the 51/6 or 51/9 type (2 bedrooms) which means that in general there are 3-4 persons per bedroom. A comparison with family size figures given above indicates that in most townships in the PWV area households accommodate an extra 2 persons per dwelling that are not family (i.e. lodgers or tenants).

TABLE 2 PERSONS PER DWELLING IN VARIOUS PWV AFRICAN TOWNSHIPS (1977)

TOWNSHIP	PERSONS PER DWELLING
Pretoria : Mamelodi	7,5
Atteridgeville)	7,8
Saulsville)	
Central Rand : Soweto	7,1
West Rand : Kagiso	6,6
Munsville	6,0
Bekkersdaal	10,3
Mohlakeng	6,7
Vaal Triangle: Sebokeng	8,4
Evaton	5,7
Boiputong	6,6
Sharpville	6,8
Zamdela	7,1
East Rand : Tembisa	6,6
Katlehong	6,1
Thokoza	7,8
Daveyton	7,2
Wattville	8,0
Vosloorus	6,5
Kwathema	9,4
Tsakane	5,6

Source : Urban Foundation (1977).

A comparison of family size and total number of persons per dwelling gives an indication of the degree of overcrowding within each dwelling and within the African residential areas as a whole. An initial estimate of the extent of the housing shortage in the PWV area using an overcrowding factor (i.e. the difference between the number of persons per dwelling and family size) indicated that there was a shortage of approximately 90 000 houses in the PWV area, excluding the homeland areas to the north of Pretoria (Urban Foundation, 1977).

Soweto

The African housing problem is at its most intense in Soweto. The housing backlog has been estimated at 35 000 units (Saspu National, 1981d; Laurence, 1982). This backlog is estimated to be increasing at 4 000 units per year (Laurence 1982).

In addition an estimated 23 000 people were living in shacks in Soweto in 1982 (SAIRR, 1982).

To catch up with the housing backlog 45 houses per day would have to be erected to meet the housing needs by the year 2000 (Schlemmer and Moller, 1982). According to Morris (1980) between 1978 and 2000 an additional 620 000 people or 114 820 households will need to be housed.

It is extremely difficult to obtain accurate data on housing occupancy rates since many occupants are illegal and any estimate is likely to be underenumerated. A variety of sources give the following average figures:

7,14 persons/dwelling	(1979-Institute of Urban Studies, Rand Afrikaans University, quoted by Morris, 1980; Human Awareness Programme, 1982)
7,0 persons/dwelling	(1975-Shuenyane et al, 1977)
7,1 persons/dwelling	(1977-8, West Rand Administration Board, in Morris, 1980)
10,0 persons/dwelling	(Schlemmer and Moller, 1982)
14,0 persons/dwelling	(Johannesburg Chamber of Commerce, 1976 in Morris, 1980; Human Awareness Programme, 1982)
29,0 persons/dwelling	(Black Sash figure in Human Awareness Programme, 1982).

If it is assumed that approximately 30 per cent of residents in Soweto are illegal then a realistic figure for average number of occupants may be around 9 or 10 per dwelling (Morris 1980 and 1981a).

A survey undertaken by the Institute of Urban Studies in 1979 revealed that about 50 per cent of houses in Soweto were too small for satisfactory living standards (Morris, 1981b).

The standard house in Soweto consists of 4 rooms (2 bedrooms, a living room and a kitchen) and was designed according to minimum space standards for a household of 5 persons. With an average of approximately 3 persons per habitable room or 4 or 5 per bedroom, elementary health and privacy standards have been abandoned. This forced overcrowding has a fundamentally adverse effect on the living conditions of the vast majority of residents (Morris, 1980).

Alexandra

A survey undertaken in 1979 showed that the chronic housing shortage forced, on average, 2 families to live in one house (Lamont et al, 1979). Nearly 80 per cent of households were crammed into 1 or 2 rooms, 57 per cent in 1 room and 21 per cent into 2. As the average household size in the township was 6 the overcrowding had caused a host of social problems (Financial Mail, 1982a).

East Rand

The official housing shortage on the East Rand was given as 23 889 units excluding hostel beds (SAIRR, 1982). It is estimated that there are about 50 000 backyard shacks on the East Rand. This means that approximately 250 000 people are living in shacks in East Rand African townships (Izwi Lase Township, 1982-83). In Katlehong, there were 17 650 houses and 34 000 shacks and in Thokoza 10 000 shacks (SAIRR, 1982). In Daveyton near Benoni the population increased from 61 000 in 1967 to 87 000 in 1977 but no new houses were built (SAIRR, 1981). In 1982, 3 588 families were living

in shacks in Daveyton (SAIRR, 1982).

Recently, however, an increasing number of shacks, especially in Katlehong is being demolished by the East Rand Administration Board (ERAB). Large scale erection of shacks began in the late 1970s. Because of the boom in the economy factories in the nearby industrial areas increased their demand for labour. The townships became overcrowded and workers were forced to build shacks. As a result of the present recession, however, the authorities are becoming concerned with the number of unemployed people in the townships. By demolishing shacks they are forcing retrenched workers to return to the homelands (SASPU National, 1983).

Pretoria

In 1977 the Central Transvaal Administration Board estimated that there was a shortage of 8 958 houses in Pretoria townships (Perlman, 1982). The estimated shortage of hostel beds was 22 000. In Winterveld most of the population is living in shacks. There is also a large number of people living in shacks in the Bophuthatswana townships of Mabopane and Garankuwa (Perlman, 1982).

Coloured Housing

Except for some information in 'Saspu National' not much else seems to be available on Coloured housing in the PWV area. In Eldorado Park and Kliptown, south of Johannesburg, people have been on the waiting list for houses since 1975. Houses and flats built originally for pensioners are accommodating families of up to 9 people in 2-roomed houses (SASPU National, 1980, 1981b).

Reiger Park in Boksburg has 10 000 people on the waiting list for houses. Many of these families lived in their own houses in the 1960s before they were uprooted from their homes in Springs, Brakpan, Benoni and Germiston and resettled in Reiger Park. There is evidence of overcrowding with up to 3 families occupying one room in many cases (Saspu National, 1981c).

Indian Housing

In 1969 about 25 per cent of households in Boksburg lived in shacks and in Germiston a similar proportion lived either in shacks or other unsatisfactory structures such as lean-to's and outbuildings. There was a considerable degree of overcrowding (Maasdorp and Pillay, 1977). Most of the Indians on the East Rand have been resettled in Actonville near Benoni where 4 000 families are on the waiting list for houses.

In 1980, the Urban Foundation, in a survey of Lenasia, the Indian township south of Johannesburg, found a housing occupancy rate of 6,5 persons per dwelling. Some research has also been done in Thomsville, a slum area in Lenasia (Thom Grey Family, 1977; Saspu National, 1981a). Thomsville residents were Group Areas victims from Sophiatown, Newclare, Fordsburg and Pageview. The 100 4-room and 368 2-room units of Thomsville were squalid and overcrowded. An average of 6,5 people shared space that was initially meant for pensioners. There was no electricity, inside water or toilets. One outside toilet served 4 families. The area was declared a slum in 1968 (Saspu National, 1981a).

3. LIVING STANDARDS

In this section living standards are examined by relating the income of households to their poverty datum lines (PDLs).

The Poverty Datum Line is a measure of the extent of poverty in a community. One of the most frequently used PDLs in this country is that calculated by Potgieter. He uses the terms Household Subsistence Level (HSL) and Household Effective Level (HEL). The HSL is "an estimate of the theoretical income needed by an individual household if it is to maintain a defined minimum level of health and decency in the short term. It comprises the total food, clothing, fuel, lighting, washing and cleansing materials required for each person, together with the fuel, lighting and cleansing materials needed by the household as a whole, the cost of rent and of workers' transport".

Whilst the HSL indicates the cost of a 'theoretical budget' of necessities, it does not suggest an adequate income because in practice, out of a total income equivalent to that budget, one-third will be diverted away from the specified items to other immediate essentials. In this case the income is not effective in enabling the household to maintain the standards of short-term health and decency specified in the HSL. The HEL of income then, is that which, after one-third of it has been allocated to other items is equal to the cost of the HSL required for the household, i.e. the $HEL = 150$ per cent of the HSL (Potgieter, 1979).

The HSL and HEL are very conservative estimates of the PDL - they represent the very minimum necessary for survival and have sometimes been referred to as the 'starvation line' (HSL) and the 'bread line' (HEL) (Keenan, 1982).

The HSL for African and Coloured families in Johannesburg and Pretoria between 1973 and 1982 are given in Table 3(a). The HSLs for African families in some other towns in the PWV area are given for 1975 and 1980

in Table 3(b). These figures are based on a household of 6 African and 5 Coloured members.

TABLE 3(a) HSLs (RAND PER MONTH) FOR AFRICAN AND COLOURED FAMILIES
IN JOHANNESBURG AND PRETORIA 1973-1982

Year	Johannesburg (African)	Johannesburg (Coloured)	Pretoria (African)	Pretoria (Coloured)
1973	87,59	97,44	84,71	93,80
1974	103,61	100,29	100,12	107,83
1975	119,69	120,51	121,01	118,57
1976	134,67	133,89	131,35	136,78
1977	144,78	149,28	137,22	145,41
1978	157,92	157,41	145,76	155,84
1979	172,56	177,75	164,04	173,29
1980	200,12	211,27	195,67	204,05
1981	242,49	237,81	218,23	222,88
1982	271,71	274,64	247,94	253,05

Source : Potgieter (1973-1982). These figures are for September or October of each year.

TABLE 3 (b) : HSLs (R/MONTH) FOR AFRICAN FAMILIES IN SOME PWV TOWNS
1975 AND 1980

AREA	1975	1980
Benoni	115,43	181,62
Boksburg	115,59	182,24
Brakpan	114,18	196,61
Germiston	112,78	184,83
Springs	112,28	183,26
Krugersdorp	114,70	191,54
Vaal Triangle	120,10	194,46

Source : Potgieter (October 1975 and October 1980)

The Bureau of Market Research at the University of South Africa has calculated average household incomes in sample surveys of various Black areas (See 1971a, b; 1972a, b, c,; 1976a, b, c; 1977).

Much of the research on living standards has concentrated on Soweto. A summary of some of the studies is found in Table 4.

TABLE 4 : INCOME LEVELS IN SOWETO : FINDINGS OF SOME STUDIES
BETWEEN 1966 AND 1982

AUTHOR	AIM OF STUDY	RESULTS
Suttner (1966)	Average income of family of five	R46,31 per month (PDL was R55,57)
Dept. of Non-European Affairs (Quoted in Assocom, 1971)	Budget for family of five	R69=86
Assocom (1971)	Budget for family of five	R68=33
Urban Bantu Council (1971) (Quoted in Assocom, 1971 and Day, 1972)	Budget for family of five	R116=00
Shuenyane, et al (1977)	Diepkloof Socio-Economic survey	(i) 30% of families below PDL (ii) 61% had mean income of R109,60/month (HSL for 1975 was R119,69)
Suchard and Stumpf (1979)	Income Levels	Highest percentage of household heads (39,33%) had a monthly income between R80 and R160
Morris (1980)	Detailed study of Soweto	(i) estimated at least 18,7% of households below HSL. (ii) average income for Soweto in 1977 was R2950/year. (Average income of Whites in 1976-R9088, Coloureds-R4130 Indians-R5160)

/cont...

TABLE 4 (CONT)

AUTHOR	AIM OF STUDY	RESULTS
Keenan (1981)	Survey of households in Rockville, one of the 'better-off' areas of Soweto	(i) Between July 1978 and Dec. 1980 real wages of 70,5% of those employed declined (ii) Total average wage (real-take-home pay) fell by a mean of 13,5% (iii) 60% of households worse off in Dec. 1980 than in July 1978. (iv) Number of households below HEL increased in the same period from 29,4% to 37,3%.
Keenan (1981)	Sample surveys - various areas	70% of households in White City, 51% in Phiri and between 30 and 40% in Moroko below HEL
Johannesburg Chamber of Commerce (in Human Awareness Programme, 1982)	Minimum Living Level (MLL)	(i) Soweto family budget = R222,33 for 1980 (ii) Estimated 40% earned below this in 1979 (iii) For those earning above, 73% of income spent on essentials
Markinor (1982) (in SAIRR, 1982)	Income Levels	37,9% of families earned less than R250/month and 61,8% less than R400

**TABLE 5 : INCOME LEVELS IN TOWNSHIPS OTHER THAN SOWETO :
FINDINGS OF SOME STUDIES**

AUTHOR	AREA	RESULTS
Lamont et al (1979)	Alexandra	(i) Mean household income between R150 and R199/month (ii) 75% of households received less than R250/month (HEL for Africans in Johannesburg in 1979 was R258,84)
Urban Foundation (1980a)	Vuilkomber and Spooktown (Shanty towns in Khutsong, Carletonville)	(i) Mean monthly income for male heads of households was R123,73 and for females R38,31 (ii) Mean monthly income for all heads of households was R92,93 (iii) Only 2% of household heads earned R200 per month or more and only 5% R160 or more (iv) Mean household income was R120,57
Brindley (1976)	Western Coloured Township	(i) 'Poorer section' housing 4/5 of population - median monthly income was R78,24 (ii) 'Wealthier section' - median monthly income was R146,20 (HSL and HEL respectively R133,89 and R200,84)
Saspu National (1981b)	Kliptown	Average monthly income was R160
Markinor (in SAIRR, 1982)	PWV area (excluding Soweto)	38% of families earned less than R250/month and 66% less than R400/month

TABLE 6 : INCOME LEVELS OF SINGLE AFRICAN HOUSEHOLDS - FINDINGS
OF SOME STUDIES

AUTHOR AND STUDY	RESULTS
Peskin and Spiegel (1976) Sample survey of WRAB hostels in Johannesburg	(i) Average weekly wage was R24,20 (ii) 65,6% of the residents earned less than R25 per week
Loubser (1982b) -Income and Expenditure Survey of Single African households in PWV area	(i) Highest average income (R2781/year) earned by hostel residents; then came those living in mine and industrial compounds (R2672), followed by persons living on government (e.g. nurses) and business premises (e.g. hotel staff) - R2537 - these three groups consisted largely of males (ii) Second lowest income group - those persons living on residential premises in African townships - R2164 (iii) Lowest income group - domestic servants - average cash earnings of R1327 per year.

The low quality of life in Soweto and other PWV townships can be ascribed to the meagre amounts of disposable income available per household. Although a range of incomes is found across the different townships the broad pattern is one of a universe of poverty (Hlophe, 1977; Morris, 1980). The average household income in Soweto, for example, was estimated at a quarter of that recorded in white Johannesburg (Morris, 1980). Tables 4 - 6 show a substantial portion (anything between 20 and 40 per cent) of the population living below the PDL. The PDL used here however, is a highly conservative index and if items such as costs of education, recreation, necessary savings, medical expenses, household utensils and other family essentials are considered it is likely that as many as 80% of Soweto households, for example, receive less than this adjusted income level (Kane-Berman, 1978).

Nel (1982) has shown that from 1962 to 1975 the average real income of of African households in Johannesburg rose by 62 per cent and the average real income by 78 per cent. Table 7 shows that the proportion of households

earning less than R3500 (1980 prices) fell from almost 83 per cent in 1962 to 47,6 per cent in 1975. However, from 1975 to 1980 a downturn in their real income reversed this trend. The percentage of African households earning less than R2000 increased from 13,0 per cent in 1975 to 20,7 per cent in 1980 and the percentage of households in the 'less than R3500' group increased to 50,7 per cent in 1980 from 47,6 per cent in 1975.

The drop in their real income also increased the percentage of households with an income below the Minimum Living Level (MLL). In 1980, 28,6 per cent of African households in Johannesburg had an income below their MLL and 41,4 per cent below the Supplemented Living Level (SLL). (The MLL denotes a minimum subsistence standard of living, roughly equivalent to the HSL and the SLL is a modest low-level standard of living, analagous to the HEL). The corresponding MLL and SLL figures for 1973 were respectively 20,8 and 31,3 per cent (Nel, 1982).

TABLE 7 : PERCENTAGE DISTRIBUTION OF INCOME OF MULTIPLE AFRICAN HOUSEHOLDS BY INCOME GROUP (1980 PRICES) - 1962-1980

INCOME GROUP	1962	1970	1975	1980
< R2000	41,9	32,1	13,0	20,7
2000-3499	40,8	37,4	34,6	30,0
3500-4499	9,9	18,6	20,2	16,5
4500+	7,4	11,9	32,2	32,8

Source : University of South Africa, Bureau of Market Research, 1982

The Bureau of Market Research also showed that between 1975 and 1980 the real income of African earners in Pretoria dropped 7,5 per cent and for those in the East and West Rand by 5,7 per cent (SAIRR, 1982).

4. HEALTH AND NUTRITION

Research on health and nutritional status has concentrated only on Soweto. This section is based largely on the work of Morris (1980) and Shuenyane et al (1977).

The health status of a community may be gauged by various indicators such as incidences of disease and illness or cause of death (Morris, 1980).

The African infant mortality rate although dropping, is still high compared to that for other races. In 1970 the infant mortality rate in Soweto was 100,36 per 1000 confinements; in 1979 it was 41,73 (Human Awareness Programme, 1982). In 1979 the infant mortality rates for Whites was 14,9 per 1000 births and for Indians 25,0 (South African Statistics, 1982).

Diseases such as malnutrition and tuberculosis have a high incidence in Soweto. The primary cause of malnutrition is an inadequate diet. In 1978 there were 1104 admissions to the Baragwanath Hospital for malnutrition (Human Awareness Programme, 1982). In 1970 17,8 per cent of deaths of children under 10 years was due to malnutrition; by 1978 this figure had dropped to 14,1 per cent (Human Awareness Programme, 1982).

Shuenyane et al assessed children in Diepkloof, Soweto for the prevalence of malnutrition. The prevalence of malnutrition, stunting and wasting in 5 age groups is given in Table 8.

TABLE 8 : PERCENTAGES OF CHILDREN UNDER 17 YEARS OF AGE WITH
MALNUTRITION, STUNTING AND WASTING

	2 Years	2-5 Yrs	6-9 Yrs	10-12 Yrs	13-16 Yrs
Number of Subjects	74	134	126	108	81
Malnutrition	18,9	29,1	38,9	45,4	38,3
Stunting	63,5	66,4	55,5	59,2	45,7
Wasting	9,6	20,1	25,4	24,1	16,0

Source : Shuenyane et al (1977)

The prevalence of malnutrition rose from infancy through early childhood to reach its height in the age group 10-12 years. Stunting occurred frequently at all ages and was more marked in pre-school children. Wasting was less prevalent than sub-standard weight or height at all ages so that the majority of children had normal body proportions.

The incidence of deaths from diseases such as gastro-enteritis and measles is high amongst infants and young children in Soweto. Gastro-enteritis occurs largely as a result of unhygienic practices and harsh environmental conditions (Morris, 1980). In 1978 3 267 gastro-enteritis cases were admitted to Baragwanath Hospital (Human Awareness Programme, 1982).

Hypertension has become increasingly responsible for deaths in Africans from strokes, heart and kidney failures and is regarded by many as having reached epidemic proportions (Morris, 1980). The high incidence of deaths from accidents and homicides is associated with the poor living conditions (Morris, 1980).

An increasing number of Africans is being treated for mental illnesses such as schizophrenia and psychosis, both of which are psychiatric illnesses resulting from stress, social disorganization, disrupted family-life and an inability to adjust to urban life (Morris, 1980) Hayes (1983) has linked the increasing incidence of mental illnesses to unemployment.

As far as medical resources are concerned Soweto in 1980 had 583 doctors and 3870 nurses (Morris, 1980). If the population is taken as 1 million then the doctor-population ratio would be 1:1715 and the nurse-population ratio 1:258. Sowetans are served by the Baragwanath Hospital (2492 beds) and the Non-European Hospital in Hillbrow, Johannesburg (193 beds) (Morris, 1980). The total of 2685 beds gives a bed to population ratio of 1:372.

The low socio-economic status of a significant proportion of the population can be seen as a major cause of the generally low health status of the population which in turn acts to perpetuate a state of poverty. An overall improvement of the health status in Soweto can only be achieved through the upgrading of socio-economic and environmental conditions (Morris, 1980).

5. EDUCATION

Several surveys have exposed the low educational level of most Black workers in the PWV area.

The Bureau of Market Research, for instance, has published the educational levels of income earners in its various surveys (See 1976a, b, c, and 1977).

Shuenyane et al (1977) in their Diepkloof, Soweto survey showed that 73 per cent of the men and 79 per cent of the women had not reached high school. Only 5 per cent of the men and 3 per cent of the women had reached matric level. There were only 2 men (in 186 households surveyed) with a university education and no women.

In Alexandra, a quarter of the heads of households did not have any formal schooling, one-third attended primary school only and another third completed Standard 6. Only 2,7 per cent had a matric and/or another qualification. Amongst spouses 40 per cent had completed primary school, 32,1 per cent Standard 6, and 12,5 per cent Standard 8 - an average of 3 per cent higher than heads of households (Lamont, 1979).

Peskin and Spiegel (1976) in a survey of hostel residents in Johannesburg found that more than 80 per cent had an educational level of Standard Six or lower. Of this figure, 15,3 per cent had received no schooling at all.

Morris (1980) estimated that 115 000 children in Soweto were in need of pre-school services, while only 7 285 were currently being catered for in formal pre-school services.

The educational levels of persons over 15 years in Soweto in 1978 are shown in Table 9.

TABLE 9 : EDUCATIONAL LEVELS OF PERSONS OVER 15 YEARS IN SOWETO : 1978

EDUCATIONAL LEVEL	PERCENTAGE OF SAMPLE
Nil	3,9
Sub-Standards A & B	1,5
Standards 1-4	15,5
Standards 5-6	29,6
Standards 7-8	35,2
Standards 9-10	11,3
Post Matric	1,5
Unknown/Refused	1,5

Source : Morris, 1980

Thus only 1,5 per cent had a post matric education and 12,8 per cent a post Standard 8 qualification.

Of the total number of teachers in Soweto, 3 671 or 96,4 per cent had obtained qualifications in teacher training. However, 84 per cent of all teachers had a Standard Eight or lower qualification, 11 per cent a matric and only 1,6 per cent a university degree (Morris 1980). Teacher-pupil ratios in Soweto are given as 1:36 (Hannig, 1980) and 1:47 (Morris, 1980).

Morris (1980) has summarised the characteristics of education in Soweto as follows:

- (i) An unequal allocation of resources compared to White education;
- (ii) A general lack of confidence by teachers, pupils and parents in a separate and unequal education system;
- (iii) A shortage and poor quality of teachers;
- (iv) A high drop-out rate;
- (v) Inadequate extra-mural activities and supplementary services like health, social welfare and career guidance services;
- (vi) Inadequate participation by parents; and
- (vii) Inadequate opportunities for adult education.

6. UNEMPLOYMENT

The difficult task of trying to measure unemployment in South Africa has been described by De Klerk (1979), Maree (1978) and Simkins (1978a). In the PWV area the few surveys that have been carried out indicate a high African unemployment rate.

A study by Market Research Africa in 1977 (Hannig, 1980; Morris, 1980; Bromberger, 1978) estimated that Johannesburg had an African unemployment rate of 19,5 per cent. Of those unemployed or actively seeking work 51 per cent had been out of work for more than six months (Hannig, 1980). Most of the unemployed had a lower standard of education and about one-third of them fell into the 15-24 age group (Hannig, 1980; Bromberger, 1978).

Bromberger (1978), also quotes studies showing African unemployment rates of 24 per cent in Pretoria and 29 per cent in the Johannesburg-Reef-Pretoria region. Simkins (1978b) has estimated that 25 per cent of African workseekers have never been employed.

A pilot survey for the Agency for Industrial Mission on 150 unemployed Sowetans in November 1977 found that more than 30 per cent had lost their jobs in the first half of the year. 10 per cent of the families had no income sources and about 25 per cent had no wage earners in the household. More than 75 per cent of the households had problems in meeting essential expenditures on items such as rent, food and transport (Hannig 1980; Morris, 1980).

A survey by Markinor among Africans in Johannesburg, the Witwatersrand, Pretoria, Durban, Port Elizabeth and East London in November 1979 revealed that almost every second household reported one or several unemployed persons. Of all Africans living in multiple households who were willing to work, 23 per cent could not find employment, 7 out of 10 unemployed were women and almost half of all unemployed were in the 16-24 age group (Hannig, 1980).

In a survey of 2 areas, one urban (Atteridgeville and Mamelodi) and one rural (Saulspoort), Loots (1978) found evidence suggesting a doubling of unemployment between 1970 and 1977. Two-thirds of the unemployment in the urban sample were in the 15-24 age group and was higher amongst women than among men. It was estimated that 15,7 per cent of the men and 34 per cent of the women were unemployed. The relation between education and unemployment indicated that men with a matric certificate and women with a Junior Certificate were somewhat more prone to be unemployed than those with lesser educational qualifications, although in terms of numbers the latter made up the bulk of the unemployed. New entrants to the labour market comprised a quarter of the male unemployed and half of the females. Of the unemployed 60 per cent were women.

7. THE INFORMAL SECTOR

The existence of the 'informal sector' can be seen as a response to the high unemployment rates and the low incomes of many black households. A significant proportion of the workforce in both urban and rural areas is engaged in economic activities that are insecure, do not provide full employment and which, almost invariably, generate low incomes (Beavon and Rogerson, 1982). These activities include the operation of shebeens, child-minding, brewing of traditional African beer, as well as private taxis, street musicians, photographers, traditional healers, street barbers, informal schools, newspaper vendors, building contractors, self-employed artisans, shoe-makers, tailors, wood carvers, garment makers, and street hawking in flowers, food and clothing (Webster, 1979; Matsetela, 1978; Beavon and Rogerson, 1982).

The growth of the informal sector can be ascribed to the material conditions experienced by Blacks. The creation of an increasing number of structurally unemployed workers, the low wages paid to those in formal wage employment and the meagre unemployment benefits for Blacks have forced an increasing number of persons to engage in a host of informal sector activities (Webster, 1979; Rogerson and Beavon, 1980).

Similar reasons have been advanced by Matsetela (1978) for the growth of an informal sector in Winterveld. The presence of an informal sector in Winterveld can be related to a number of factors which are inherent in the broader South African economy. The most important of these are unemployment, immigration to urban areas, government policies applicable to urban development, the land tenure system, population location, lack of industrialization and the level of development of productive forces. Most of the workers engaged in informal sector activities in Winterveld are people who one way or another have been displaced in formal industry or from the peasant way of life. They engage in these activities to raise the subsistence they need.

Various sources reveal different estimates of the extent of the informal sector in Soweto. Morris (1980) mentions a 1979 survey that indicated that at least 1 in 10 households were engaged in some form of informal sector activity. Webster (1979) believes this figure is closer to 1 in 3.

Beavon and Rogerson (1982) have made an intensive study of street traders in Johannesburg. The authors draw attention to the existence of a complex system of work relationships amongst these hawkers. These range from 'disguised wage work' to situations of 'true self-employment', e.g. newspaper vendors are effectively disguised wage-workers of the newspaper companies without the normal benefits available to employed labour - the earnings of this group are based on commission.

Amongst flower-sellers there exist relationships described as 'dependent working' where poorer traders borrow money and become dependent upon better-off traders or where certain flower-sellers acquire a variety of obligations which substantially reduce their freedom of action (Tomaselli, 1981). It appears that dependent work relationships exist also within the sector of soft goods sales as many hawkers enter into such dependent roles with their suppliers which are more often than not small wholesale businesses (Bisheuvel, 1979). Only within those street trading activities requiring the least capital such as the sale of foodstuff and second-hand clothing, is there a work relationship approaching that of 'true self-employment' where the trader enjoys relative freedom in terms of both the choice of supplier and outlet for his goods.

These relationships serve to illustrate that hawking is largely a survival strategy to supplement low wages or overcome unemployment and in many cases efforts by children to raise money for school fees and books (Rogerson and Beavon, 1982).

The survival strategy that hawking represents is further exemplified in the data of Table 10 obtained from a survey of hawkers in Johannesburg and Soweto (Beavon, 1981; Beavon and Rogerson, 1982).

TABLE 10 : HAWKERS IN JOHANNESBURG : SOME SOCIO-ECONOMIC DATA OF A SURVEY

	JOHANNESBURG	SOWETO	OVERALL
<u>(1) EDUCATIONAL LEVEL OF HAWKERS</u>			
(a) None	20,8%	21,7%	21,3%
(b) Sub A - Standard 3	32,0	22,8	26,8
(c) Std 4 - Std 6	38,9	37,0	37,8
(d) Std 7 - Std 9	7,0	16,3	12,2
(e) Matric	1,4	1,1	1,2
(f) Post-Matric	0	1,1	0,6
n	72	92	164
Effectively illiterate	52,8%	44,5%	48,1%
<u>(2) SIZE OF HOUSEHOLDS</u>			
(a) Single	8,3%	1,1%	3,7%
(b) 2 - 3	18,1	11,9	14,6
(c) 4 - 6	45,9	46,7	47,0
(d) 7 - 9	20,9	31,5	26,8
(e) 10 - 12	7,0	8,7	7,9
n	72	92	164
<u>(3) OWNERSHIP OF STALLS</u>			
(a) Self	83,3%	97,8%	91,5%
(b) Family	12,5	0	5,5
(c) Self and Hawker	2,8	1,1	1,8
(d) Another hawker	1,4	1,1	1,2
n	72	90	162

TABLE 10 CONT.

	JOHANNESBURG	SOWETO	OVERALL
(4) <u>TOTAL NUMBER OF PERSONS WORKING AT STALL</u> <u>(INCLUDING OWNER)</u>			
1	54,0%	96,7%	77,9%
2	23,8	2,2	11,7
3	4,8	1,1	2,7
4 - 6	11,2	-	4,9
7 - 9	6,4	-	2,8
n	72	91	163
(5) <u>EARNINGS - AVERAGE PER DAY (MAY OR MAY NOT BE PROFIT)</u>			
Minimum	R 2,20	R 1,42	R 1,42
Maximum	R82,28	R50,00	R82,28
Average	R17,45	R11,83	R14,30
Less than R5,00	11,1%	26,1%	19,5%
R5,01 - R10,00	25,0	31,5	28,7
10,01 - 15,00	16,7	19,6	18,3
15,01 - 20,00	16,7	10,9	13,4
20,01 - 30,00	19,4	8,7	13,4
30,00 +	11,1	3,3	6,7
PERCENTAGE DEFINITELY EARNING LESS THAN AVERAGE CLASS	52,8	57,6	48,2
<u>PER WEEK EARNINGS:</u>			
Minimum	R12,85	R 2,85 (Mainly Students)	
Average	R109,67	R71,20	

Sources : Beavon, 1981; Beavon and Rogerson, 1982.

(1) The survey showed that almost 50 per cent of the hawkers were illiterate which means that most of this group would have difficulty getting good jobs in industry. The educational levels also indicate that only a small percentage has had high school training so that hawking may be regarded by them as the best way of coping with the disadvantage of a low level of education in an industrial society.

(2) The average household size of hawkers was 5,7 but almost 35 per cent of households had more than 6 persons.

(3) The stalls were almost exclusively owned by the hawker and run by the owner alone or with one assistant usually a relative or a member of the household. Only in a very small percentage of cases in Johannesburg was there an indication that the stall provided employment for a significant number of people.

(4) As 'income-earned' is actually turn-over figures, costs must be taken off, e.g. transport and purchasing stock. The average transport cost has been estimated as R24,45 for Johannesburg hawkers and R14,19 for hawkers in Soweto. Total costs are in the region of R66 per week for the average hawker which means that net earnings are meagre for a substantial proportion of the hawkers.

The harassment of hawkers and other participants in the informal sector has been described by Tomaselli (1981), Beavon and Rogerson (1982) and Rogerson and Beavon (1982b). Municipal and state authorities have constantly tried to remove street traders from Johannesburg in accordance with their objectives of a 'modern' and 'pure white' city. The obstacles include the Black (Urban areas) Consolidation Act of 1945, which requires African hawkers to obtain permission from WRAB, the Johannesburg City Council which issues licences, and the regulations concerning areas and time of operation and the issue of 'fixed stands' and mobile hawkers. In addition, there is constant harassment from traffic police, health authorities, licensing authorities and the South African Police.

In spite of harassment from official circles a significant percentage of the work force which can be termed the 'casual poor' (defined as that set of the population which combines low-average incomes with considerable instability and insecurity of income and employment - Beavon and Rogerson, 1980) has participated in one of a variety of informal sector activities as it represents the only substitute for lack of or perhaps inadequate wage income.

8. RELOCATION

The policy of relocating people in accordance with the rigid implementation of the apartheid policy has caused untold hardship to several thousands of Black people in the PWV area.

During the 1960s and 1970s the state implemented a policy of removing Africans from small townships near the White urban areas to outlying townships. Residents from Sophiatown, Martindale and Newclare were moved to Meadowlands and Diepkloof in Soweto (Morris, 1981b).

By 1973 13 000 families had been moved from Alexandra (a free hold township established early in the century) so that hostels could be established for single migrant labourers. Alexandra was to become a dormitory complex servicing the surrounding residential, industrial and business areas while 'family life' such as still existed was at the mercy of resettlement (To the Point, 5.12.1980).

Other regional townships created were Katlehong, Daveyton, Tsakané, Kwathema, Vosloorus and Tembisa on the East Rand, Kagiso, Mohlakerg, and Bekkersdal on the West Rand and Sebokeng near Vereeniging. In Pretoria large numbers of Africans were moved from Lady Selborne, Eastwood and Highlands (Morris, 1981b).

Perlman (1982) has examined the way in which the South African state has tried to regulate the residence, movement and employment of the African population in the Pretoria - Odi area. He has described how the state has tried to manage the existence of a relative surplus population in the area comprising Garankuwa, Mabopane, and Winterveld (which are in the 'independent homeland' Bophuthatswana), Soshanguwe, Mmakau, Mamelodi and Atteridgeville. In this area the state has restructured the African working class by establishing new townships, enforcing stringent influx control regulation and relocating sections of the urban population in Garankuwa and Mabopane. Housing has been emphasized as a criterion for entry into the urban areas while at the same time increasing the restrictions placed on provision of housing. This is complemented by an expansion of housing in the homeland townships.

By exploiting the lines of division amongst the working class (e.g. legal status vs illegal, township/squatter, employed/unemployed, skilled/unskilled, Tswana/non-Tswana) the state has resettled sections of the reserve army of labour (Yawitch, 1979; Perlman, 1982).

The poverty resulting from relocation is best exemplified in a description of the conditions existing in Winterveld (Harrop Allin, 1979; Baldwin, 1975; Van der Horst, 1981; Yawitch, 1979; Perlman, 1982; Financial Mail, 1982).

Winterveld was private freehold land belonging to African landowners who had bought it as far back as 1938 from a land speculation company (Yawitch, 1979). The population has been estimated at anything between 100 000 and 800 000. The vast majority of the population lives in shacks as tenants on the farms. Some plots are grossly overcrowded with up to 12 tenant families (Financial Mail, 1982).

Yawitch, (1979) has cited several reasons for the heavy influx of people to Winterveld :

- (i) The victims of 'black spot' removals from areas like Eastwood and Lady Selborne;
- (ii) the capitalization and mechanization of agriculture has caused the expulsion of large numbers of labour tenants;
- (iii) those who have moved from urban townships because of lack of accommodation and endorsement out of urban areas under influx regulations
- (iv) those who have moved nearer town because of lack of work and an inability to survive off subsistence agriculture in the interior of Bophuthatswana.

Winterveld has no infrastructure except for a main road which runs through the settlement and an efficient bus service for commuters to the industrial areas (Yawitch, 1979; Van der Horst, 1981).

There is an overwhelming squalor of the crowded areas. Diseases such as dysentery, gastro-enteritis, bilharzia, kwashiorkor and bronchitis that are related to poverty, malnutrition and unhygienic living conditions are common in the area (Yawitch, 1979; Van der Horst, 1981).

The area serves as a reservoir of cheap labour but there is a massive problem of unemployment, underemployment and great poverty (Van der Horst, 1981).

Yawitch (1979) has highlighted the plight of women in Winterveld amongst whom there is large scale unemployment. The women are employed as domestic servants and in other low-wage occupations. Coming largely from farms they lack the skill or education for higher paid industrial employment.

9. CONCLUSIONS

A study of poverty in the PWV area can only be an analysis of relative rather than absolute poverty, i.e. poverty relative to that prevalent in the rural areas and to the wealth in the White urban areas.

Who then are the poor in the FWV area? It is difficult to categorise the poor, rather one can say that a broad pattern of poverty exists in the African townships. A substantial proportion of the African population is existing below (a conservatively estimated) the Poverty Datum Line, there is sufficient evidence of high population densities and gross overcrowding and health and social services appear to be inadequate.

The educational status of many Africans is low; an inferior education system and the shortage and poor quality of teachers ensure that most Africans are confined to lower level occupations.

Unemployment rates are high impelling many to seek survival strategies in the informal sector. In addition the policy of relocation has caused untold misery in moving thousands to places far from industrial employment and closer to the impoverished homelands.

A few shortcomings of the research on poverty in the PWV area should be mentioned in conclusion:

(i) Most researchers have examined only the poverty of Africans (who are certainly the most disadvantaged) but there also seems to be a need to research Coloured and Indian poverty and possibly also White poverty.

(ii) A feature of the research into African poverty has been the overwhelming emphasis on Soweto. A few micro-studies in other African townships would provide useful information on these neglected areas.

(iii) It would be interesting also to look at the poverty of the aged and handicapped of all races - this seems to be another area that has not been researched in any depth.

REFERENCES

- Association of Chambers of Commerce
in South Africa (Assocom) 'Budget For a Bantu Family of Five
in Soweto', Johannesburg,
November, 1971.
- Baldwin, A. 'Mass Removals and Separate
Development' in Journal of Southern
African Studies, Vol. 1. No.2,
April, 1975, pp. 215-227.
- Beavon, K.S.O. 'From Hypermarkets to Hawkers:
Changing Face of Concern For
Human Geographers'. Environmental
Studies Occasional Paper No.23
Department of Geography and
Environmental Studies, University
of the Witwatersrand, Johannesburg,
1981.
- Beavon, K.S.O., and Rogerson, C.M. 'The Persistence of the Casual
Poor in Johannesburg' in Contree
(Journal For South African
urban and regional history),
Vol. 7, January, 1980, pp. 15-21.
- Beavon, K.S.O. and Rogerson, C.M. 'The informal sector of the
apartheid city: the pavement
people of Johannesburg', in
Living Under Apartheid ed. by
David M. Smith, London Research
Series in Geography 2, George
Allen and Unwin, London, 1982.
- Biesheuvel, S. 'Planning for the Informal Sector :
Hawking in Johannesburg', unpublished
M.Sc dissertation, University
of the Witwatersrand, 1979.
- Boaden, B.G. 'A Laissez-Faire Approach to
the Housing of Urban Blacks'
in South African Journal of
Economics, March 1980, pp.28-44.
- Brindley, M. 'Western Coloured Township,
Problems of an Urban Slum',
Ravan Press, 1976.

- Bromberger, N. 'Unemployment in South Africa : a survey of research', in Social Dynamics, Vol. 4 No. 1, June 1978, pp. 12-28.
- Day, C. 'It all depends on how you define poverty' in The Rand Daily Mail, 15 July, 1972.
- De Klerk, M.J. 'Structural Unemployment in South Africa', in South African Outlook, 109, pp. 35-38, 1979.
- Dorida Management Services 'Housing Demand in South Africa : 1980 - 2020', Johannesburg, 1981.
- Fair, D. 'The Witwatersrand Metropolitan region in Transition', in South African Journal of African Affairs, Vol. 9, Nos. 3 and 4, 1979, pp. 139-144.
- Financial Mail (1982a) 'Alexandra : the perils of neglect', 22 January 1982.
- Financial Mail (1982b) 'Winterveld', 27 Aug 1982.
Financial Mail Survey of Soweto, 25 March 1983.
- Frankel, P. 'Municipal Transformation in Soweto : Race, Politics and Maladministration in Black Johannesburg' in African Studies Review, Vol. 22 No. 2, 1979, pp. 49-63.
- Hannig, S. 'Soweto : testing ground for peace' in Africa Insight, Vol. 10, Nos. 3 and 4, 1980.
- Harrop-Allin, M. 'Winterveld tale' in Sash (The Black Sash magazine), Vol. 21, No 3, November, 1979.
- Hayes, G. 'Madness and Labour' in Work in Progress, No 26, 1983.

- Hellman, E. and Goldblatt, D. 'Soweto' in Optima, Vol. 23, No. 1, March 1973, pp. 14-46.
- Hlophe, S.S. 'The Crisis of Urban Living Under Apartheid Conditions : A Socio-Economic Analysis of Soweto' in Journal of Southern African Affairs, Vol. 2 No. 3, July 1977, pp. 343-354.
- Human Awareness Programme 'Soweto : An Assessment', Change Newsletter, 1982.
- Izwi Lase Township Periodical, December 1982-January 1983. Bergvlei, Transvaal.
- Johannesburg Chamber of Commerce 'Budget for a Bantu Family of Five in Soweto', Johannesburg, November 1971.
- Kane-Berman, J. 'Soweto : Black Revolt, White Reaction', Ravan Press, Johannesburg, 1978.
- Keenan, J. 'The quality of life in Soweto : Some Employment and Income Trends in 50 Soweto Households (1978-1980)', Paper presented at the University of Witwatersrand History Workshop, 1981.
- Keenan, J. 'Black Earnings : Changing Contemporary Patterns', African Studies Institute Seminar Paper, University of the Witwatersrand, Johannesburg, May 1982.
- Lamont, T.M., Augustyn, T. and Marais, S. 'Preliminary Report on a Socio-Economic Survey Done in Alexandra', Department of Sociology, University of South Africa, 1979.

- Langschmidt, W. 'The Urban Bantu : some facts and figures on their standard of living', Market Research Africa, Johannesburg, 1971.
- Laurence, P. 'Sorting out Soweto' in Energos, 7, 1982.
- Loots, L.J. 'A Profile of Black Unemployment in South Africa : Two Area Surveys', SALDRU Working Paper No. 19, University of Cape Town, 1978.
- Loubser, M. (1982a) 'Income and Expenditure Patterns of Coloureds in the Cape Peninsula and Blacks in Pretoria', in Research for Marketing, 9(1) 1982, Bureau of Market Research, University of South Africa, Pretoria.
- Loubser, M. (1982b) 'Income and Expenditure of Black Single Households in the Pretoria-Witwatersrand-Vaal Triangle' in Research for Marketing, 9(2) 1982.
- Maasdorp, G. and Pillay, N. 'Urban Relocation and Racial Segregation : The Case of Indian South Africans', Research Minograph of the Department of Economics, University of Natal, Durban, 1977.
- Maree, J. 'The dimensions and causes of unemployment and underemployment in South Africa', South African Labour Bulletin, Vol. 4, No. 4, 1978, pp. 15-51.
- Matsetela, T. 'The Informal Sector in the Political Economy of Winterveld', B.A. (Hons.) dissertation, University of the Witwatersrand, Johannesburg, 1978.

- Matsetela, T., Matshoba, M.,
Webster, D., Wilkinson, P.,
Yawitch, J., and
Zarenda, H.
- 'Unemployment and Informal
Income Earning Activity in
Soweto', African Studies
Institute Seminar Paper,
University of the Witwatersrand,
Johannesburg, July 1980.
- Morris, P.
- 'Soweto : A Reveiw of Existing
Conditions and Some Guidelines
For Change', Urban Foundation,
1980.
- Morris, P. (1981a)
- 'Soweto : A Brief History' in
Sash, Vol. 24, No.2.
- Morris, P. (1981b)
- 'A History of Black Housing
in South Africa', Africa
Foundation.
- Nel, P.
- 'Changes in Income and Economic
Welfare of Black Multiple
Households in Johannesburg,
1962-1980' in Research for
Marketing, 9(2) 1982.
- Perlman, J.
- 'The State and the African Working
Class in the Pretoria-Odi Area :
Population relocation, state
management and class restructuring',
SARS/DSG Dissertation Series
No. 1, 1982.
- Peskin, M. and Spiegel, A.D.
- 'Migrant Labour Project : Urban
Hostels in the Johannesburg
Area - A Preliminary Study',
Institute of Social and Economic
Research, Rhodes University,
Grahamstown, 1976.
- Potgieter, J.F.
- 'The household subsistence level
in the major urban centres of
the Republic', Institute of
Planning Research, University
of Port Elizabeth Biannual surveys.
Fact Sheet/Research Report Nos. 8
(1973), 9 and 14 (1974), 12 and
15 (1975), 16 and 18 (1976), 21
and 24 (1977), 25 and 28 (1978),
34 (1979), 36 and 39 (1980), 41 and
42 (1981), 45 and 46 (1982).

- Rogerson, C.M. and Beavon, K.S.O. 'The Awakening of "Informal Sector"', Studies in Southern Africa' in The South African Geographical Journal, Vol. 62, No. 2, September, 1980.
- Rogerson, C.M. and Beavon K.S.O. (1982a) 'Getting By in the "Informal Sector" of Soweto', in Journal of Economic and Social Geography, Vol. 73, No. 4, pp. 250-265.
- Rogerson, C.M. and Beavon K.S.O. (1982b) 'A Tradition of Repression : The Street Traders of Johannesburg'; Unpublished Paper, University of the Witwatersrand, Johannesburg.
- Saspu National 'Housing Crisis for Pensioners', Vol. 2 No. 3, 1980.
- Saspu National (1981a) 'Thomsville, Lenasia', Vol. 2 No. 1.
- Saspu National (1981b) 'Kliptown', Vol. 2, No. 2.
- Saspu National (1981c) 'Reiger Park', Vol. 2, No. 4.
- Saspu National (1981d) 'Wrab on the boil', Vol. 2 No. 6.
- Saspu National Re : Shacks in Orlando and Katilehong, Vol. 4, No. 1, 1983.
- Schlemmer, L. and Moller, V. 'The Need to Eliminate Outmoded Thinking' in Energos, 7, 1982.
- Shuenyane, E., Mashigo, S., Eyberg, C., Richardson, B.D., Buchanan, N., Pettifor, J., Macdougall, L., and Hansen, J.D.L. 'A Socio-Economic, Health and Cultural Survey in Soweto' in The South African Medical Journal, April 1977, pp. 495-500.

- Simkins, C. (1978a) 'Measuring and predicting unemployment in South Africa 1960-1977' in Structural Unemployment in Southern Africa, ed. by Simkins, C. and Clarke, D., Development Studies Series 1, pp. 1-49, University of Natal, Pietermaritzburg.
- (1978b) 'African Unemployment in urban and rural South Africa' in South African Unemployment : A Black Picture ed. by C. Simkins and C. Desmond, DSRG and Agency for Industrial Mission.
- South African Institute of Race Relations (SAIRR) (1971) 'Poverty and Wages in Johannesburg', Information Sheet No. 53.
- (1973) 'Poverty Datum Lines in Various Areas', Publication No. RR50/A/73.
- (1981) Race Relations News, Vol. 43, No. 2.
- (1982) Annual Survey of Race Relations - 1982.
- (1983) Race Relations News, Vol. 45, No. 3.
- S.A. Statistics, 1982 Dept. of Statistics, Pretoria.
- Suchard, H. and Stumpf, R. 'The Poverty Problem in the Black Township of Soweto : Major Results of a Survey' in Development Studies on Southern Africa, Vol. 1 No. 4, July 1979.
- Suttner, S. 'Cost of Living in Soweto', SAIRR, Johannesburg, 1966.
- Thom Grey Family 'A Survey of Housing Conditions in Thomsville Lenasia, 1977.

To The Point

Periodical, 5 December 1980.

Tomaselli, R.

'Johannesburg Indian Flower Sellers : A History of People on the Street', Paper presented at the University of Witwatersrand History Workshop, 1981.

University of Pretoria, Bureau for Economic Policy and Analysis, 1977

Focus on Key Economic Issues : Urban Blacks (No. 19).

1979

Focus on Key Economic Issues : The Economy and the People (No. 23).

University of South Africa,
Bureau of Market Research
(BMR)

1971 (a)

Income and Expenditure Patterns of Non-White Urban Households : Multiple Bantu Households :
(i) Pretoria (Report No. 27.1)
(ii) Johannesburg (Report No. 27.2).

1971 (b)

Income and Expenditure Patterns of Non-White Urban Households : Multiple Asian Households : Johannesburg Survey (Report No. 27.5)

1972 (a)

Income and Expenditure Patterns of Non-White Urban Households : Multiple Coloured Households : Johannesburg Survey (Report No. 27.8).

1972 (b)

Income and Expenditure Patterns of Non-White Urban Households: Multiple Bantu Households,
(i) Krugersdorp (27.12)
(ii) Tembisa, Kempton Park (27.13).

1972 (c)

Income and Expenditure Patterns of Non-White Urban Households Single Bantu Households
(i) Pretoria (27.14)
(ii) Johannesburg (27.15).

- 1976 (a) Income and Expenditure Patterns of Non-White Urban Households : Multiple Bantu Households :
(i) Pretoria (50.2).
(ii) Johannesburg (50.3).
- 1976 (b) Income and Expenditure Patterns of Non-White Urban Households : Multiple Asian Households - Johannesburg Survey (50.6).
- 1976 (c) Income and Expenditure Patterns of Non-White Urban Households : Multiple Coloured Households - Johannesburg Survey (50.8).
- 1977 Income and Expenditure Patterns of Non-White Urban Households : Multiple Bantu Households - East and West Rand Survey (50.15).
- 1982 News Release, 5.9.82.
- Urban Foundation 1977 'Information Base 1 : Population Profile', Transvaal Region, Johannesburg.
- 1978 'Information Base 2 : Urban Black Housing', Transvaal Region, Johannesburg.
- 1980 (a) 'Ikhaya Lethu Self-Help Housing Project', Transvaal Region, Johannesburg.
- 1980 (b) 'Lenasia Investigation', Transvaal Region, Johannesburg.
- Van der Horst, S.T. (ed.) 'Race Discrimination in South Africa : A Review', David Philip, Cape Town, 1981.

Webster, D.

'The political economy of survival :
the unemployment crisis and
informal income opportunities
in Soweto' in Work in Progress,
No. 10, 1979.

Yawitch, J.

'Women and Squatting : A Winterveld
Case Study', African Studies
Institute Seminar Paper,
University of the Witwatersrand,
Johannesburg, May 1979.