

**A STUDY OF THE GARBAGE PICKERS WITHIN  
THE PORT SHEPSTONE DISPOSIAL SITE**

**JSG NAIDOO  
947487**

**A study of the garbage pickers within the Port Shepstone  
Disposal Site.**

Garbage pickers are members of the urban poor population. The collection of scrap reflects their search for a livelihood. They sort through what other people have chosen to throw away. Their income is not stable, but depends on luck and individual diligence in collecting "valuable items". They are classified as casual workers, for their activity requires time and at least a minimal effort.

In this paper the term "garbage picker" refers to those individuals who work in public places recuperating materials from the city's garbage. It thus excludes the housewives and domestic servants, who may keep the household newspapers to sell at some opportune moment, and those large scale enterprises that deal in the buying and selling of waste materials. The garbage picker is the most visible component of a larger system, characterized by the sacks that he carries with him, and quite often a small handcart or supermarket trolley as well. It is important to emphasize that the garbage pickers are not employees of the municipal garbage collection department.

**A research report submitted in partial fulfilment of the requirements for an Honours Degree in Geography, in the Department of Geography, University of Zululand, 1994.**

**JSG NAIDOO  
947487**

**ABSTRACT**

*The aim of this study is to investigate the socio-economic status of the garbage picker and the nature of the garbage picking activity. The majority of the pickers were found to be housed in the nearby informal settlements and had an earning potential that was far below the Poverty Datum Line. The investigation highlights this poverty and exposes the exploitation in terms of the resale of recuperated items. The items served many purposes and includes the provision of building material for "shacks".*

**ACKNOWLEDGEMENTS**

*I would like to express my gratitude to the following people for their assistance in making this research study possible:*

- 1. The garbage pickers within the Port Shepstone Disposal Site for their co-operation.*
- 2. The field workers.*
- 3. The Senior Health Inspector - Mr P.A. Pfeil.*
- 4. Professor E.M. Makhanya of the Department of Geography and for his guidance and assistance.*

## TABLE OF CONTENT

	Pg. No.
1. Title Page	i
2. Abstract	ii
3. Acknowledgement	iii
4. Table of Contents	iv
5. List of Maps and Plates	vi
6. List of Figures and Diagrams	vii
7. List of Tables	viii
8. CHAPTER ONE	1
1.1. Introduction	1
1.2. Introduction of Methodology	2
1.2.1. Aim	3
1.2.2. Objectives	3
1.2.3. Hypothesis	3
1.2.4. Methodology	4
1.3. Study Area	4
9. CHAPTER TWO	6
2.1. Informal Sector	6
2.2. Garbage Picking	11
2.3. Port Shepstone Dump	14
10. CHAPTER THREE ( Analysis )	21
3.1. Socio-economic status	21
3.2. Residential characteristics	25
3.3. Informal Activity	26
3.4. Items Recovered and Uses	32
3.5. Income	38
3.6. Evaluation	40

11.	CHAPTER FOUR	41
	4.1 Recommendations	41
	4.2 Conclusion	42
12.	APPENDIX	44
	Questionnaire	
13.	BIBLIOGRAPHY	50

## LIST OF MAPS AND PLATES

### Maps:

1. Location of Study Area	5
2. Future expansions of the dump	16
3. Land use patterns	17
4. Existing and proposed fencing	19
5. Site after closure	20

### Plates:

1. Garbage pickers at work	33
2. Informal settlement - Boboyi	34
3. Collected cardboard	35
4. Collected plastics	35
5. Transportation of cardboard	36
6. Machine compacting cans	36
7. Machine compacting metals	37
8. Compacted metals	37

**LIST OF FIGURES AND DIAGRAMS**

<b>Figures:</b>	<b>Pg. No.</b>
1. Marital Status	21
2. Age Distribution	22
3. Education Status	25
4. Distance and Population Density	26
5. Satisfaction	28
6. Location of Dwelling	31
7. Items recovered	32
8. Uses of Items	32

<b>Diagrams:</b>	
1. Maslow's need-hierarchy theory	7
2. Relationship between pickers and dealers	13

**LIST OF TABLES**

Pg. No.

**Table:**

1. Income opportunities in a Third World City.	9
2. Distribution between formal and informal sectors.	10
3. Characteristics of the two - circuit urban economy.	11
4. Income Status	23
5. Work status of Head Picker	24
6. Satisfaction with activity	27
7. Uses of Items	33
8. Satisfaction and responses	39

## CHAPTER ONE

### 1.1. Introduction

There is no site that so impressively advertises the existence of poverty as does that of the garbage picker at work. If anything represents the employment and income problems of a "developing" economy then it is Mayhew's (1861) "bone-grubbers" or Cali's "vultures" as they sort through what other people have chosen to throw away. From what little has been written about these people it is clear that most observers have been strongly of the attitude that garbage pickers are a hopelessly poverty stricken group who are scratching out a meagre existence from the crumbs of the richer man's table (Bromley and Gerry, 1979).

Garbage picking is seen as an activity that is on the border line between employment and vagrancy. What is strange is that people tend to look at this occupation as an expression of poverty and not as a cause of it. We see the garbage picker as being forced into this activity by the lack of opportunities elsewhere in the urban economy, whilst we forget that he is working. "In the absence of any solution to failure, sickness or old age, except the workhouse, the London streets abounded with the most pathetic and gratuitous forms of economic activity" - Stedman Jones (1971) - has sited in Bromley and Jerry, (1979). We have been more interested in the fact that the garbage picker is not working

in something else, rather than in looking at why he is poor, and how his present activities contribute to that poverty. What we have failed to do is to stop and look at the reality of the situation. The attitude of businessmen and other employers who operate on a "casual system" escalate the poverty dilemma. The wage is often not even enough to sustain the labourer let alone his family. The belief that the labour as a commodity can be separated from the labourer would only perpetuate further anomalies.

Furthermore, demands for resources such as health, housing, education etc. have been met at minimal levels for the Black population group. The informal sector has offered an alternative as a coping mechanism for the urban poor. Garbage picking in particular has been given limited attention, yet, there are many who eke out a living out of this activity.

## **1.2. Introduction to Methodology**

In view of the employment crisis facing our country, one must realise that the informal sector offers an avenue for alleviating some of the pressure on the government.

Furthermore, strategies for overcoming the employment dilemma must be approached from all angles and one cannot sit back and expect the state to suggest alternatives. The garbage picking activity has offered a source of income and survival

for some of the poor and it is thus interesting to investigate and improve understanding of the characteristics of such an activity.

#### **1.2.1. Aim**

To investigate the socio-economic status of the garbage picker and the associated characteristics of this activity at the Port Shepstone Solid Waste Disposal Site. The socio-economic status refers to the state, condition or ranking of the garbage picker. It deals with the income-levels and living conditions among the people.

#### **1.2.2. Objectives**

1. To evaluate the socio-economic status of the garbage pickers.
2. To determine the types of recyclable items obtained from the disposal site.
3. To establish the income derived from the informal recovery operation.
4. To determine the residential location of the pickers.
5. To assess the alternate uses of materials recovered.

#### **1.2.3. Hypothesis**

It is hypothesized that:

1. Majority of the garbage pickers are housed in the nearby settlements of Band Farm and Boboyi.
2. The most common recuperated items are cardboard,

bottles, plastic and scrap metal.

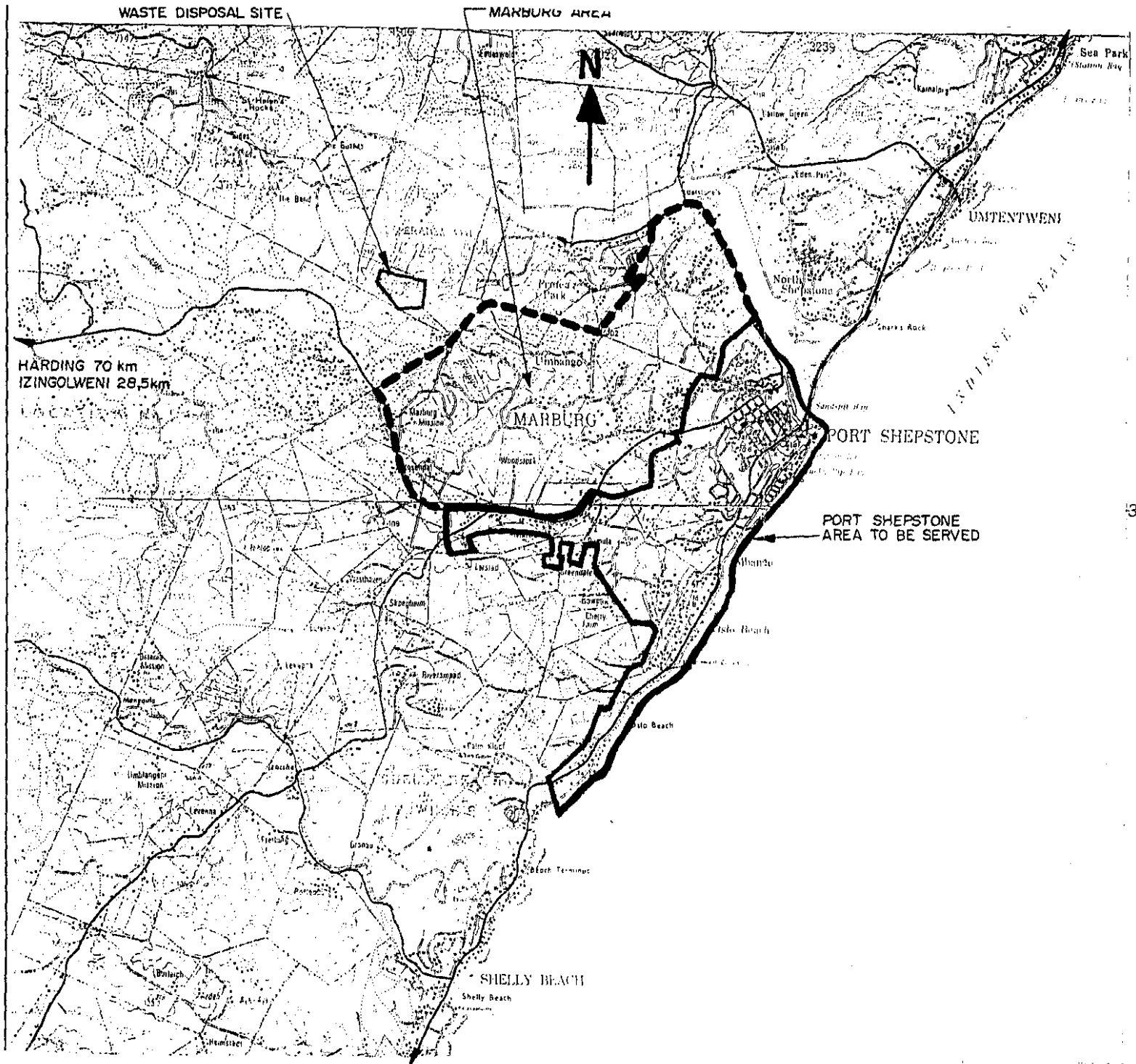
3. The fundamental use of the recuperated items is resale.
4. The income derived from this activity is far below the Poverty Datum Line.

#### **1.2.4. Methodology**

Thirty samples were drawn at the Port Shepstone Disposal Site using the snowball random sample method. This sample may be considered as statistically valid since the population figure ranged from 100 to 130. It must be stressed that this population figure is not fixed and is subject to change according to the needs of pickers. The data was collected by means of a questionnaire (see appendix 1). The researcher personally administered the questionnaire together with an assistant field worker and an interpreter. This questionnaire was administered after 2p.m. as this is the time during which the pickers work.

#### **1.3. Study Area**

The map on the following page is indicative of the geographical location of the Disposal Site of the Borough of Port Shepstone.



30%	DRAWN	J. CAMP	ENGINEER	PR. E.T.
	CHECKED	L. BOSCH	DATE	1986-07-02

SCALE 1 IN 50000

CLIENT  
**PORT SHEPSTONE BOROUGH**

LOCATION  
**WASTE DISPOSAL SITE**

TITLE  
**TOPOGRAPHICAL PLAN SHOWING  
 LOCATION OF WASTE DISPOSAL SITE  
 AND AREA TO BE SERVED.**



**DAVIES  
 LYNN &  
 PARTNERS**

CONSULTING GEOTECHNICAL  
 ENGINEERS & ENGINEERING  
 GEOLOGISTS

812 SANGRO HOUSE, 417 SMITH ST.  
 DURBAN 4001  
 P.O. Box 2328 DURBAN 4000  
 PHONE (031) 3012515

7/1/

## CHAPTER TWO

### Conceptual Framework

#### 2.1. The informal sector

The world of the casual poor, of the street hawker, backyard artisan or common lumenproletarian, is one only recently explored by the social science community as a whole. The awakening of informal sector studies must be seen against a background of a society that could not support a growing population within a particular economic system. Originally, the activities falling into the category "traditional" sector were considered as a negative blockage to economic growth, an inhibiting obstacle to development (McGee, 1976,1978a). However, it soon became clear, to even the most ardent proponents of modernization policies, that there had emerged a mass of persons, the victims of "urbanization without industrialization" (Worseley 1972), whose plight could no longer be ignored. However, given the training and social experience of most development economists the "problem" was defined as one of "urban unemployment" with its corollary of "underemployment", a term used to describe all forms of non-wage economic activity (Hart,1976). This conceptualization was argued by Gerry (1979) to be false in that when talking of employment in the Third World, development economists automatically assumed this to be capitalist in nature. The mass of the urban populations of the Third World were not sitting idly by, rather they had been compelled to find means

of generating incomes which fell "outside" the bounds of recognized forms of wage labour. The informal sector is thus seen as a survival strategy or coping mechanism for the urban poor.

Although many of these petty activities have been viewed with scorn and disgust by members of the upper socio-economic structures, it is imperative to realise that survival is the issue at stake. Unlike our so called "social elites" who are striving for esteem, self actualisation and perhaps "nirvana", and poverty stricken individuals at the bottom of the ladder are still attempting to meet basic physiological drives. Maslow (1970) has shown these different levels of achievement in his need-hierarchy theory (Diagram 1).

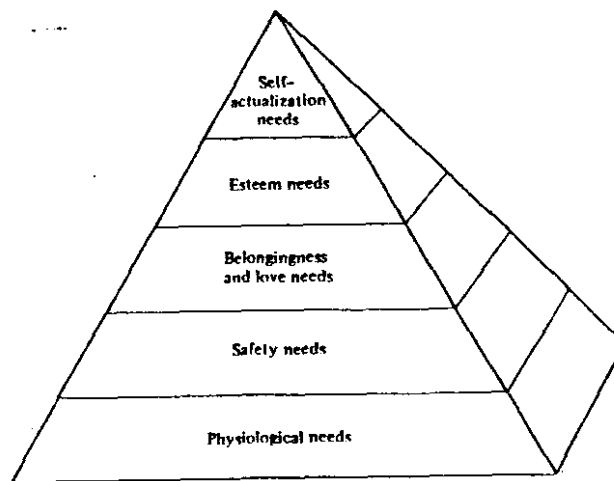


Diagram 1: A schematic representation of Maslow's need-hierarchy theory.

( Hjelle, A.L. and Ziegler, D.J., 1987.)

It is important to note that the governments of Third World countries changed their attitudes toward the petty forms of

production primarily because such activities are labour intensive and helps alleviate the "employment crisis" as experienced in many African, Asian and Latin American urban environments. In addition, the fact that non-capitalist petty forms of production are often comprised of family employment, with household heads offering welfare to their relatives, reduces the burden on the state to introduce adequate systems of welfare and social security. In turn, this can mean that "more capital can be invested in areas which often directly benefit the capitalist mode of production" (McGee,1979).

It has also been stated that the informal mode of production releases stress on the government thereby decreasing the potential for political unrest. Davies (1979) maintains that the function of the informal sector "is to service the formal sector through its impact on wage-structures and labour supplies".

The casual work that characterized the informal economy was proposed to embrace those situations that lack a moderate degree of security of both income and employment and the category "casual poor" to describe those members of the labour force whose incomes are very low and subject to fluctuation and insecurity and whose access to the basic means of subsistence is severely circumscribed by the

structure and process of underdevelopment (Bromley and Gerry, 1979).

Although the approaches to the study of the informal sector are fairly recent, the parthways for analysis have been opened by many researchers. Hart (1973) distinguishes between sectors of formal and informal income earning-opportunities (Table 1). For Hart the division between formal and informal sectors was "based essentially on that between wage-earning and self-employment.

<p>Formal Income Opportunities</p> <ul style="list-style-type: none"> <li>(a) Public sector wages.</li> <li>(b) Private firms (wages, dividends, etc.).</li> <li>(c) Transfer payments - pensions, unemployment benefits.</li> </ul>
<p>Informal Income Opportunities: Legitimate</p> <ul style="list-style-type: none"> <li>(a) Primary and secondary activities - farming, market gardening, building contractors and associated activities, self-employed artisans, shoemakers, tailors, household manufacturers of beer and spirits.</li> <li>(b) Tertiary enterprises with relatively large capital inputs - housing, transport, utilities, commodity speculation, rentier activities.</li> <li>(c) Small-scale distribution - market operatives, petty traders, street hawkers, caterers in food and drink, bar attendants, carriers, commission agents, and dealers.</li> <li>(d) Other services - musicians, launderers, shoeshiners, barbers, night-soil removers, photographers, vehicle repair and other maintenance workers; brokerage and middlemanship (the <i>maigida</i> system in markets, law courts, etc.); ritual services, magic and medicine.</li> <li>(e) Private transfer payments - gifts and similar flows of money and goods between persons; borrowing; begging.</li> </ul>
<p>Informal Income Opportunities: Illegitimate</p> <ul style="list-style-type: none"> <li>(a) Services - hustlers and spivs in general, receivers of stolen goods; usury, and pawnbroking (at illegal interest rates); drug-pushing, prostitution, poncing ('pilog boy'), smuggling, bribery, political corruption Tammany Hall-style, protection rackets.</li> <li>(b) Transfer - petty theft (E.g. pickpockets), larceny (e.g. burglary and armed robbery), speculation and embezzlement, confidencia tricksters (e.g. money doublers), gambling.</li> </ul>

Table 1: Income opportunities in a Third World City  
( Rogerson, C.M., 1991.)

The report of the International Labour Office Mission to Kenya (I.L.O.,1972-as cited in Rogerson, 1985) also makes a parallel distinction between formal and informal sectors of economic activity based upon the essential characteristics of the two sectors.

Informal Sector	Formal Sector
Ease of entry	Difficult entry
Indigenous inputs predominate	Overseas inputs
Family property predominates	Corporate property
Small scale of activity	Large scale of activity
Labour intensive	Capital intensive
Adapted technology	Imported technology
Skills from outside school system	Formally acquired(often expatriate) skills
Unregulated/competitive market	Protected markets (e.g. tariffs, quotas, licensing arrangements)

**Table 2: Distinction between the formal and informal sectors.**  
( Rogerson, C.M., 1985.)

Santos (1976.1979) introduced and described the essential characteristics of what are styled as the upper and lower circuits of the urban economy in underdeveloped capitalist societies. The Characteristics of Santos' two circuit urban economy model are presented in Table 3.

Characteristics	Upper Circuit	Lower Circuit
Technology	Capital-intensive	Labour-intensive
Organization	Bureaucratic	Generally family-organized
Capital	Abundant	Scarce
Hours of work	Regular	Irregular
Regular wages	Normal	Not required
Inventories	Large quantities and/or quality	Small quantities, poor quality
Prices	Generally fixed	Generally negotiable between buyer and seller
Credit	Banks and other institutions	Personal non-institutional
Relations with clientele	Impersonal and/or through documents	Direct, personal
Fixed costs	Important	Negligible -
Publicity	Necessary	None
Re-use of goods	None, wasted	Frequent
Overhead capital	Indispensable	Not indispensable
Government aid	Important	None or almost none
Direct dependence on foreign countries	Great, outward-oriented activity	Small or none

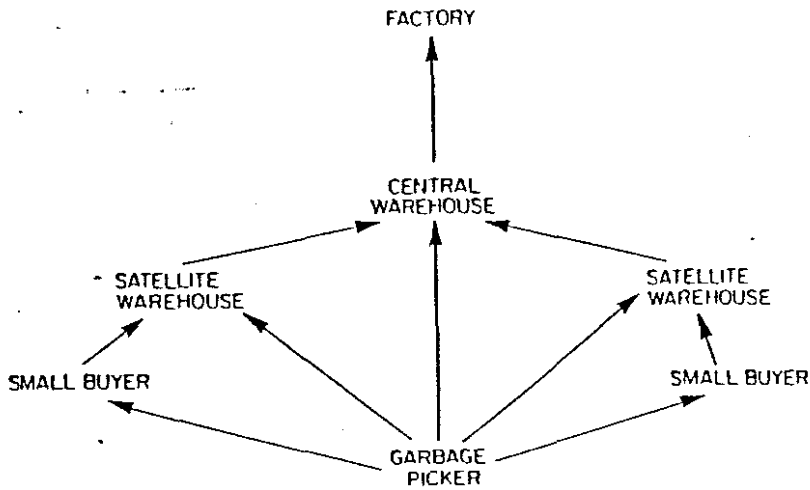
**Table 3: Characteristics of the Two-Circuit urban economy.**  
( Rogerson, C.M., 1985.)

## 2.2. Garbage Picking

Recycling is more than anything else a question of economics. If an article of the required standard can be provided by recuperating it from waste materials at a cheaper price than by using new raw materials, then there would be a market for waste material. Hence, where raw materials are expensive and in short supply, the incentive would be to use recuperated

materials. Cardboard, plastic, scrap metal and bottles even textile off-cuts are the popular recyclable items. The utilization of these items are dependant on the needs of processing and manufacturing plants which are, in most cases, owned by the private sector. There are two agents at work that transfer waste from producer to consumer. The first is the garbage-picker and this refers to those individuals who work in public places recuperating material from the city's garbage. In this context, the housewives and domestic servants, who may keep the household newspapers to sell at some opportune moment, and those large scale enterprises that deal in the buying and selling of waste materials, are excluded. The second agent is the recycling company, which is a capital-intensive concern, which tends to link large-scale industrial and commercial waste producers with those enterprises interested in buying recuperated materials (Bromley and Gerry, 1979).

The relationship between the garbage-picker and the dealers in waste are reflected in diagram 2.



**Diagram 2: Relationships between the garbage picker and dealers in waste paper.**  
 ( Bromley, R. and Gerry, C., 1979.)

It is imperative to note that the satellite warehouse may not be the last link between the picker and the factory. In several cases there are intermediaries, sometimes with nothing but a small warehouse, and sometimes with nothing but a small sum of capital, who make a living by buying and selling the waste.

Bromley and Gerry (1979), have shown from a study in Cali, Columbia that the enumeration of pickers is extremely difficult. This is because of the lack of official statistics and because the numbers fluctuate seasonally - that is the pickers work in conjunction with their needs and the availability of "better" jobs. In their study, they found that the age distribution of the garbage-pickers is relatively wide. This included a substantial number of children that were wither homeless or forced to contribute to the family budget. The high levels of illiteracy was also a reflection of the lack of funds for education within the household, and the necessity of sending children out to work

at a relatively early age. The poverty of the garbage-pickers was also strikingly shown by the high percentage living in rented accommodation (usually a single room) either in the city or in the peripheral squatter settlements. Bromley and Gerry also found that the number of garbage pickers can change quite rapidly. However there is always a nucleus who always work in that activity, some for a good number of years. In Cali it is no rare occurrence to meet a picker who has worked as such for 20 or 25 years. On the other hand, because of the relative ease of entry into the occupation - it requires little capital or skill - there are many people who go into garbage picking for short periods. This varies from the vagrant who devotes the odd day to collecting scraps of paper who normally works in some other trade but for some reason has had to leave it on a temporary basis. Street sellers of fruit for example, may find that the supplies can come to a halt at certain times of the year, and thus will take to garbage picking for a few days or weeks until the situation returns to normal.

### 2.3. The Port Shepstone Dump

The waste disposal site is located approximately 1,0 km to the west of the nearest existing Urban Development and no less than 0,5 km to the west of any future proposed Residential development. The waste disposal site however, borders the populated Kwa Zulu settlements of Boboyi and Murchison along

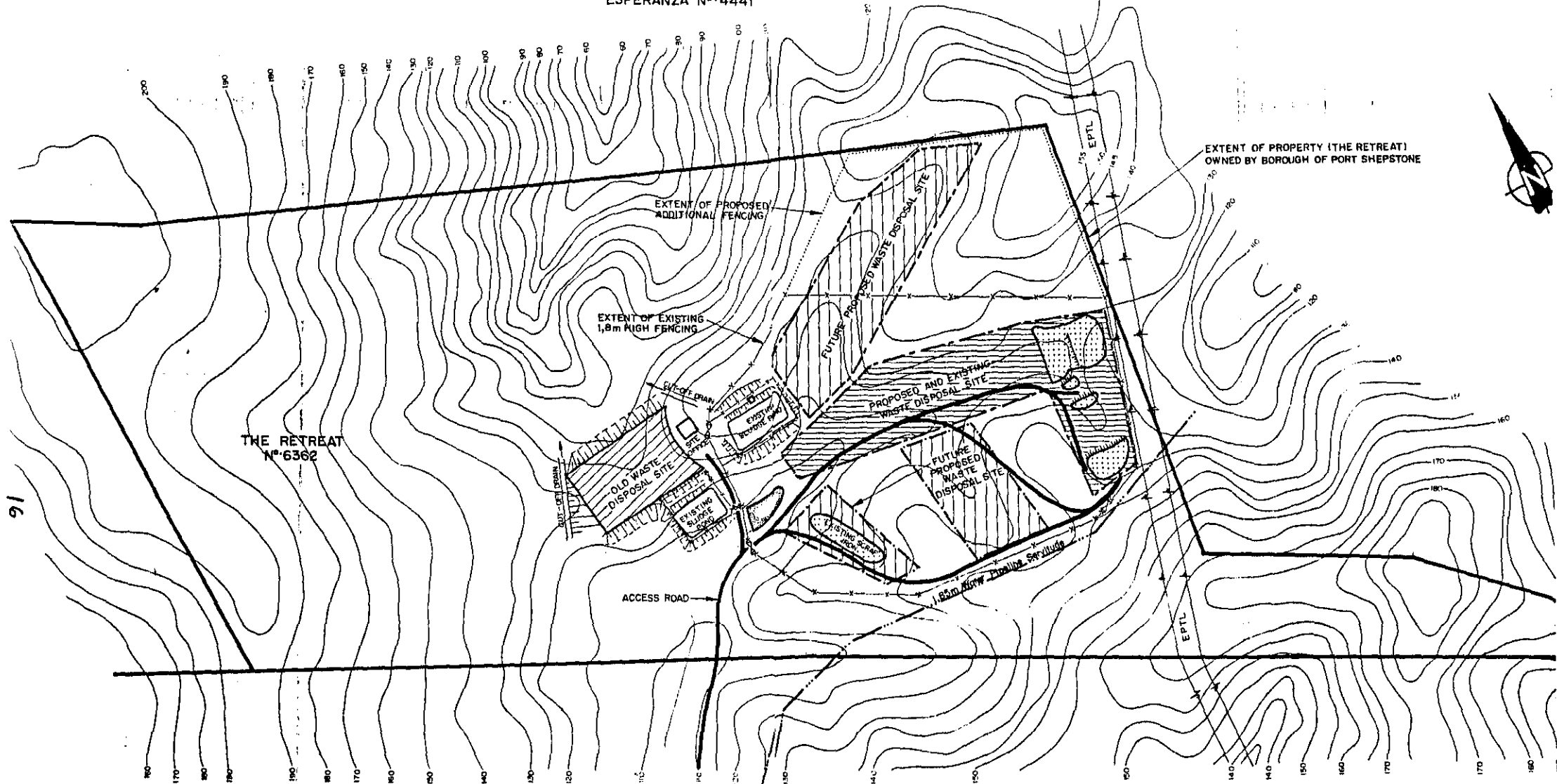
its southern boundaries. The disposal site is situated some 6 km from the sea. Access to the waste disposal site is from the N2 National Road. The extent of the area of the waste disposal site is approximately 14 hectares in extent. The waste disposal site an initial, main site incorporating almost half the area with three smaller, secondary, future sites as depicted on the map on page 16.

The estimated life of the main waste disposal site is approximately 11 years on the basis of an available airspace of 150 00 M<sup>3</sup> and an annual compact volume of refuse of 13 000 m<sup>3</sup>. The estimated life of the proposed additional waste disposal site is calculated to be approximately 7 years for an available airspace of 90 000 m<sup>3</sup>. The annual volume of refuse, mentioned above is the combined annual volumes of refuse from Port Shepstone, Marburg and Merlewood.

A plan showing the N2 National road, land use pattern and the surrounding areas up to 1 km away from the waste disposal is indicated on page 17.

The garbage that is collected around Port Shepstone consists of approximately 150 tons per day. This may be further subdivided as follows:

- approximately 20 tons domestic
- approximately 15 tons commercial
- approximately 10 tons rubble



THE RETREAT  
N° 6362

EXTENT OF PROPERTY (THE RETREAT)  
OWNED BY BOROUGH OF PORT SHEPSTONE

EXTENT OF PROPOSED  
ADDITIONAL FENCING

EXTENT OF EXISTING  
1.8m HIGH FENCING

OLD WASTE  
DISPOSAL SITE

EXISTING  
WASTE  
DISPOSAL SITE

FUTURE PROPOSED  
WASTE DISPOSAL SITE

PROPOSED AND EXISTING  
WASTE DISPOSAL SITE

FUTURE PROPOSED  
WASTE DISPOSAL SITE

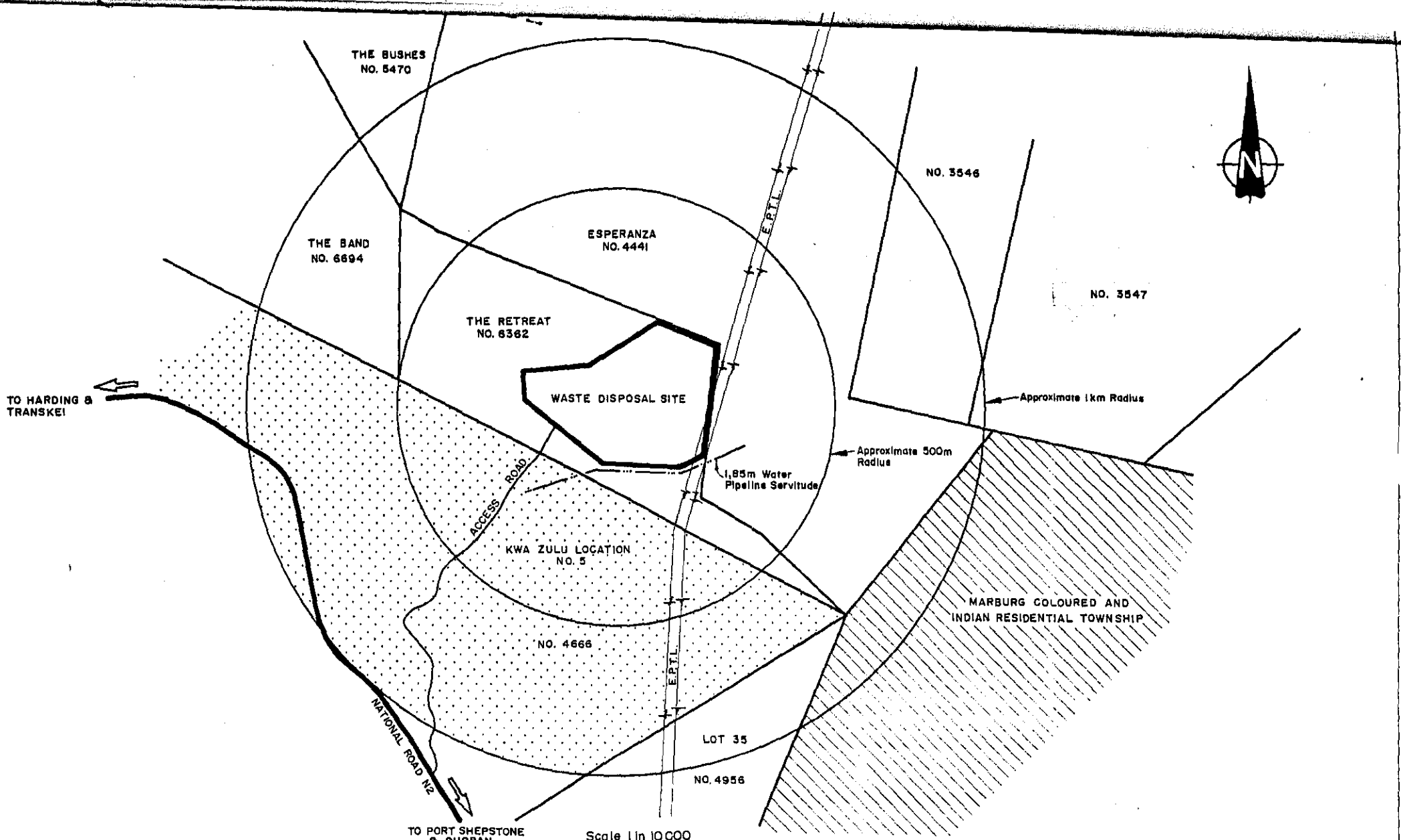
ACCESS ROAD

KWA ZULU LOCATION N° 5  
N° 4666

91





17



Scale 1 in 10000

KEY

-  Kwa Zulu Location - Residential (unplanned low density housing.)
-  Agricultural - Sugar Cane and Forestry.
-  Zoned as Indian and Coloured Residential (Marburg).

DRAWN	J. C.
DATE	1986-06-17
CHECKED	L. B.
AMEND	

PORT SHEPSTONE BOROUGH

PLAN SHOWING LAND USE PATTERN UP TO 1km AWAY FROM WASTE DISPOSAL SITE



**DAVIES LYNN & PARTNERS**  
 CONSULTING GEOTECHNICAL ENGINEERS & ENGINEERING GEOLOGISTS  
 PO Box 2328 DURBAN 4000  
 Telephone (031) 3012515

7/1/4

approximately 5 tons of garden refuse

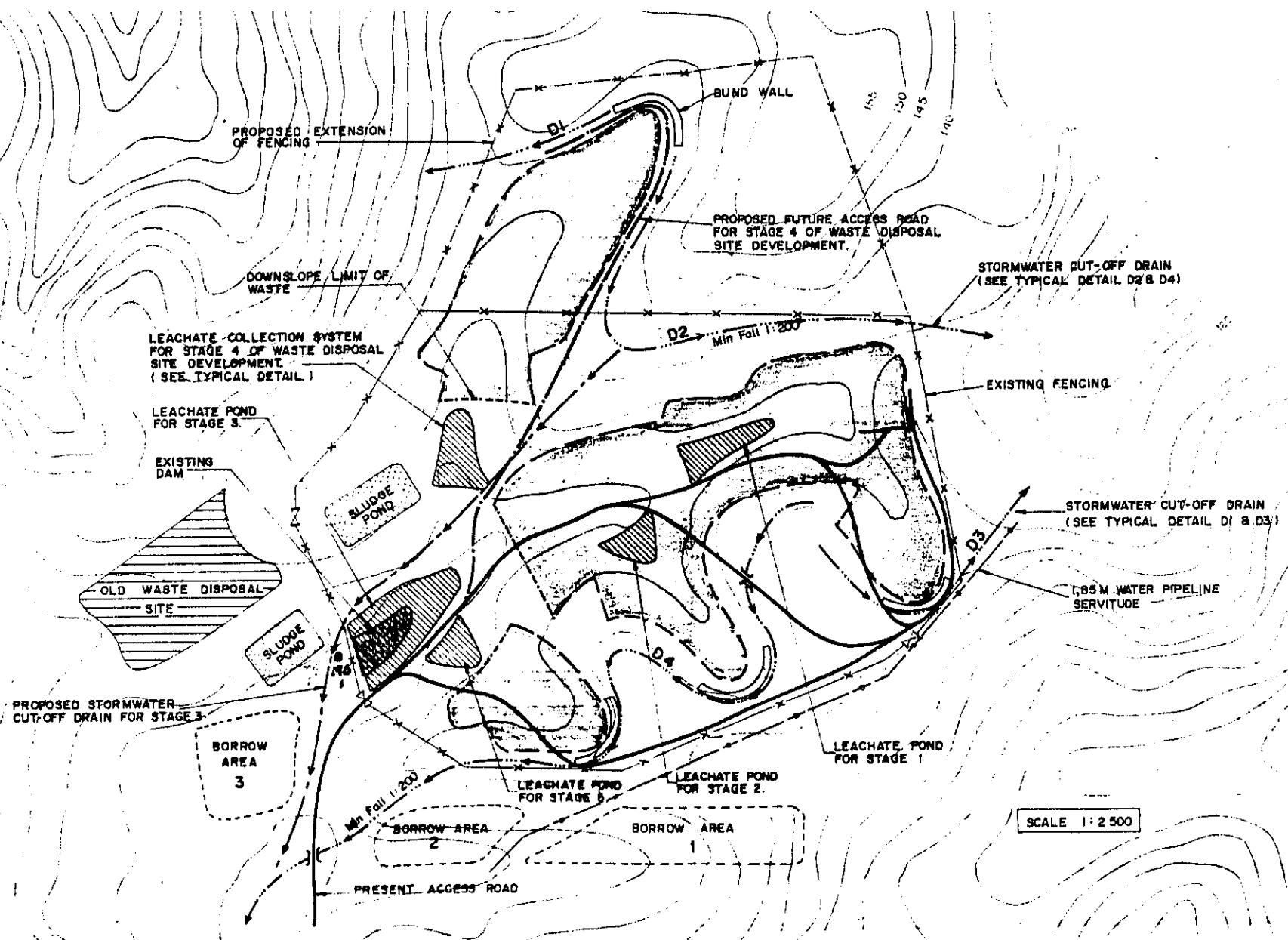
The waste disposal site operates on Monday to Friday between the hours 7h 00 to 16h 30 and on Saturday between the hours 7h 00 to 12h 00. The disposal site is surrounded by a 1.8 metre high fence constructed on creosote gumpoles and galvanized Bonnox wire fencing. Lockable gates, 4 metres in width and 1,8 metres in height are provided at the two entrances to the waste disposal site. The extent of the existing and the proposed additional fencing as well as the location of the entrance gates are shown on the map on page 19.

An average of 20 truck loads per day bring in this material. Private vehicles also bring in materials to the dump. The attitude of the officials is varied with a significant percentage maintaining a perception of the garbage picker as a scavenger. In an attempt to reduce accidents within the confines of the dump the officials do not allow the pickers into the dump while the trucks are operating. To avoid any legal action the officials have adopted a legal stance of "Enter at your own risk!".

Once the required heights within the valley has been achieved, part of the area will be vegetated for recreational use. A provisional plan of the site after closure is shown on page 20.

61

LEVEL

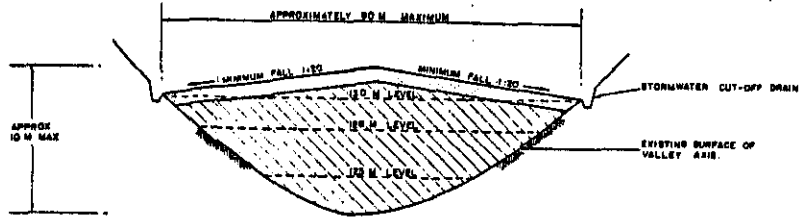


PLAN OF WASTE DISPOSAL AREA SHOWING PROPOSED LOCATION OF STORMWATER CUT-OFF DRAINS, BUND WALLS, DOWNSLOPE LIMITS OF WASTE, FUTURE ACCESS ROADS, BORROW AREAS AND LEACHATE COLLECTION SYSTEMS.

DRAWN B.J.W.	BOROUGH OF PORT SHEPSTONE
DATE JULY 1986	
CHECKED	PROPOSED CIVIL WORKS REQUIREMENTS UNDER REGULATIONS 8 (f) GOVERNMENT GAZETTE N° 9838, DATED 12-7-1985.
SCALE As Shown	

**DAVIES LYNN & PARTNERS**  
 CONSULTING GEOTECHNICAL ENGINEERS & ENGINEERING GEOLOGISTS  
 PO Box 2328 DURBAN 4000  
 Telephone 10311 322515

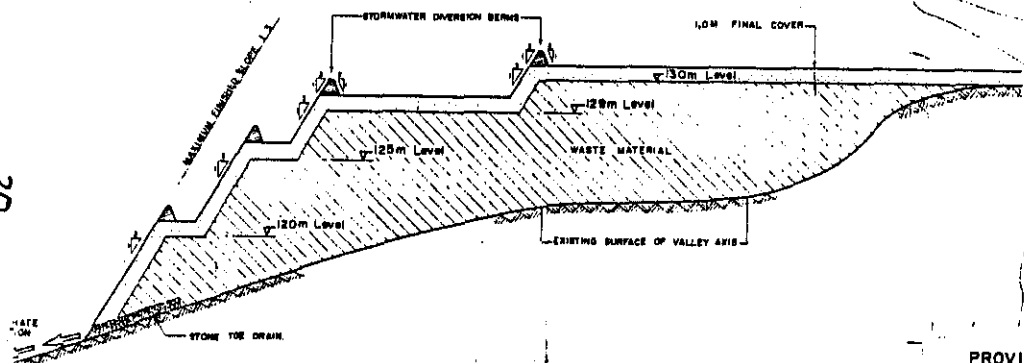
REF. NO. 2080-30
FIG. NO. 5



FINAL COVER 1.0M THICK COMPRISING MINIMUM 100mm SOL. WITH PERMEABILITY LESS THAN OR EQUAL TO 1x10<sup>-7</sup> CM/SEC (LL > 30, PI > 10, % FINER > 30) UNDERLYING A MINIMUM 400mm SANDY SILT OF WHICH THE UPPER 60mm IS TO BE TOPSOIL.

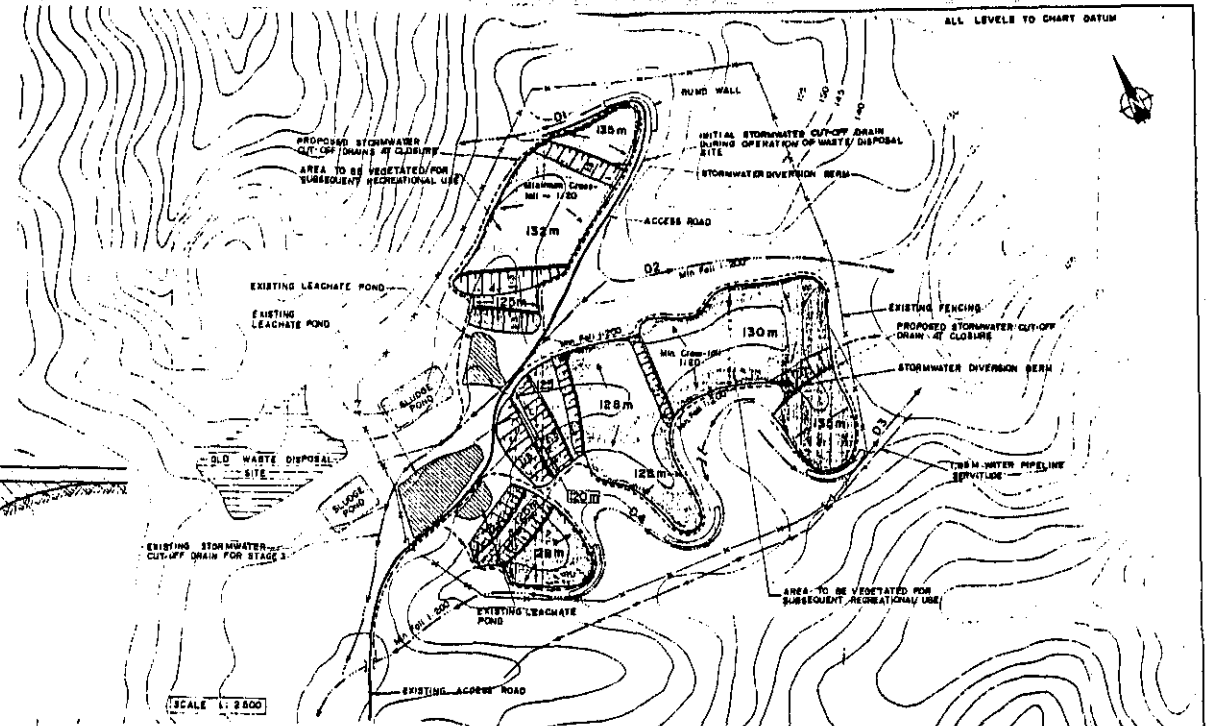
TYPICAL CROSS-SECTION OF WASTE DISPOSAL SITE AFTER CLOSURE

SCALE Vertical 1:50 (Vertical Exaggeration 1:2.5)  
Horizontal 1:50




TYPICAL DETAIL OF WASTE DISPOSAL SITE AFTER CLOSURE

SCALE Vertical 1:50 (Vertical Exaggeration 1:3)  
Horizontal 1:100



PROVISIONAL PLAN OF SITE AFTER CLOSURE

SCALE 1:2500

DRAWN E.J.W.	BOROUGH OF PORT SHEPSTONE	 <b>DAVIES LYNN &amp; PARTNERS</b> CONSULTING GEOTECHNICAL ENGINEERS & ENVIRONMENTAL CONSULTANTS PO Box 2379 DURHAM 2000 Telephone (031) 327616	REV NO 2080-30
DATE 18-7-88			FIG NO 6
CHECKED	PROVISIONAL PLAN AND TYPICAL DETAILS OF WASTE DISPOSAL SITE AFTER CLOSURE.		
SCALE 1:2500			

## CHAPTER THREE

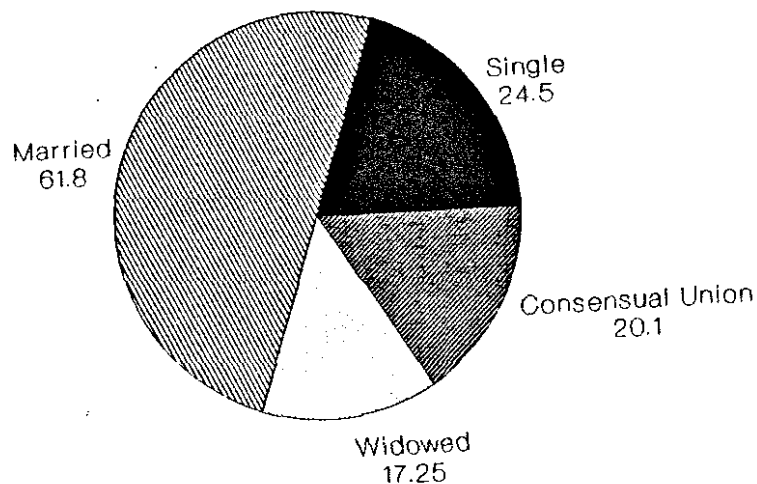
### ANALYSIS OF DATA

#### 3.1. SOCIO-ECONOMIC CHARACTERISTICS:

##### 3.1.1. Family Type.

Of the 30 interviews conducted, 24,5 were single head of households living alone; of which 74% were males and 26% females. Another 20,1% were living together but have no children. The remaining 55,5% were made up of families with a range of 1 - 4 dependants within the immediate household. Of these 55,4%, 83,6% were females and 16,4% were males. It can be concluded from the above statistics that of the 44,6% single families, 64% picking at the dump were males. Of those 55,4% family units picking at the dump, 16,4% were males, leaving an overwhelming 83,6% females. A possible explanation of this trend could lie in the contention that the household heads are poorly paid as would be revealed in the income status, thereby forcing other members of the family to contribute to the household income.

**Figure 1: MARITAL STATUS**

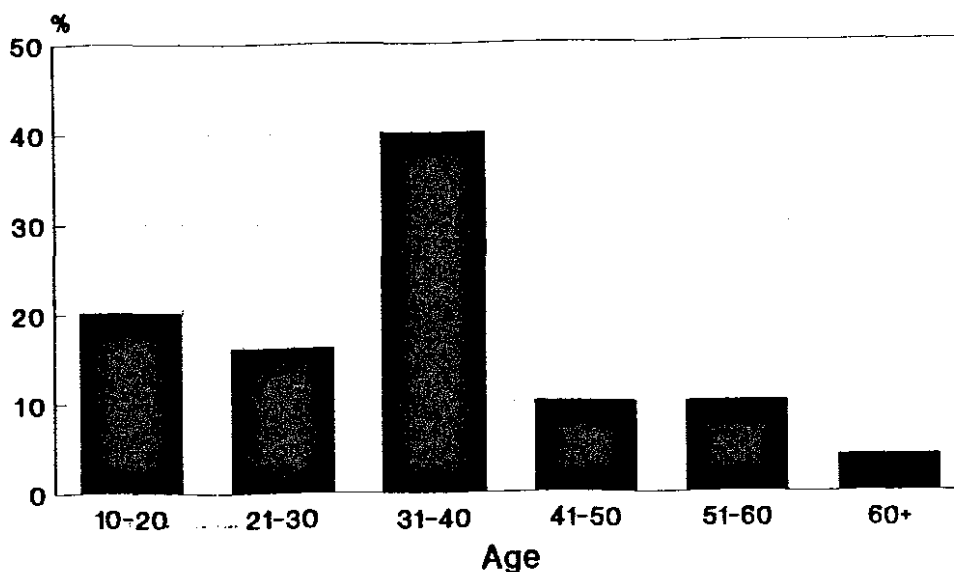


The above graph reflects the marital status of the interviewees.

**3.1.2. STATUS OF HEAD PICKER:**

**3.1.2.1. Age.**

**Figure 2: AGE DISTRIBUTION OF HEAD PICKER**



Of those interviewed the age level ranged from 16 to above 60 years as depicted in figure 2. The greatest concentration of 40% was in the age group 31-40 years. 20% of the interviewees were under 20 years with the youngest being 16 years. It is important to note that the majority of garbage pickers are in the age group which is generally perceived as an economically active period and yet, many may consider that the activity they are engaged in is unproductive when compared to the economic structures of society.

3.1.2.2. Income and Work Status.

No.	Head's Income	Total Family Income	No.	Head's Income	Total Family Income
1	48	48	16	173	173
2	58	58	17	240	240
3	58	58	18	240	240
4	63	63	19	336	336
5	72	72	20	96	* 216
6	72	72	21	168	* 240
7	96	96	22	96	* 240
8	120	120	23	144	* 264
9	120	120	24	48	* 288
10	120	120	25	168	* 408
11	120	120	26	96	* 456
12	120	120	27	144	* 504
13	144	144	28	144	* 504
14	144	144	29	144	* 504
15	144	144	30	144	* 864

n = 30

Table 4: Income of Head and Total Family ( rands / month )

[\* implies additional income from other sources.]

It was calculated that 86,4% of the total sample size pick at the disposal site as a full time occupation with 8,3% of this number also having an alternate source of income, the mean of which was R 137 - 87 pm. The remaining 13,6% pick on a

random / part time basis and it was observed that in families, other sources of income was evident. This mean was calculated at R 299 - 95 pm.

This additional income is probably an explanation of their noncommitment to the activity. The South Africa Poverty Datum Line is at present standing at R 890 pm for urban areas and R 650 pm for rural areas. The above statistics reveal that the earnings of the mono-income garbage picker is a mere 15,49% of the prescribed standards. This is an obvious expression of the extreme budget which is irregular anyway, underwhich the pickers are expected to live.

WORK STATUS	%
Full time	86,4
Part time	13,6

n = 30

Table 5: Work Status of Head Picker.

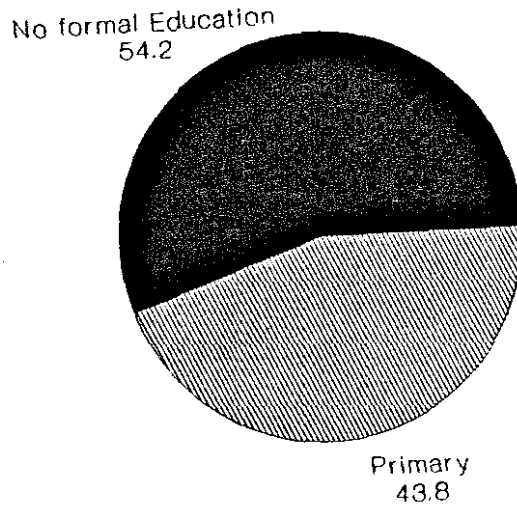
### 3.1.2.3. Educational Status.

56,2% of those interviewed revealed that they had no formal schooling, while 43,8% have had primary education only. It was not expected to find pickers with higher education levels, viz. secondary and tertiary. The poor levels of education probably explains the poor income earnings.

Because of this disadvantage, opportunities for employment

are limited and so is their knowledge of resale rates of recovered items.

**Figure 3: EDUCATIONAL STATUS OF HEAD PICKER**



**3.1.2.4. Job Description.**

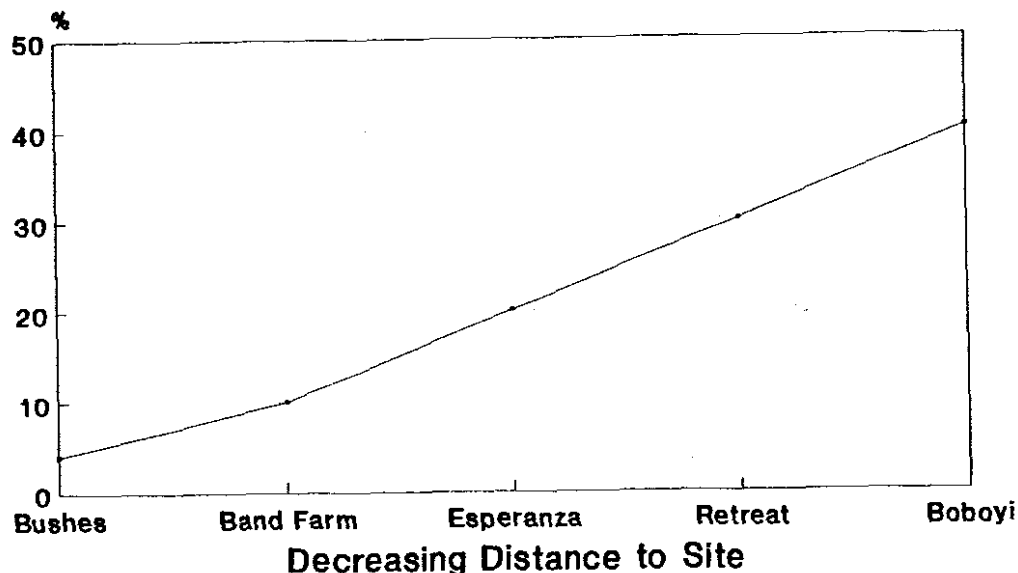
Of the 30 household, 38,2% had an alternate source of income. Of this figure, 12% was formally employed with 82% being informally employed. This informal employment consisted primarily of casual work ("togt labour"), characteristics of which include the very low and unstable incomes. It was calculated that the average income from the informal employment was R 44-00 per week.

**3.2. RESIDENTIAL CHARACTERISTICS.**

The data suggests, the majority ( over 66% ) are housed in the informal settlements within a 2 km radius. The informal settlements of Boboyi and Retreat are located close to the

disposal site. Results have indicated that 45% of the pickers come from Boboyi while 25% come from the Retreat settlement. The relationship of increasing concentrations of pickers with decreasing distance to the dump is clearly illustrated in figure 4. The dump may thus be viewed as a magnet for informal development and offers a potential source of building materials, food and income for the poverty - stricken households.

**Figure 4: DISTANCE FROM SITE AND POPULATION DENSITY**



**3.3. INFORMAL ACTIVITY.**

**3.3.1. Reason for joining the informal activity (picking).**

The following responses were obtained when the interviewees were asked why they began garbage picking.

Lost formal employment	61,3%
Unable to find other employment	32,9%
To supplement present family income	5,8%

It must be noted that well over 80% of the interviewees hold no formal jobs thereby highlighting the poverty scenario. This reflects a non-fixed income and a spending power that is limited to basic needs. The basic needs which have been shown as a physiological necessity in Maslow's need hierarchy model.

### 3.3.2. Satisfaction with activity

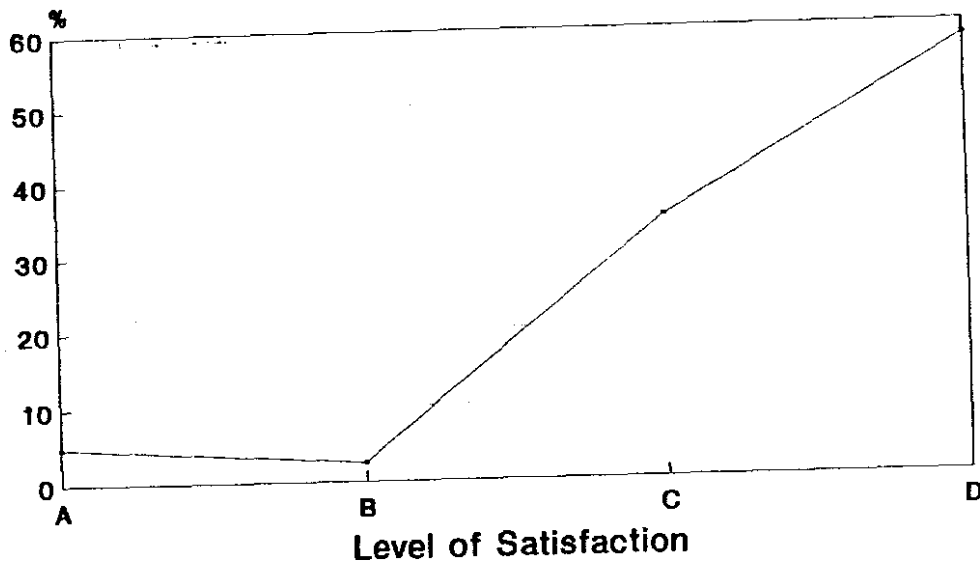
Figure 5 on the following page depicts levels of satisfaction associated with practising the activity itself.

**Legend:**

	Satisfaction with activity	%
A	Satisfied	4,8
B	Neither satisfied nor dissatisfied	2,5
C	Dissatisfied	34,7
D	Very Dissatisfied	58

It was calculated that over 95% of the pickers are unhappy with the activity per se. It was also found that 4,8% were satisfied while another 2,5% were neutral in their attitude. It could be observed that majority of the people are unhappy with this type of job, but have no choice, since it is the only means contributing to their survival.

**FIGURE 5: LEVEL OF SATISFACTION WITH ACTIVITY**



### 3.3.3. Protective accessories

None of the pickers interviewed have ever used any protective accessories eg. rubber gloves; dust musks or boots. 8,2% believed that they have contracted illnesses from their operation in the disposal site as discussed in the case studies 3.3.1. and 3.3.2. 91,8% believed that their activity in the dump posed no threat to their health. It is a widely acknowledged fact that dump sites pose a health risk and hazard. These individuals are subjected to the situations almost every day of their lives, but contracting any illnesses are of the least of their concerns. Mention has to be made that these individuals could pose a possible health hazard to the community at large.

#### 3.3.3.1. Case study 1:

Mr Jacob Komalo, a 32 year old single male living in Boboyi, has claimed that his health has been seriously affected by his working in the disposal site. Mr Komalo was content with his earnings when misfortune struck in 1989, manifesting itself in the loss of his formal job. Since then he has sought to the dump for a means for survival. He claims that the only items of value too him included metal, clothes and quite obviously food. Mr Komalo's misfortune grew greater, and six months later he was admitted at the Murchison Hospital for what he claims as "pain in the heart". He stated that doctors had removed a significant amount of water from his spine. He is obstinate in his belief that his illness was caused by picking in the dump.

#### 3.3.3.2. Case study 2:

Miss Grace Mbili, a 52 year old single parent residing at the Boboyi settlement has a junior primary education and is maintaining a meagre earning of R35 per week. Items of value to her include cardboard, plastic, offcuts and food. she sobbed while relating how she had become a tuberculoses patient.

#### 3.3.4. Compositions of pickers

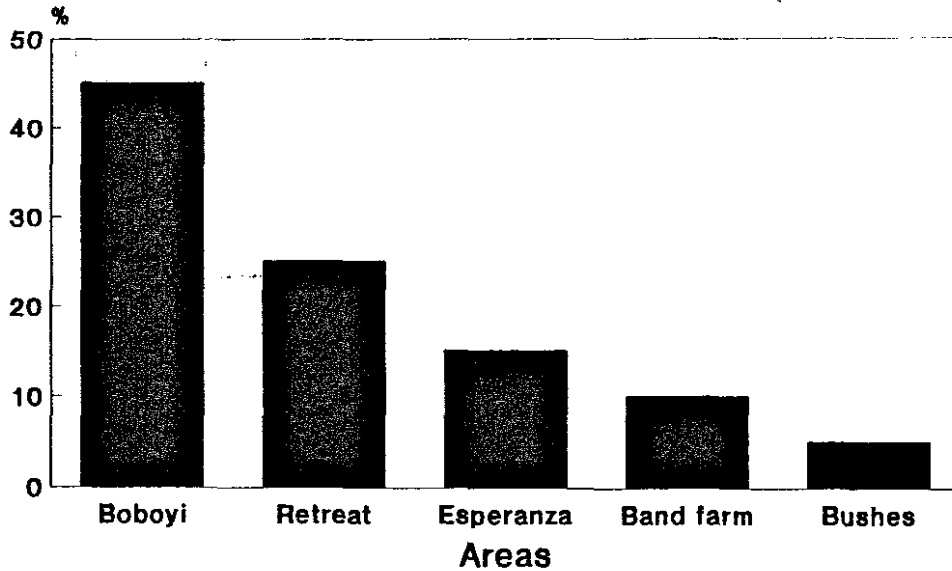
The questionnaire was constructed to elicit information about members within each picking group. This structure was decided

upon from observations of children picking with their parents or leaders. However, it turned out that none of the pickers were prepared to confirm that others worked with them commonly. Perhaps this attitude was fostered by illegal child labour, the immorality that accompanies it and a fear of persecution. It is imperative to note that although no verbal confirmation was received, the observed activities of children as young as seven years was deeply moving. This also highlighted the poverty dilemma that confronts these individuals.

#### **3.3.5. Times of operation**

The garbage-pickers operate at the dump after 14h00 from Mondays to Saturdays and usually continue after dark. On Sundays, they pick at random as there are no time constraints placed on them. The time constraints are imposed by the disposal site officials who caution that there is phenomenal danger posed to the pickers if they are allowed into the dump during peak operation hours of their heavy vehicles i.e. before 14h00. This is a strategy employed amongst others by the authorities, to minimise hazards associated with picking at the dump.

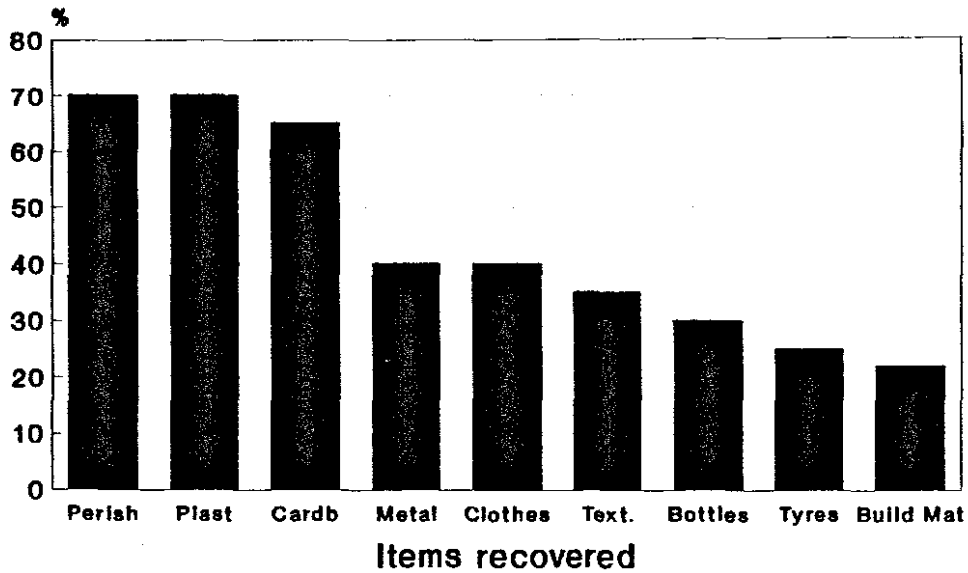
### 3.3.6. Location of dwelling



It can be deduced from figure 6 that the larger number of pickers are housed in the closer settlements of Boboyi and Retreat. This may serve as valuable information when one attempts to realise the source of the building materials that are used on the periphery of the dump. This concept of a correlation between the squatter settlement and the dump site is further developed under section 4.

### 3.4. Items recovered and their uses

Of all the items sought in the dump, the following were recorded with the relative percentages reflecting their magnitude of significance.



The following figure is self explanatory and further developed in table 6.

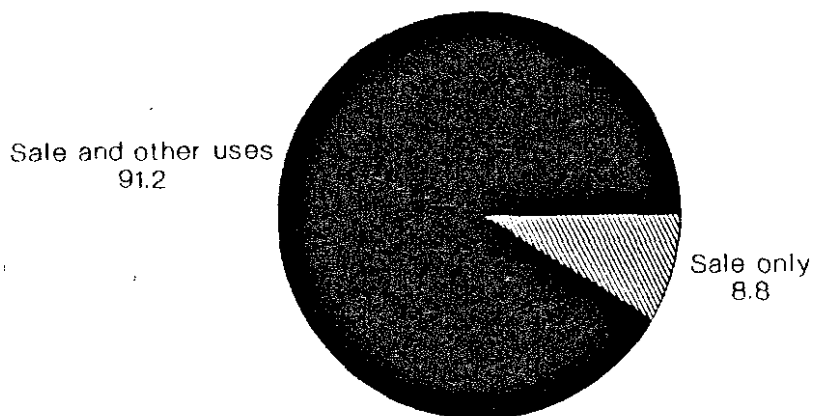


Table 6: Uses of items recovered

Uses of items recovered	%
Consumption only	27.9
Consumption and Construction	29.0
Consumption and wear	15.2
Consumption, construction and wear	16.3
Construction	5.0
Wear	3.8
Construction and wear	3.8

n = 30

It is evident that a large proportion of the items recovered are consumed by the pickers. The origin of the discarded food is often unknown, and this poses a serious health risk to the pickers. Plate 1 shows the garbage pickers busy at work.

**PLATE: 1.**



It was also found that 53,5% of the pickers use certain items for "shack" building. The settlement at Boboyi houses 45% of the pickers. Plate 2 reflects areas of the informal settlement at Boboyi.

**PLATE: 2.**



The dump is therefore seen as the source area for the building material used in the construction of many of the "shacks". The short distance between the dump and these areas is also indicative of this relationship.

Plates 3 and 4 show the collected cardboard and plastic which were bought from the pickers and bundled in neatly stacked bales.

**PLATE: 3.**



**PLATE: 4.**



Plate 5 shows a truck with cardboard ready to be transported to Mondi paper mill in Durban.

**PLATE: 5.**



Plates 6, 7 and 8 show the machines that compact the metals collected from the dump into cubes.

**PLATE: 6.**

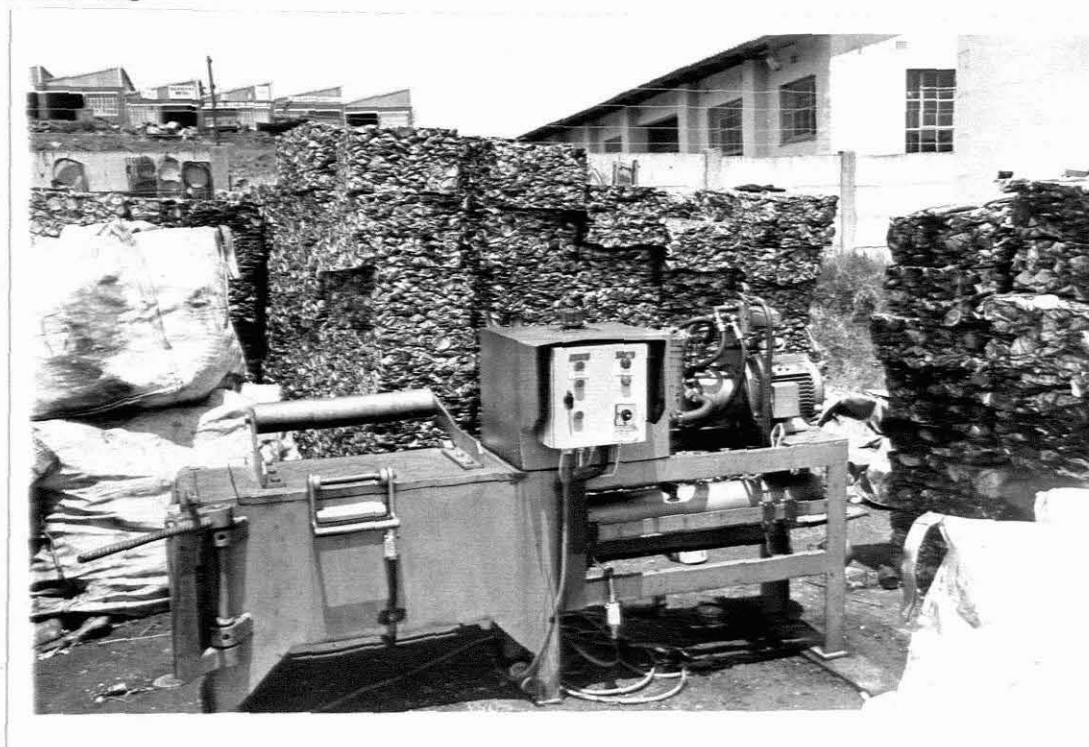


PLATE: 7.



PLATE: 8.



### 3.5. Income from recovered items

The income derived from the resale of the recovered items only is approximated to a mean of R 18,95 per week. A startling observation is that although this is such a low figure, the pickers are still ignorant of the rates. From the few who are aware of the rates, further discrepancies were recorded since some believed that cardboard was being sold at 4 cents per kg while others maintained that this item was being sold at 10 cents per kg.

Similarly plastic was argued to be sold at 10 and 25 cents per kg. One is tempted to engage in an extensive argument regarding the exploitation common in such a system of sale. The fact that scrap metal was being sold in "lots" and not according to weight was an act of exploitation on its own. Together with other statements the above relationship existed between the buyer and seller and although this cannot be statistically verified, the interviewer was inundated with complaints regarding this issue.

The buyers of the recovered items had the advantage of Transport. This resource is the primary cause of the garbage picker not being able to get the "goods" to the central warehouses. Even if they walk the distances to the larger buyers, they cannot sell the items since the warehouses only buy in bulk.

Table 7: Satisfaction with payment and reasons for responses.

Level of Satisfaction	%	Reasons for choice	%
Neither satisfied nor dissatisfied	6.7	No choice	6.7
Dissatisfied	23.3	Limited income	23.3
Very dissatisfied	66.7	Limited income and unaware of rates	53.4
		Exploitation	10.0
		No choice	3.3
Do not know	3.3	Do not know	3.3

This table reveals both the level of satisfaction with payment received for resale of items recovered and the reasons for their responses. It is clearly evident that a majority of the people are unhappy with the payment, and feel they are being exploited and cheated. It is evident that these people are not well educated, a phenomena which manifests itself in 53,3% of the people not knowing the price at which items are traded. Thus they have become easy targets for exploitation. Generally a grievance that reigns supreme is that the income received from the resale of items and the rates of trading are a cause of resentment. The pickers ignorance is resulting in someone else gaining a profit, at the expense of their hard labour.

### 3.6. EVALUATION OF HYPOTHESIS.

1. The residential characteristics of the garbage pickers revealed that the greatest concentration are indeed found in the Boboyi and Retreat settlements. This is clearly revealed in figure 4 which is also reflective of their location relative to the disposal site ie. greater concentration are found closer to the site.
2. There is a partial acceptance of the second hypothesis, since cardboard, plastic and scrap metal do form part of the most important recuperated items. However, it was found that perishable items were also recovered, and this was of greater significance than the other items.
3. All the garbage pickers confirmed that resale of items was a common practice (see figure 8). However it must be noted that other uses such as construction and consumption were paramount (see table 6).
4. As discussed under the section "Income and work status", it was found that the earnings was only 13,4% of the urban poverty datum standards. This serves to support the hypothesis.

## CHAPTER FOUR

### 4.1. RECOMMENDATIONS

Considering the fact that limited research has been undertaken in this area, the scope is wide and varied for future researchers. It must be stressed that the conditions and lifestyles of the pickers are deeply moving and sensitive investigators should be cautioned in their approach.

There was also reluctance by certain garbage pickers to the answering of questionnaires as they felt that this may institute "trouble" with the dump officials. In certain instances they had to be paid to answer the questionnaires. The use of an interpreter is also imperative in such an investigation.

The probability of contracting diseases and illnesses are increased with the fact that these people do not use any protective accessories. This is clearly manifested in the early mentioned case studies. Considering their input into the informal economy and the suggestions for alternatives to the employment problems, this activity can be turned into prospective source of income. In Cali, Columbia there are as many as five to ten thousand people engaged in this activity (Bromley and Gerry, 1979). The possibility of providing these pickers with the necessary protective accessories should

therefore be considered. Perhaps the access to resources such as tools and transport would increase enthusiasm and decrease the exploitation by the smaller buyers. Such alternatives have to be considered in a straggling economy.

#### 4.2. CONCLUSION

The crisis facing the urban poor is phenomenal. The garbage picker is attempting to make the most of a desperate situation. Their activity should not be scorned at and instead of viewing them as independent operators, they should be more correctly viewed as dependant workers tightly integrated into the urban economy in a subordinate fashion. Despite the fact that the rewards for this piecework is low and variable, it is a lot better than total non-activity and reliance on welfare bodies. As suggested earlier, this activity is capable of being transformed into a gainful occupation. The local authorities attempts to improve the conditions of informal settlements in the Port Shepstone area has included a budget of four million rands to upgrade these settlements. This is like treating the symptoms and not the cause. Although improvements in sanitation, health and other services is imperative and long overdue, the provision of jobs is just as important. The informal sector is the alternative with garbage picking as a good example. A few changes could ensure control over the activity and a reduction in the exploitation which is so blatant in the

resale of the items. It seems that this activity is a relatively permanent feature and should therefore be structurally controlled. In Walvis Bay, for example, pickers have sustained themselves for over 20 years on this "dump economy".

APPENDIX  
1  
UNIVERSITY OF ZULULAND

DEPARTMENT OF GEOGRAPHY

RESEARCH REPORT : GARBAGE PICKERS WITHIN THE PORT SHEPSTONE DUMP.

QUESTIONNAIRE : CONFIDENTIAL

**1. SOCIO-ECONOMIC CHARACTERISTICS.**

**1.1. Household family characteristics**

Number	1	2	3	4	5	6	7	8	9	10	11	12
Relation to head												
Sex												
Age												
Working status												
Education status												
Marital status												
Job designation												
Income												

**2. RESIDENTIAL CHARACTERISTICS**

**2.1. Location of dwelling**

Boboyi	
Retreat	
Esperanza	
Other (specify)	

**2.2. Length of stay at present dwelling**

< 6 months	
6 - 12 months	
13 - 18 months	
19 - 24 months	
> 24 months	

**3. INFORMAL ACTIVITY.**

3.1. Reason for joining the informal activity.

Unable to find formal employment		
Formal jobs pay too little		
To save money for a specific need		
To supplement family income		
Lost formal job		
Other (specify)		

3.2. Satisfaction with activity.

Very satisfied		
Satisfied		
Neither satisfied nor dissatisfied		
Dissatisfied		
Very dissatisfied		

3.3. Do you use any protective accessories eg. gloves; masks booths?

Yes			If yes, who supplies them? _____
No			_____

3.4. Have you contacted any illnesses or diseases whilst operating in the disposal site?

Yes			If yes, give details. _____
No			_____

3.5. Composition of pickers.

Number of pickers in your group		
Number of family members		
Other members		

3.5. Times of operation.

Mon	Tues	Wed	Thur	Fri	Sat	Sun

3.6. How long have you been picking at this site?

< 6 months	
6 - 12 months	
13 - 18 months	
19 - 24 months	
> 24 months	

**4. ITEMS RECOVERED.**

4.1. Types

Cardboard		
Plastics		
Bottles		
Metals		
Tyres		
Textile / off-cuts		
Other (specify)		

4.2. Use of materials recovered:

4.2.1. Resale (yes / no) \_\_\_\_\_

4.2.2. Other:

4.2.2.1. \_\_\_\_\_

4.2.2.2. \_\_\_\_\_

4.2.2.3. \_\_\_\_\_

**5. INCOME FROM RECOVERED ITEMS.**

5.1. Nett group income. \_\_\_\_\_

5.2. Payment to group members. \_\_\_\_\_

5.3. Family income. \_\_\_\_\_

**6. SALE OF ITEMS.**

6.1. Satisfaction with payment.

Very satisfied		
Satisfied		
Neither satisfied nor dissatisfie		
Dissatisfied		
Very dissatisfied		
Do not know		

6.2. Reason for your choice/s above. \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**CODES**

**Relation to head picker.**

Husband	1
Wife	2
Son	3
Daughter	4
Son-in-law	5
Daughter-in-law	6
Mother	7
Father	8
Friend	9
Other	10

**Sex.**

Male	1
Female	2

**Age.**

< 10 years	1
10 - 20 years	2
21 - 30 years	3
31 - 40 years	4
41 - 50 years	5
51 - 60 years	6
> 60 years	7

**Work status.**

Full time	1
Part time	2

**Educational status.**

No formal education	1
Primary	2
Secondary	3
Tertiary	4

**Marital status.**

Single	1
Married	2
Widowed	3
Consensual union	4

**Job description.**

Unemployed	1
Formally employed	2
Informally employed	3
Scholar / student	4
House wife	5
Temporary job	6
Old age	7

**Income per week.**

< R25	1
R25 - R75	2
R76 - R100	3
R101 - R125	4
R126 - R150	5
R151 - R175	6
R176 - R200	7
> R200	8

## BIBLIOGRAPHY

1. Bromley, R.,: Organization, Regulation and Exploitation in the so-called "urban informal sector": The street traders of Cali, Columbia, World development 1976, Vol.6, 1161-1171.
2. Bromley, R.,: The urban informal sector: Why is it worth discussing? World Development 1978, Vol 6. 1033-1039.
3. Bromley, R. and Gerry, C., 1979: Casual work and Poverty in Third World Cities, John Wiley and sons, Chichester.
4. Davies, R.J., 1979: Informal sector or subordinate mode of production?: a model in R.Bromley and C. Gerry, Casual work and Poverty in Third World Cities, 87-104.
5. Gerry, C., 1979 : Poverty in employment: a political economy of petty commodity production in Dakar, Senegal, University of Leeds.
6. Hart, K., 1973: Informal income opportunities and urban unemployment in Ghana, Journal of Modern African Studies 11, 61-89.
7. Hart, K., 1976: The informal sector reconsidered, New Haven, Connecticut.

8. Hjelle, A.L. and Ziegler, D.J., 1987: **Personality Theories** McGraw Hill, Singapore.

9. McGee, T.G.,: **The persistence of the proto-proletariat: occupational structures and planning of the future of Third World Countries**, *Progress in Geography* 9 ,1-38.

10. Moser, C.,: **Informal sector or petty commodity production** , *World Development* 1978, Vol 6, 1041-1064.

11. Naicker, K.M., 1991: **The Geography of and policy guidelines for the development of the informal sector in the Newcastle CBD**, University of Pretoria.

12. Rogerson, C.M., 1985: **Environmental Studies: The first decade of informal sector studies: Review and synthesis**, University of Witwatersrand, Johannesburg.

13. Santos, M., 1979: **The shared space**, Methuen and Co., London.

14. Smith, D.M., 1987: **Geography, Inequality and Society**, Cambridge University Press, Cambridge.

15. Tolosa, H.C., : **Causes of Urban Poverty in Brazil**, *World Development* 1978, Vol 6, 1087-1101.