

# **EGOLI ENUMERATION REPORT**



**PHILIPPI, CAPE TOWN, MAY 2011**

**Flooding in Cape Town under Climate Risk (FliCCCR)  
University of Cape Town**

## Background

This research forms one of several parts of the larger research project FliCCCR at UCT titled: *“The power of collaborative governance: Managing the risks associated with flooding and sea-level rise in the City of Cape Town”*. This research project aims to understand how the city of Cape Town deals with flooding and sea-level rise at different levels (from local government to inhabitants in different areas), in order to suggest how collaborations between various actors can be improved.

The research project is funded by the ‘Climate Change Adaptation on Africa’ (CCAA) programme, which is a joint program of the International Development Research Centre (IDRC), Canada, and the Department For International Development (DFID), U.K.<sup>1</sup>

The **CCAA program** aims to improve the capacity of African countries to adapt to climate change in ways that benefit the most vulnerable, and one of the guidelines is to involve the vulnerable themselves in the research. Thereby, the aim of this enumeration exercise was not only to extract information from settlement, but to involve them and other actors in order to enable learning and change from the grassroots.

This informal settlement was selected to be one of the three informal settlements that will be part of the research projects focus. After some meetings with the community leaders of Egoli, we decided together to carry out this survey as one of the research activities.

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The enumeration was carried out by Laura and four people all residing in the informal settlements. The community leaders also assisted, especially by explaining the community what will happen before the survey was carried out.

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<sup>1</sup> <http://www.idrc.ca/ccaa/>

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### 1. Introduction

Egoli is a small informal settlement located in the Scaapkraal/ Philippi area, Cape Town. Many of the people who moved here 16 years ago were workers that were evicted from nearby farms.

This report gives an overview over the statistics of the settlement, regarding people living here, the flooding problems and other issues. In line with the objectives of CORC / SDI<sup>2</sup>, it is meant to not only provide data, but enable the inhabitants to address their problems as well as connect to and negotiate with other actors like NGOS and local government officials.

In addition to the eviction case they are encountering, there are many problems facing Egoli. Because the settlement is on private land there has been little development there, there is no electricity and little toilets. They are also facing the problem of flooding and still standing water in the paths and entering the shacks in the winter, which cases health problems. Additionally, as the graphs indicate that level of unemployment is high and there are many young people here, they are particularly vulnerable to such natural disasters.

This report gives a brief analysis of these problems, in addition to mapping out statistics of the inhabitants.

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<sup>2</sup> <http://www.sasdialliance.org.za/corc/>

## **2. Methodology of the enumeration**

### **The survey / questionnaire:**

The enumeration was carried out in March and April 2011. In order to possibly collaborating with CORC / SDI at a later stage, the format of their questionnaire was used as a baseline, and more detailed questions on the flooding issue were added. There were some problems with the questionnaire however, as it was too long and contained some questions that the inhabitants found difficult to answer.

For this report I have only made use of the results from that were the most interesting and from the questions that seemed to receive the most reliable response.

### **The enumeration process**

One objective of the process was that the people from the community were to carry out the actual enumeration. 4 young inhabitants from Egoli were selected by the community leaders to do this. They were explained the process and questions, and I went together with them four of the five first days.

After 180 surveys were filled out, I plotted the data in the software program SPSS for data analysis. Using SPSS I extracted some key statistics and graphs. A second version of this report will include maps of the settlement and will be finalized and handed to the community leaders in July 2011.

### **Reliability and validity**

One problem regarding reliability of the data is that the survey was targeting the household as a whole. Sometimes the heads of the households were at work, and another representative of the household had to answer. These representatives did not always know the answer to e.g. questions like income and expenses, and these questions did therefore not get a high answering percentage. Additionally, there might be slight difference in the statistics if other representatives of the families were asked.

However, only the questions that seemed to be reliably answered are used in this report, and the validity of the key findings and graphs represented here it therefore satisfactory.

### **Generalizability**

The survey covers approximately 56 % of the population, and it should give a generalizable account on the settlement. We went door to door in Egoli making people answer the surveys at their home. Thereby I made sure that a representative portion of the settlements inhabitants were surveyed, with regards to location in the settlement, shack size and origin of the person.

### 3. Key information

#### Settlement Profile

<b>‘Slum’ name</b>	Egoli
<b>Age of Settlement</b>	Approximately 16 years. The first people moved here in 1995
<b>Structures</b>	All Shacks
<b>Population</b>	Approximately <b>1280</b> . Based on generalisation from this survey: 320 shacks multiplied by average number of people in household: 4 (see point 4.1)
<b>Number of Shacks</b>	Approximately <b>320</b> . 318 shacks counted Jan 2007 by CoCT informal settlement count <sup>3</sup>
<b>Land Ownership</b>	Private land
<b>Percentage of households covered in survey</b>	180 of 320 = <b>56,25 %</b>
<b>Disaster experience</b>	Many have experienced floods and fires. Floods especially some years - like in 2009.
<b>Most urgent problems</b>	Eviction case, electricity, flooding mitigation, toilets

#### Other important facts, generated through other sources and conversations with inhabitants:

- Many of the oldest inhabitants have been evicted from nearby farms. In 1995, about 64 families moved here from the largest farm in Philippi because they were evicted, and formed Egoli. In 1996 more people came from other farms. After that Egoli expanded slowly until now, especially with contract workers that are brought to Cape Town from Eastern Cape that were not happy with the work conditions of their contract.
- The area of the settlement used to be a soccer field, where the people that moved here first used to play. They did not know that the land was private. In 1999 the land was sold and in 2000 they received the first Eviction order.
- Since many people in Egoli are born in the area (see stats page ... , they don't want to move far away as they feel a strong belonging in Schapraal – also because this area is a farming area and not that dense.
- The ‘back’ area of the settlement (the part facing west) was inhabited lastly, and this is also where the flooding is worse, because the area slopes downwards.

<sup>3</sup> <http://www.capetown.gov.za/en/stats/Documents/Informal%20Settlements%20Count.mht>

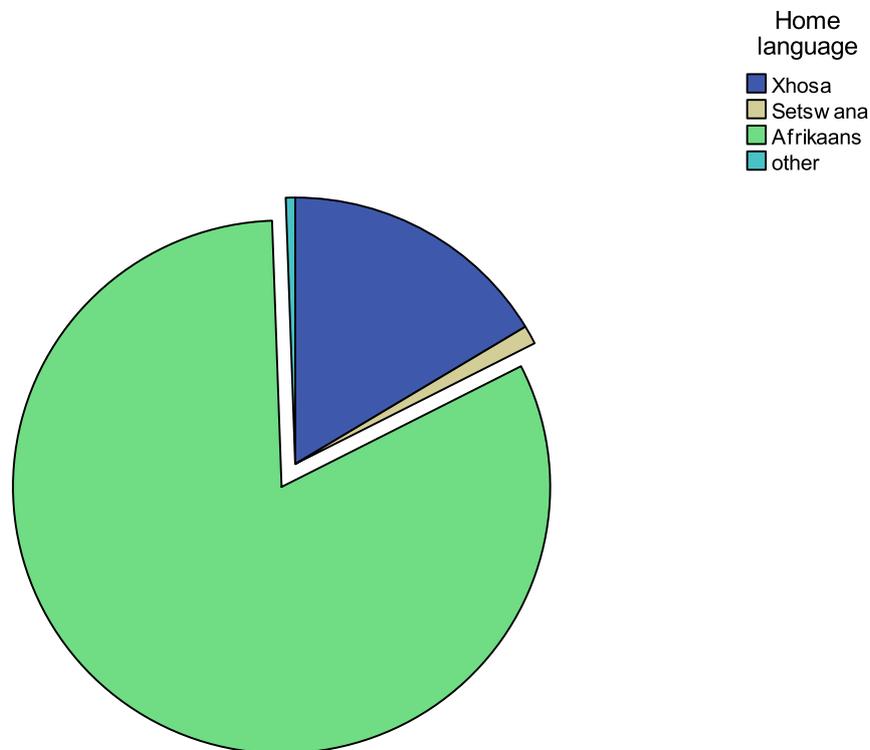
## 4. Analysis / Graphs and tables

Statistical data was generated from the enumeration and the results are presented in this section. 180 surveys were answered, of these were 56,7% women and 43,3 % men. Average age (mean) of the people answered was 39,7, and the median 37.

### 4.1 Population in Egoli / demographics

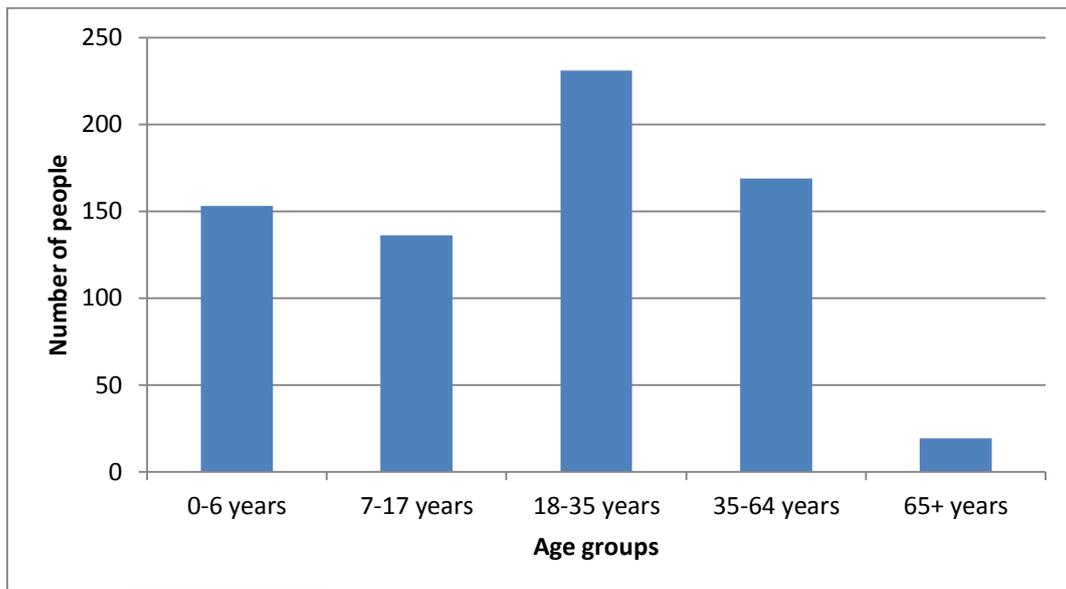
#### Language groups:

Compared to other informal settlements I have worked with, this one has a much higher percentage of Afrikaans speaking people. The pie chart below shows that 81.9 % speak Afrikaans, 16.4 % Xhosa, 1.1% Setswana and 0.6% other languages.



#### Age groups:

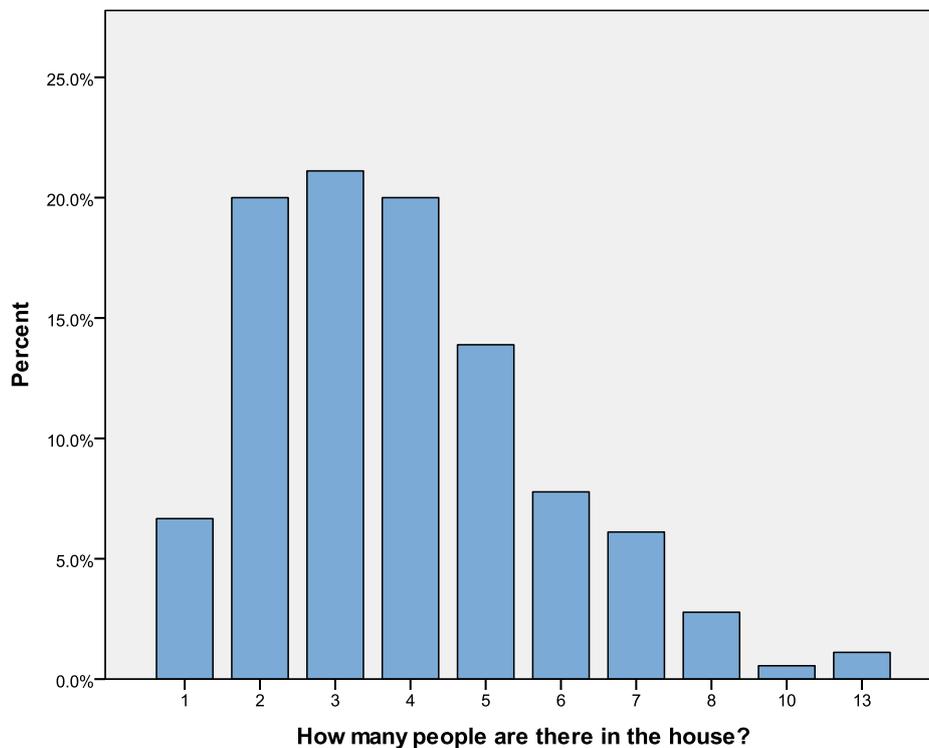
The settlement is mixed when regarding age groups, but there are a lot of children below the age of 18, as the graph below indicate. However, only 48.9 percent of the households answered that there are one or more than one children that are going to school. This could indicate that children drop out early. The graph below shows the age groups covered from the 180 shacks covered in Egoli:



Explained in percentage, 0-6 = 21,6%, 7-17=19,2% 18-35=32,6%, 35-64=23,8%, 65=2,7%

**Density:**

On average there is 4 people in each shack (mean 3.91, median 4, see table below), and there average number of rooms is 2 (mean 2.47, median 2). The chart below also shows that there is a variety in the density, with some staying alone but some also staying up to 13 people in one shack.



## 4.2 Length of stay, origin and migration

People living in Egoli have stayed in **Cape Town** on average for 28.14 years (28.14 mean, 25 median). This is because a high percentage also is born in Cape Town, as shown in the table below:

		Where are you born / origin?			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Cape Town	100	55.6	<b>55.6</b>	55.6
	Eastern Cape	36	20.0	20.0	75.6
	Western Cape	20	11.1	11.1	86.7
	Rest of SA	18	10.0	10.0	96.7
	Other country	1	.6	.6	97.2
	Not answered	5	2.8	2.8	100.0
	Total	180	100.0	100.0	

Regarding how long they have lived in **Egoli**, the mean here is **9.78** and the median 10 years. The statistics below also show that the mode (the most frequent answer) is 16 years, which states that many people came at this point of time. This confirms the statement by the community leaders that many families came here 16 years ago and started the settlement.

### Statistics

How long have you lived in this settlement?

N	Valid	170
	Missing	10
Mean		9.78
Median		10.00
Mode		16

Furthermore, the table below compares origin and how long the person has stayed in Egoli, and shows that the percentages of people born in Cape Town have stayed longer in Egoli than people born in Eastern Cape.

How long have you lived in this settlement? \* Where are you born / origin?

	Where are you born / origin?						Total
	Cape Town	Eastern Cape	Western Cape	Rest of SA	Other country	Not answered	
1-5 years	15 39.5%	10 26.3%	3 7.9%	8 21.1%	1 2.6%	1 2.6%	38 100.0%
6-10 years	28 50.0%	14 25.0%	5 8.9%	7 12.5%	0 .0%	2 3.6%	56 100.0%
11-16 years	50 65.8%	10 13.2%	12 15.8%	2 2.6%	0 .0%	2 2.6%	76 100.0%
Total	93 54.7%	34 20.0%	20 11.8%	17 10.0%	1 .6%	5 2.9%	170 100.0%

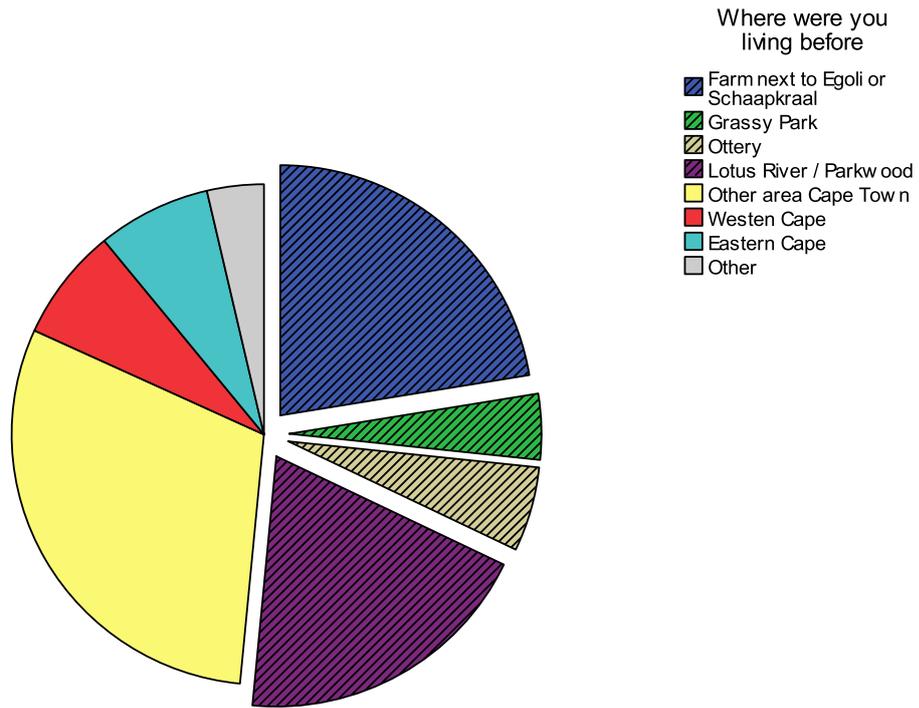
**Migration patterns:**

Since the settlement is approximately 16 years old, most people moved here from other areas. The table below show that many of the inhabitants have moved to Egoli from nearby settlements:

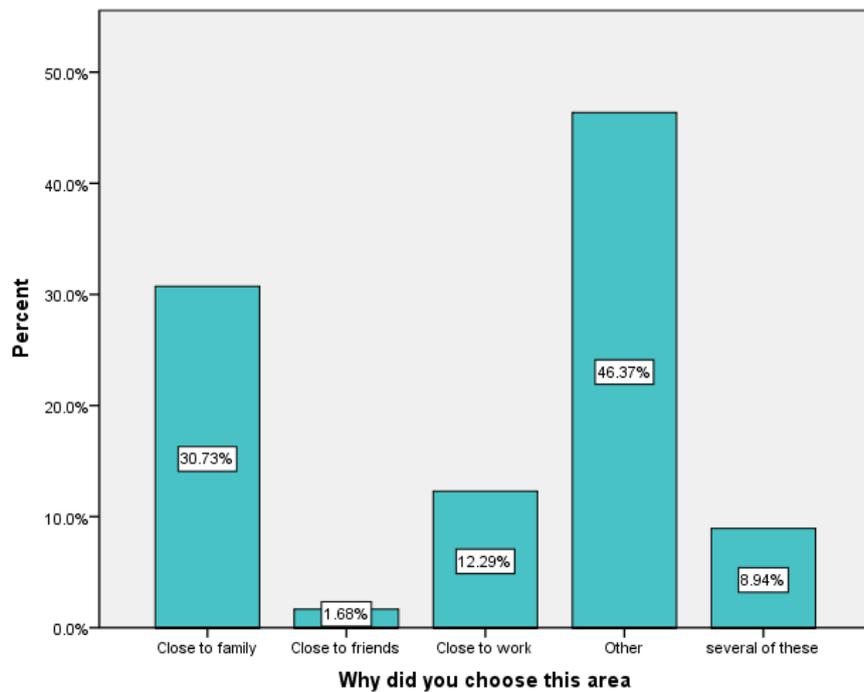
Where did you live before you moved to Egoli?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Farm next to Egoli or Schaapkraal	37	20.6	22.4	22.4
	Grassy Park	7	3.9	4.2	26.7
	Ottery	9	5.0	5.5	32.1
	Lotus River / Parkwood	32	17.8	19.4	51.5
	Other area Cape Town	50	27.8	30.3	81.8
	Westen Cape	12	6.7	7.3	89.1
	Eastern Cape	12	6.7	7.3	96.4
	Other	6	3.3	3.6	100.0
	Total	165	91.7	100.0	
Missing	Not answered	15	8.3		
Total		180	100.0		

This is made visually clearer in the pie chart below, where the scribbled parts, which are over half of the people, moved to Egoli from neighbouring areas. This is contrary to the more common tendency in other informal settlements with large migration pattern from other areas of South Africa.



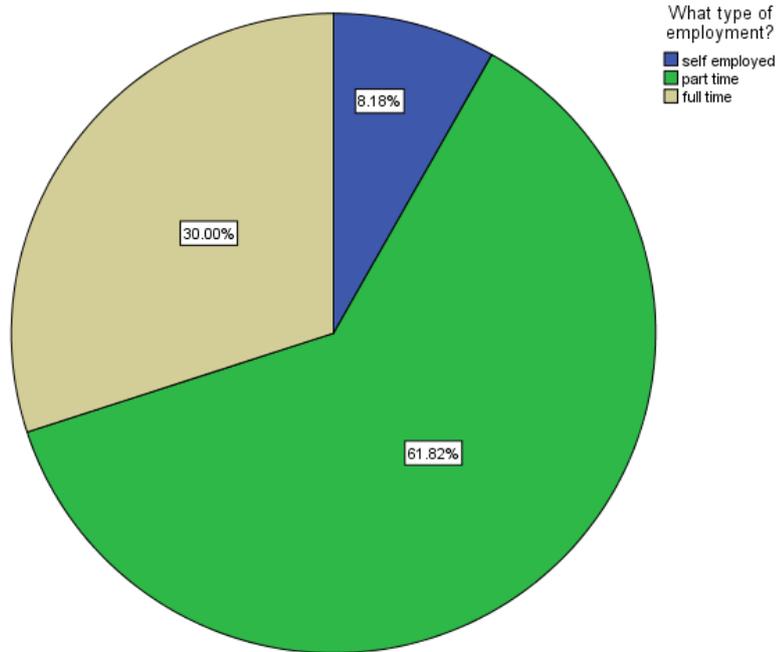
On the survey question asking why people moved to Egoli, it turned out that many found it hard to answer this. As the graph shows, most people answered 'other', explained by that they either were evicted from farms and did not find any other place to go, that they wanted to move out from their parents, or that they could not afford rent in backyards.



### 4.3. Rate of employment and social grants

In 36.1 % of the households there is no one who is employed. 47.8 % have one who is employed, 10.6 % have 2 who are employed and 1.1 three who are employed.

Of these, most are part time employed, indicated in the pie chart below. Additionally, it was explained that there are many who occasional go to the traffic lights to wait for someone to pick them up for work.



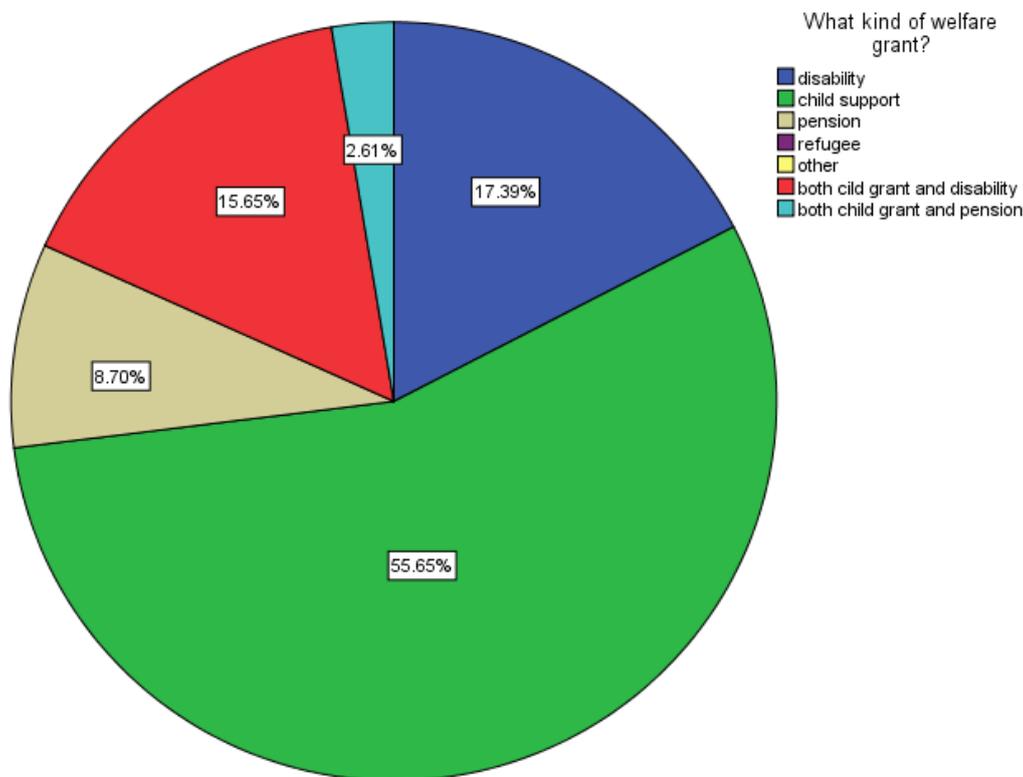
The pattern of employment compared with length of stay in Egoli reveal that the unemployment seems to increase with the length of stay. This might be because many of the people that stayed here longest where earlier farm workers that lost their job when they got evicted.

**How long have you lived in this settlement? \* How many people are employed in the house? Crosstabulation**

			How many people are employed in the house?				Total
			None	1	2	3	
How long have you lived in this settlement?	1-5 years	Count	9	19	7	0	35
		% within How long have you lived in this settlement?	25.7%	54.3%	20.0%	.0%	100.0%
	6-10 years	Count	21	28	6	1	56
		% within How long have you lived in this settlement?	37.5%	50.0%	10.7%	1.8%	100.0%
	11-16 years	Count	28	36	6	1	71
		% within How long have you lived in this settlement?	<b>39.4%</b>	50.7%	8.5%	1.4%	100.0%
Total		Count	58	83	19	2	162
		% within How long have you lived in this settlement?	35.8%	51.2%	11.7%	1.2%	100.0%

**Social grants:**

64.6 percent answered that they receive social grants. Most of these are child support grant, but there are also many who receive disability and pension grants:



**Expenses:**

Not many people answered this question, because it was difficult to answer. However, the average of those who answered is that 1000 Rand a month is spent on food. This however varied hugely depending on other factors like employment and rate of people in the household. Regarding electricity, no one spent anything on this since it is no electricity installed in the settlement, and additionally there does not seem to be illegal electricity set up either, which is common in other informal settlements.

		How much do you spend on food each month	How much do you spend on electricity each month	How much do you spend on transport each month
N	Valid	155	166	164
	Missing	25	14	16
Mean		1003.06	.00	49.39
Median		500.00	.00	.00
Mode		500	0	0

#### 4.4 Disaster experience

89.8 % had experienced evictions, but it is not clear through the survey if they mean the current eviction case or if they meant previous evictions.

46.8 % answered that they had experiences fires and **87.2%** answered that they had experiences flooding. When we asked how often, many said that it happens every winter. Most people also said that the water rises from underneath, and that it also leaks through the shack. The water stays for a long time, often several days or weeks.

The picture below was taken the 1.th of September 2010 (by the researcher) illustrating how the water stays in the paths of the settlement after only one night with 30% rainfall. Some shacks where also flooded inside. During heavy rainfalls it gets worse than this, and many of the respondents stated that in 2009 the flooding was much worse.



The people that first inhabited Egoli seemed to have settled areas with less flooding. This is confirmed with the table below that shows that the people living for shorter time in Egoli experience more flooding:

**How long have you lived in this settlement? \* Incidence of floods Crosstabulation**

			Incidence of floods		Total
			yes	no	
How long have you lived in this settlement?	1-5 years	Count	35	3	38
		% within How long have you lived in this settlement?	<b>92.1%</b>	7.9%	100.0%
	6-10 years	Count	48	8	56
		% within How long have you lived in this settlement?	85.7%	14.3%	100.0%
	11-16 years	Count	63	12	75
		% within How long have you lived in this settlement?	84.0%	<b>16.0%</b>	100.0%
Total		Count	146	23	169
		% within How long have you lived in this settlement?	86.4%	13.6%	100.0%

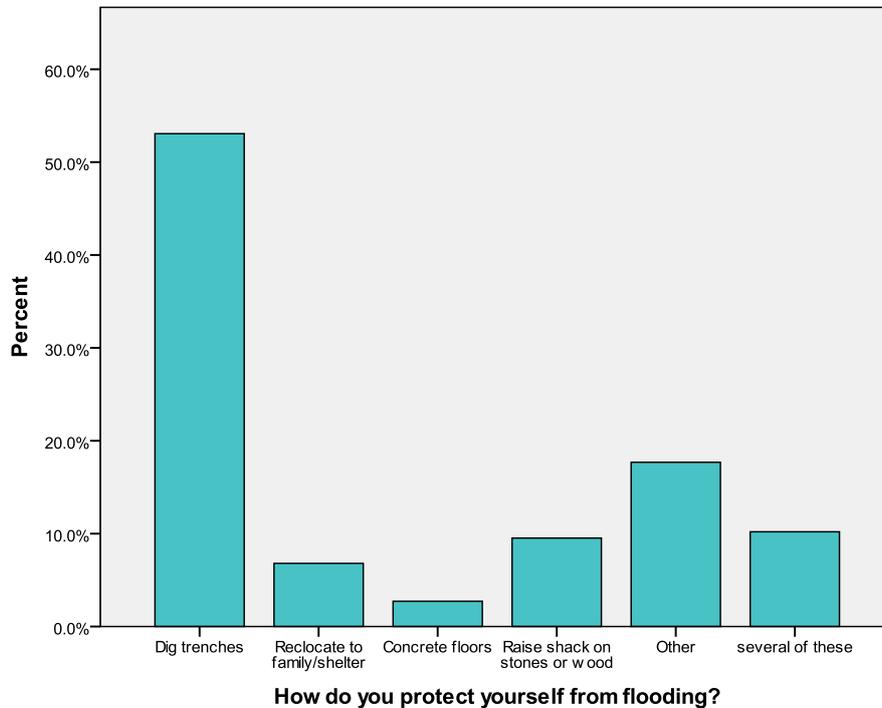
To validate this, flooding experience can be compared with the experience of fire, which shows the opposite trend- the longer people have lived there the more prone they are to fires. This is because flooding is more place specific than fires, as fires can happen anywhere.

**How long have you lived in this settlement? \* Incidence of fires Crosstabulation**

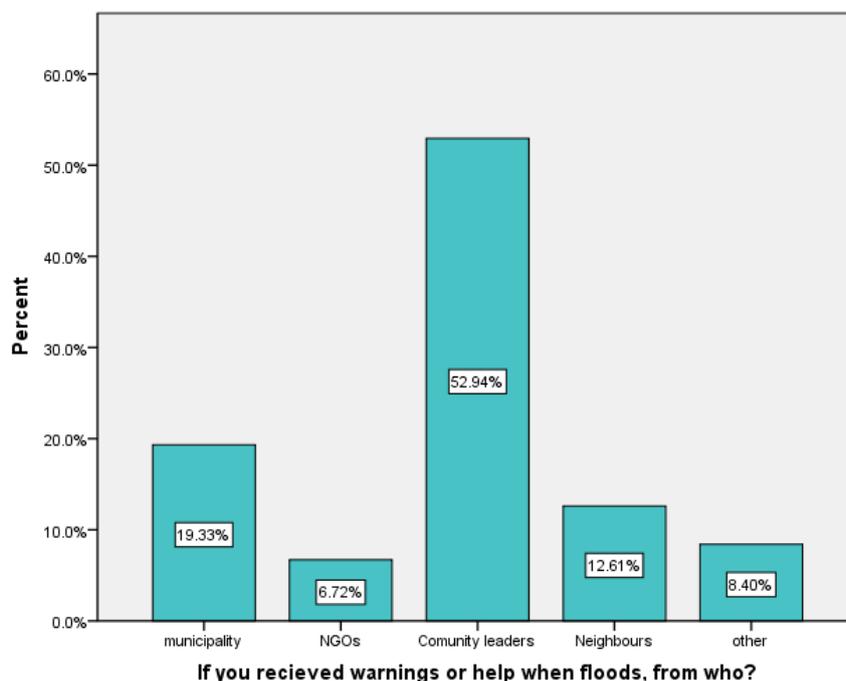
			Incidence of fires		Total
			yes	no	
How long have you lived in this settlement?	1-5 years	Count	13	24	37
		% within How long have you lived in this settlement?	35.1%	64.9%	100.0%
	6-10 years	Count	24	29	53
		% within How long have you lived in this settlement?	45.3%	54.7%	100.0%
	11-16 years	Count	37	34	71
		% within How long have you lived in this settlement?	<b>52.1%</b>	47.9%	100.0%
Total		Count	74	87	161
		% within How long have you lived in this settlement?	46.0%	54.0%	100.0%

**Flooding mitigation:**

The majority of the residents respond to flooding by digging trenches in order to channel runoff water past their shacks. The second most popular means of flood mitigation is elevating the shacks so that runoff water can flow beneath the shacks. However many stated that they make use of several methods:



On the question if they receive any warnings or help when flooding, 59.1 % answered yes. The chart below shows that the community leaders seem to be important figures here, and it was explained that they are the ones who have to phone disaster risk management. Also, they help people relocate to the local church if the flooding is very heavy (like it was in 2009).



#### 4.5 Sanitation and disease

94.4 % make use of bucket toilets, while 5.6 % answered ‘other’. When asking what they meant by other, they usually answered to go to toilet outside in the bush.

In average 11.63 people use one toilet. The mean is 8 and the mode 10.

One of the most significant consequences of flooding is said to be health effects in addition to damage to property. Regarding illnesses related to flooding, 80 % answered cough / flu, 42.8 % running stomach, 29.4% TB and 20.6 % rashes.

#### 4.6 Community engagement and leadership:

Since this is a old settlements, people know each other well and there are many relatives. The average (mean) of the answer ‘how many people are your friends’ was often answered with “a lot” or “everyone”, therefore the average of 66.2 people is a bit misleading since “everyone” or “a lot” could not be quantified and used in the statistics.

The average of relatives besides the family is 16.37 (mean), which is a quite high number.

The people in the settlement seem to be surprisingly involved in the internal community meetings. The informal community members seem to have an important role here and as many as 95.6 % answered that they know the community leaders in Egoli. Further, 96.7 % answered that they participate in community meetings. One reason for the high percentage might be that the community is currently under an eviction case, which is a matter that they take very seriously.

The crosstab below illustrates that most people say they participate every time there is a meeting and that there is a slightly higher percentage of men participating more often:

Gender of respondent * How often do you participate in the community meetings? Crosstabulation		
	How often do you participate in the community meetings?	Total

		every time	very often	sometimes	Not answered	
Female	Count	72	7	1	22	102
	% within Gender of respondent	70.6%	6.9%	1.0%	21.6%	100.0%
Male	Count	58	5	1	14	78
	% within Gender of respondent	74.4%	6.4%	1.3%	17.9%	100.0%
Total	Count	130	12	2	36	180
	% within Gender of respondent	72.2%	6.7%	1.1%	20.0%	100.0%

## 5 Summary

Like most informal settlements, the general conditions are not good, there is a high degree of unemployment and many are dependent on social grants.

However, Egoli seems differ from more ‘average’ informal settlements in some ways.

First, people seem to have lived here for a long time, and many states that they are also born and grew up in the surrounding areas. This might be one of the reasons why people here are very connected to the place. Many expressed that they have nowhere to go, and they are afraid that if they were to be relocated, they might be put in an area they are not familiar with. Secondly, compared to other ‘old’ informal settlements, there seems to have been little development here. This is because the location on private land.

And third, there seems to be a sense of community in Egoli (even though there also are a lot of disagreements), this might be due to that the settlements is small and old, the inhabitants seem to know each other well and the community leaders seem to be engaged.

Regarding flooding the tables confirm the indication given by the community leaders that the first people settled in the leas flood prone areas, since they had to move into the vacant areas of the settlement. People seem to deal with the flooding in different ways, and they are getting warnings and help from each other, the community leaders, disaster risk management (municipality) and NGOs. This help is however not sufficient, as the structures and paths are in bad condition.



## Appendix: Survey form

### Settlement ENUMERATION

This survey is a part of a research project at the University of Cape Town.

The enumeration survey collects information on housing conditions, expenditures (and income if possible), employment and sanitation in your community. Please co-operate with the enumerator to fill in this questionnaire.

This form asks for the following:

- Basic information about the people who are living in your house
- Specific information about this house and its occupancy
- Specific information about flooding, sanitation services and health conditions.

Thank you for your co-operation.

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### Household Details and (Data)

1) Shack Number

Respondent (occupant of shack): Surname \_\_\_\_\_ Names \_\_\_\_\_

2) Age

3) Gender of the head of respondent: **Male**  **Female**

4) Home Language \_\_\_\_\_

5) How many people stay in your house?   3-

6 -10) How many people in the house are... **0 - 6 years**  **18 – 35 years**   
**7 – 17 years**  **36 – 64 years**   
**65 + years**

11) How many people in this household attend school?

### Employment, Income & Expense

12) How many people are employed in the house?

0  1  2  3

13) What type of employment are they involved in?

**Self Employed**  **Part time/Casual**  **Full Time**

14) Do you receive any kind of a welfare grant? **Yes**  **No**

15) What kind of grant do you receive?

**Disability**  **Child support**  **Pension**   
**Refugee**  **Other**

16) How many people have any form of income in your house?

0  1  2  3

17 -19) How much are the main expenses per month?

**Food**  **Electricity**  **Transport**

20) What type of transport do you use when going to work?

**Walk**  **Private**  **Taxi/ Bus**  **Train**

21) How far is the place of employment (or where the household head gets the income)?

(Hours, Minutes of TRAVEL or WALK)

\_\_\_\_ Hrs \_\_\_\_ min

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### Nature of house

22) Use of structure: Residential only  Church  Pre -school  Spaza

23) How many rooms does your house have?

1  2  3  4 +

24) Do you own a car? Yes  No

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### Eligibility for Housing Subsidy

25) Were you ever approved for a housing subsidy? Yes  No

26) Would you like to state your income level for the purpose of understanding how many households in the community can apply for subsidies?

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### Flooding History

27-29) Have you ever experienced the following when staying at this settlement?

27) Fire Disaster Yes  No  How often? \_\_\_\_\_

28) Flooding Yes  No  How often? \_\_\_\_\_

29) Evictions Yes  No

30) If your answer to 28 was YES, what type of flooding affects you? (Only tick one)

Under ground water  Leaking roof/wall  Real flooding

31) for how long does your house remain flooded? (Only tick one)

½ day  One day  more than one day

32) if you have experienced flooding, which of these mechanisms are most effective(Only tick one):

Dig Trenches  Relocate to family/shelter  Concrete Floors

Raise Shack on stones or wood  Other \_\_\_\_\_

33) If your answer to 28 was **NO**, do you think you are at risk to flooding? \_\_\_\_\_  
If yes, why? \_\_\_\_\_

34) If your neighbors were flooded, would you help them? Yes  No

35) Have you ever received any warnings or help when flooding? Yes  No

36) If yes, from who? Municipality  NGOs  Community leaders   
Neighbors  Others: \_\_\_\_\_

37) Do you call any authority during a flood? Yes  No  If yes, who? \_\_\_\_\_

38) What do you think could be done to reduce the effect of flooding? (Only tick one)  
Dig more Trenches  Provide sand  Provide building material   
Relocation  Other \_\_\_\_\_

### Migration History

39) How long have you lived in Cape Town?

40) Where are you born / originally from: \_\_\_\_\_

41) How long have you lived in this settlement?

42) Where did you living before you came here? \_\_\_\_\_

43) Why did you choose this settlement? Close to family  Close to friends   
Close to work  Other \_\_\_\_\_

44) How many people do you know (are your friends) here in this settlement?  About \_\_\_\_\_ people

45) How many of you relatives are living in this settlement?  About \_\_\_\_\_ people

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### Health & Sanitation

46) Which toilet do you use? Bucket System  Water System (Flushed)  Other

47) How many people use this toilet?  About \_\_\_\_\_ people

48) What health facilities do you have access to? **Traditional Healer**  **Clinic**

49) What health problems have you or your family suffered **after a flood**?

**Cough**  **Flu**  **Running stomach**  **TB**  **Rashes**  **Other**

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50) Do you know the community leaders / street committee in this settlement? **Yes**  **No**

51) Do you participate in community meetings? **Yes**  **No**  **If yes, how often:** \_\_\_\_\_

52) Do you have any other things you want to say? **Please give a comment:** \_\_\_\_\_

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**Please Note:** All Enumerators have to write their names including dates during the process.

***THANK YOU! ENKOSI! DANKIE!***

**ENUMERATOR:** \_\_\_\_\_  
**DATE:** \_\_\_\_/ \_\_\_\_/ 2010