

Poverty lines in Greater Cairo
Underestimating and misrepresenting poverty

Sarah Sabry

May 2009

This is one of a series of working papers exploring the appropriateness of definitions and measurements of poverty in relation to urban poverty. Other papers in this series include Bapat, Meera (2009), *Poverty Lines and Lives of the Poor; Underestimation of Urban Poverty, the case of India* and Chandrasekhar, S. and Mark R. Montgomery (2009), *Broadening Poverty Definitions in India: Basic Needs in Urban Housing*. These were prepared with financial support from the Swedish International Development Cooperation Agency (Sida).

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ISBN: 978-1-84369-737-4

This paper can be downloaded free of charge from <http://www.iied.org/pubs/display.php?o=10572IIED>. A printed version of this paper is also available from Earthprint for US\$20 (www.earthprint.com)

Acknowledgements

I would like to acknowledge various people and NGOs who have facilitated the fieldwork for this research. To avoid implicating them in my findings, I will not state their names. I am especially grateful to the residents in many of Greater Cairo's *ashwa'iyyat* who have been generous with sharing their time and details about their lives with me. Special thanks to Carlos Oya for meticulous feedback, to David Satterthwaite for important suggestions and to Nina Behrman for editing this paper. Comments by Salwa Ismail, Hania Sobhy and Yasmine Moataz are also greatly appreciated.

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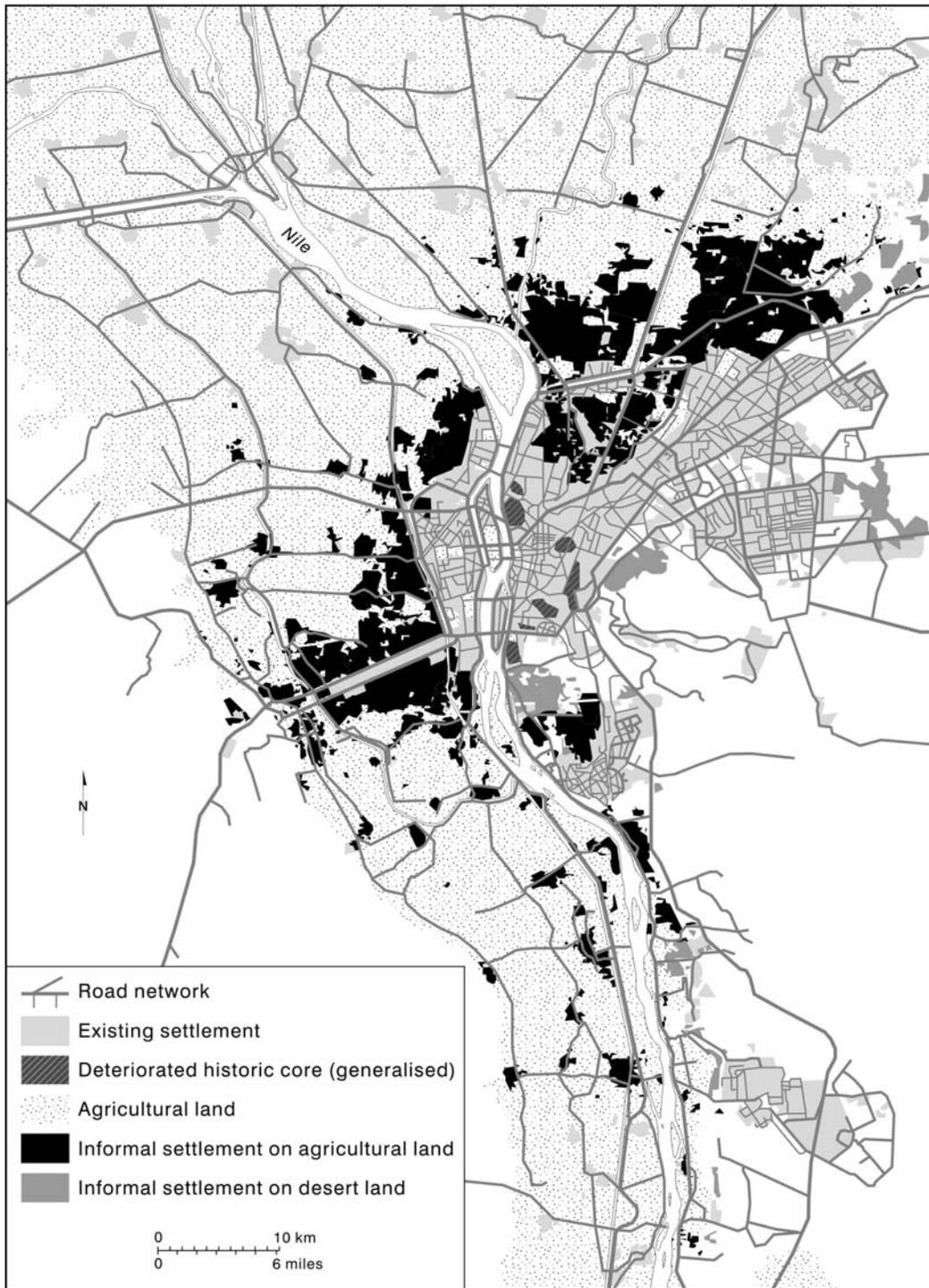
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Acronyms and abbreviations

CAPMAS	Central Agency for Public Mobilization and Statistics
ECES	Egyptian Center for Economic Studies
EHDR	Egypt Human Development Report
FPL	food poverty line
GC	Greater Cairo
HIECS	Household Income, Expenditure and Consumption Survey
IDSC	The Egyptian Cabinet Information and Decision Support Center
IPL	international poverty line
LE	Livres Egyptiens (Egyptian Pounds) [US\$1 = 5.5LE (15/12/2008)]
MDG	Millennium Development Goal
LPL	lower poverty line
PL	poverty line
PPP	purchasing-power parity
UN	United Nations
UNDP	United Nations Development Programme
UPL	upper poverty line
WB	World Bank

A map of the informal settlements of Greater Cairo



Source: Sims (2003, p.5)

SUMMARY

The way in which poverty is defined and measured influences who is considered to be poor, how the state responds and how successful the state responses are judged to be. As this paper shows, if the definition is incorrect or based on inaccurate data, the scale and nature of poverty can be greatly underestimated. In low- and middle-income nations, most measurements of poverty are based on poverty lines set at some particular income level (for instance US\$1 per person per day). The most widely recognized definitions and measurements of poverty in Egypt use poverty lines. This paper engages with the global debate about the validity and reliability of this approach by examining their use in Egypt in relation to the reality of the lives of the urban poor in Greater Cairo. It reviews the accuracy of Egypt's various poverty lines, and the data which inform them, and then questions their validity in relation to the real costs of basic food and non-food needs in eight of Greater Cairo's informal areas in 2008. The paper concludes that the incidence of poverty is considerably underestimated in Greater Cairo. This is because poverty lines are set too low in relation to the costs of even the most basic of needs, and because the household survey data that inform poverty line studies under-sample people living in informal settlements (and under-count the populations of informal settlements).

The paper is divided into four main sections. Section 1 reviews some background literature about poverty lines and their weaknesses, especially in urban contexts. It emphasizes the importance of multi-dimensional measures of poverty that consider more than just income levels or consumption levels. But it also emphasizes that if poverty lines are to be used, they need to reflect the costs of food and non-food needs. In many nations, urban dwellers living in 'slums' or informal settlements can have an income a little above the official poverty line and thus not be counted as poor, while in reality their conditions of housing and living should unquestionably categorize them as poor. Some of the key criticisms of poverty lines are discussed. They include: not reflecting the multi-dimensional nature of poverty, having arbitrary cut-off points, being too low in relation to the costs of real needs, failing to deal with the gender dimensions of poverty and intra-household inequality, and using problematic household survey data. Many different national poverty lines have been set in Egypt over the last two decades and most fail to address these issues. In Egypt, as in most other low- and middle-income nations, the US\$1 per person per day poverty line is also used. In the Egyptian context, this produces misleading and meaningless figures about poverty. With the most recent application of this poverty line, only 2 per cent of Egypt's population were 'poor' in 2004 (and only 1.8 per cent in 1999 and 2.5 per cent in 1995). These figures suggest that poverty affects a minute proportion of the population and present a stark contrast to the millions of people living in Egypt's urban slums and informal settlements and the scale of poverty in Egypt's rural areas.

Section 2 assesses what poverty line studies tell us about poverty in Greater Cairo. It begins by reviewing what the many different studies tell us about poverty in Egypt in general, and then considers what can be extracted from them in relation to poverty in Greater Cairo. Different studies (and data sources) produce different and, at times, contradictory conclusions about the scale and distribution of poverty in Egypt and about trends in poverty incidence over time. This section reviews some of these contradictions, most of which can be attributed to the different conceptual choices, definitions, methodology and data used. The limited information available about poverty in Greater Cairo is then discussed. This is complicated by the fact that Greater Cairo is not considered as one city or one governorate in official statistics and so data on Greater Cairo is spread over parts of five governorates, making it very difficult to extract information relevant to the city. Moreover, the city's population is greatly underestimated because of the administrative definition of what constitutes an urban area in Egypt. Millions of people living on the periphery of the city, mainly in informal settlements, are not counted as part of the city's population because these areas are still considered rural from an administrative perspective. Thus, arriving at realistic

and precise figures for poverty in Greater Cairo (and much else besides) is an impossible endeavour. The overall view from most of the studies is that poverty in Greater Cairo is quite low (in the range of 5–10 per cent of the city's population), decreasing and contributing to bringing down the national incidence of poverty. The rest of the paper questions the low poverty incidence rates and the unrealistically low value of the poverty lines for Greater Cairo, especially in relation to the very rapid growth of the population in *ashwa'yyat* (the Arabic word used for informal settlements/slums that means random or haphazard). It also considers the flawed assumptions on which poverty lines are based, and the real costs of living.

Section 3 discusses the flawed data on which poverty line studies draw from. It reviews various contradictory figures from different government authorities about the number of slums and their populations. Significant inconsistencies exist between the statistics provided by different authorities, as well as within the same authority. Figures for the population living in slums (including informal settlements) in Greater Cairo range from a low of 2.8 million in 2000 to 10.7 million in 2006 (which implies that two thirds of Greater Cairo's population lived in slums). Moreover, a study in 2006 found that slum populations were growing much faster than formal Cairo's population. Low poverty-incidence figures for Greater Cairo cannot be reconciled with such large slum populations while trends claiming that the incidence of poverty is falling cannot be reconciled with the very rapid growth in the population living in slums. Data from the Central Agency for Public Mobilization and Statistics (CAPMAS), the official source for statistics in Egypt, under-counts slum populations. All household surveys depend on its data. Some large slum areas were found to be missing from this agency's lists while others had estimates for their population that were a small fraction of their real population. As one resident of an informal settlement noted:

“If the government census collectors come here, they only come to the first few streets which are close to the asphalt. Do you expect an employee who is paid a pitiful government salary to go deep into the pockets where most poor people live, especially when many of these areas have a bad reputation – do you expect them to hop on our mini-trucks or walk for kilometres in these puddles of sewage?”

The consequence of under-counting slum populations means that these populations have a much lower probability of being included in household surveys that provide data for poverty line studies. Given that slums/informal settlements house a significant proportion of Greater Cairo's population means that the poor are under-sampled in household surveys. Other categories of poor people who live outside slums are also under-counted – for instance not including the homeless or those accommodated at their workplace. Reasons why populations of informal areas are under-counted include: the government's ambiguous relationship with informal areas and their populations, different definitions, political motivation, outdated maps, lack of coordination between government authorities and limitations in the capabilities and skills of the government bureaucracy.

Section 4 questions the validity of various recent poverty lines in relation to the costs and conditions of living in eight of Greater Cairo's informal settlements. Costs of food and non-food needs in these settlements are assessed and compared with the poverty lines (which are supposed to indicate the income needed to afford these food and non-food needs). The methodology used to calculate the food allowance in poverty lines is inadequate. While most poverty line studies in Egypt now take regional price differences into account, they miss significant intra-city food price differences. Those who live in informal areas, especially on the outskirts of Greater Cairo, frequently pay more for many food items than those who live in some of the most prosperous neighbourhoods of Cairo. Furthermore, the food allowance in poverty lines, which is based on the actual diets of the poor, fails to factor in the cost of a nutritious diet. Malnutrition levels are quite high in Egypt. The 2005 Egypt Demographic and Health Survey found that 18 per cent of Egyptian children and 16.2 per cent of children in

urban areas suffer from chronic malnutrition or stunting (El Zanaty and Way 2006). Such high levels of malnutrition cannot be reconciled with the reported low incidence of poverty in Greater Cairo, which houses close to 50 per cent of Egypt's urban population.

Table A provides estimates for the costs paid for a range of non-food needs by those living in eight informal settlements. These show how much low income households have to pay for rent; half of the households living in slums and informal settlements rent accommodation. Keeping children at school, transport (for income-earners and students) and health care are all expensive. These actual costs are much higher than the non-food allowance in even the most generous poverty lines – for instance the most recent upper poverty line in World Bank 2007. Raising the value of poverty lines to adequately reflect these costs would considerably increase the incidence of poverty in Greater Cairo, especially given that a significant percentage of people have incomes only just above the existing poverty lines. This can be seen if the figures in Table A are compared with the allowances for non-food needs in both lower and upper poverty lines. For a family of five, the lower poverty line provides a non-food allowance of 179LE per month while the upper poverty line provides 374LE per month (World Bank 2007). These very low allowances for non-food needs do not represent the actual costs paid for non-food needs as shown by Table A.

Consider a family of five with two children in primary school and one in secondary school. If their income was equivalent to the lower poverty line, their non-food allowance would be 179LE per month (World Bank 2007). This means that they would only be able to afford to rent one room in a slum with a toilet shared with several other households. They certainly would not be able to keep all three children at school; to do this they would need an absolute minimum of around 320LE per month to cover school costs and other non-food expenses (see Table 1). But having 320LE per month would still not allow them to live in non-slum conditions; typically even with this monthly income, they would live in one room with a shared bathroom that may have an official connection to the sewage network and a water connection. 320LE per month would only be sufficient assuming no one ever gets sick and where schools are available in walking distance. Many slum households would need a lot more than this – for instance if a shared bathroom has no piped water or sewer (which presents not only health problems but also additional costs), if children have to pay for transport to and from school due to no school in the slum, if the main income-earner has to take more than one ride to work and/or for costs of health care and medicines if one family member gets sick. Meeting non-food needs could cost a family of five as much as 1,000LE per month, which is more than five times the allowance for non-food needs in the lower poverty line and nearly three times the allowance for non-food needs in the upper poverty line.

Table A: The costs of non-food needs in informal settlements in Greater Cairo

Item	Notes on costs per month	Range of costs (LE) per month
Housing	Cost of renting a room with a bathroom shared with 4–8 other rooms in an informal settlement is 70–100LE; for a flat with two bedrooms and a living room, 200–275LE.	70–275
Education	Cost of education includes compulsory <i>majmu'at</i> (extra classes), transport to school and a small daily allowance. The range of costs in two neighbourhoods was 30–80LE for a primary school student and 95–135LE for a secondary student. Annual costs include uniforms, shoes, school bag and books (averaged over year: 8–12LE per month per student).	Primary: 30–80 Secondary: 95–135 Annual costs/month: 8–12
Healthcare	Difficult to estimate. Quality of public healthcare has severely deteriorated; it is no longer free due to user fees and unavailable free medication. It is common that people live with untreated illnesses, especially serious long-term illnesses where medication has to be regular and where costs are not affordable. Furthermore, ill health is more common due to the unhygienic conditions in areas where water and sanitation are lacking and where housing is overcrowded and badly ventilated.	
Transport	Assuming that one household member goes to work using public transport or private minibuses (and varying according to how many times they have to change).	50–200
Electricity	Official connection: 15–35LE. One-room renters: 5–10LE paid to landlord.	5–35
Sanitation	Official connection costs nothing; contribution to emptying trenches twice a month 50–150LE. The worst housing usually has no official connection.	0–150
Water	Official connection: approximately 15LE. Costs are higher if water has to be purchased when there is no supply in the piped system.	Min. 15
Other	Costs of work in the informal economy, social obligations, clothing.	?
Total		320–>1000

If poverty lines are to be used, then their limitations in terms of measuring other aspects of deprivation need to be recognized. They also have to be set at levels that make sufficient allowance for the real costs of enough food, reasonable quality accommodation, water, sanitation, electricity, keeping children at school, transport, health care and medicines when needed.

Introduction

There is a global debate about the poverty line approach, its meaningfulness, validity and reliability. Lately, the approach in general, as well as its application in the urban context, has come under severe criticism. While some scholars propose modifications and updates to improve on the weaknesses (Deaton 2001; Ravallion, Chen et al. 2008), others propose abandoning the approach altogether (Reddy and Pogge 2005) due to a number of fundamental faults which cannot be overcome.

In Egypt, poverty lines are the most influential measure of poverty. While other measures of human welfare such as the UNDP Human Development Index have been used, poverty incidence rates based on poverty lines are the most widely cited. Poverty incidence rates, especially those of the World Bank, are widely cited as facts even though there are multiple estimates in the different poverty line studies done for Egypt since the 1990s. Besides incidence rates, these poverty line studies also offer different poverty lines and different conclusions about the distribution of poverty in Egypt, and the trends of poverty over time. A review of the studies concludes that very different and at times contradictory conclusions can be reached.

This paper focuses on the city of Greater Cairo and examines what poverty lines tell us about poverty there and how well this information reflects the reality of the lives of poor people, especially those who live in informal settlements.¹ This will be done in three ways. First, the paper will review Egypt's poverty line studies and will extract from them the information about Greater Cairo. Second, the data which informs Egypt's poverty lines will be examined. Third, through fieldwork in eight² informal settlements in Greater Cairo, poverty lines will be questioned in relation to the real costs of some basic needs. The paper concludes that poverty is severely underestimated in Greater Cairo. This is because poverty lines are set too low in relation to the costs of basic needs and because the household surveys which inform poverty line studies under-sample people living in informal settlements as they are based on census data which under-count the populations of informal settlements.

The paper is divided into four sections. Section 1 reviews some of the key literature on measuring poverty, poverty lines and their weaknesses, especially in the urban context. Section 2 reviews what the poverty line studies tell us about poverty in Egypt in general and in Greater Cairo in particular. Section 3 questions the validity of these poverty lines by questioning the data they are built on. Section 4 questions how poverty lines factor in the costs of living in some of Greater Cairo's informal settlements, in terms of costs of both food and non-food basic needs.

¹ In Egypt, *ashwa'iyyat* is the Arabic word used for informal settlements/slums. The word means "random or haphazard". UN-Habitat calls them slums; Egyptian government authorities refer to them as *ashwa'iyyat*, slums and informal settlements/areas. There is an emerging discussion in Egypt to create new labels to reflect the diversity within the hundreds of *ashwa'iyyat* in Egypt today. This paper will use slums, informal settlements and *ashwa'iyyat* interchangeably to refer to these areas where housing is mostly illegal, basic infrastructure and services are severely lacking and there is widespread poverty.

² Focus groups were held in 2008 with residents of the following informal settlements: Ezbet El Haggana in Nasr city, Ezbet Abou Karn and Batn El Ba'ara in Masr El Qadima, Manshiet Nasser and Ezbet Kheirallah around Moqattam, Arab Ghoneim and Arab Rashed and Al Ma`sara Al Mahatta in Helwan.

1 Poverty lines: the debate

1.1 Defining and measuring poverty: the importance of a multi-dimensional measure

The importance of how poverty is defined and measured cannot be overstated. This is primarily because it can drive the choice of policies aimed at poverty reduction (Chambers 1995; Wratten 1995; Kanbur and Squire 1999). Measuring the extent of poverty at different times allows for a “poverty comparison” over time or between different places (Ravallion 1992). Thus, the results of measuring poverty can help to assess important issues such as the impact of policy or where to direct resources or focus efforts to reduce poverty. A mere change in definition and approach for measurement has the capacity to define different people as poor. If the choice of definition and the measure produce radically different estimates, or estimates that do not reflect reality, they have the capacity to misinform policy-making.

The definition of poverty has been progressively broadened over the last two decades. From a focus on income alone, it is now widely acknowledged that poverty is a multi-dimensional phenomenon including other essential dimensions of living standards. The influence of Amartya Sen has greatly contributed to this broadening by including the lack of capabilities and freedoms in addition to the lack of resources as dimensions of poverty. In addition to income and consumption, health and education are now part of the definition of poverty. More recently, mainly as a result of insights from the poor themselves and research which emphasizes the multi-dimensional nature of poverty (Moser, Herbert et al. 1993; Chambers 1995; Baulch 1996; Narayan, Patel et al. 2000), aspects such as vulnerability, exposure to risk, voicelessness and powerlessness have also been added to the mainstream definition of poverty (World Bank 2000). This broader definition has also expanded the relevant set of policies to target poverty. As Kanbur and Squire (1999) notes, this broader definition means that “the impact of appropriately designed combinations [of poverty reduction strategies] will be greater than the sum of the individual parts”.

While many different approaches exist for measuring poverty, the most widely used and most influential are poverty lines. Progress on the most important world target in reducing poverty, Millennium Development Goal 1 (MDG 1: to reduce by half the proportion of people living on less than a dollar a day³) is guided by poverty lines. While MDG 1 has been powerful in increasing the focus on global poverty, it has also contributed to conceptualizing the poor as a homogenous group, whose main problem is low income, and hence has caused policy-makers to focus mainly on increasing the poor’s incomes (Hulme and Shepherd 2003). Alternative indicators to poverty lines, which also describe material living conditions, include asset indices (Moser 1998; Rakodi and Lloyd-Jones 2002). Generally, these assess assets such as human, social, physical, financial and natural assets. Such multi-dimensional indicators, which include housing conditions, would surely be more appropriate in assessing poverty in slums and would produce policies which are broader than those which focus on income alone (Moser 1998).

1.2 National and international poverty lines: the criticism

Poverty lines have been widely criticized. The criticisms can be divided into those relating to conceptual choices, and those relating to the data used (Hanmer, Pyatt et al. 1999). Poverty lines do not accommodate the broadening of the definition of poverty as they are a one-dimensional indicator which is defined by expenditure or consumption (Srinivasan 2004). The “money-metric” approach used focuses on the income dimension of poverty and neglects all other dimensions of welfare (Hanmer, Pyatt et al. 1999). Despite the

³ <http://www.un.org/millenniumgoals/#>.

acknowledgement of the multi-dimensional nature of poverty, there has been no significant change in who is counted as poor (Kanbur and Squire 1999).

Both national and international poverty lines have been criticized for being arbitrary, set too low and not based on the real needs of human beings. The methods used to arrive at the cut-off point which defines those who are poor below a particular line, and not poor above it, are both problematic and arbitrary. National poverty lines suffer from a number of weaknesses. They are mostly determined by identifying the cost of achieving certain capabilities (such as being adequately nourished) (Reddy and Pogge 2005).

In a review of 25 poverty assessments done by the World Bank for different countries, Hanmer, Pyatt et al. (1999) found a number of problems.

- Many poverty lines fail to deal with the economies of scale of different household sizes, as well as the different household compositions. "All individuals are assumed to have the same requirements regardless of age, sex and occupation" (Hanmer, Pyatt et al. 1999, p.80).
- Poverty lines also fail to deal with gender dimensions of poverty, and intra-household inequality in general, as the household is used as a unit of analysis.
- Price variations are not adequately dealt with. While some poverty lines deal with rural/urban differences, they usually fail to deal with price variations in a single locale. In many cases, the poor pay more for goods and services even in the same city.
- Comparing poverty trends both across and within countries is impossible because data from different studies cannot be compared due to the different approaches used.

All these issues can have a significant impact on the final results, as a small change can result in a radically different poverty line and thus a totally different poverty headcount. Besides the specific methodological issues, Hanmer, Pyatt et al. (1999) found that poverty assessments are weak in addressing the causes of poverty. They emphasize the recent lack of growth as the cause, while ignoring the historical, political and international reasons for the persistence of poverty.

Data gathered in household surveys and used to arrive at poverty lines are also extremely problematic. Household surveys suffer from both design and coverage weaknesses. While the availability of poverty indicators has improved in recent years, "poverty statistics are still far from being produced with similar methods and are far from uniform and consistent in terms of quality and reliability" (Szekely, Lustig et al. 2000, p.2). A comparison of household surveys in Latin America finds that while some surveys collect expenditure⁴ data, others have only income data and moreover not all surveys cover the same sources of income. Some, for example, have no information about non-monetary income, such as payments in kind. To miss capturing income sources important for the poor can make countries, for example, seem poorer (Szekely, Lustig et al. 2000). Extrapolation from limited local data to arrive at global poverty estimates and comparisons can result in great errors, although it is not possible to know the extent of these errors in the estimations of global poverty (Reddy and Pogge 2005). These incomparable data mean that conclusions about global poverty trends are very unreliable. Without knowing poverty trends, it is almost impossible to have any serious debate about better and worse policies (Sahn and Stifel 2000).

The method used to arrive at world poverty numbers and comparisons has additional problems arising from the use of purchasing-power parity (PPP) exchange rates. In this approach, an international poverty line is set using an abstract money unit (international dollars). It is then translated into local currency using PPPs, aiming to arrive at the amount of local currency equivalent in purchasing power to the international poverty line (Deaton 2001;

⁴ Expenditure is generally preferred to income as a welfare indicator. This is because households could use savings and credit to smooth fluctuations in income, and so consumption is considered to be a better reflection of actual welfare (El Laithy, Lokshin, et al. 2003).

Reddy and Pogge 2005). These PPPs have been criticized for generating arbitrary values,⁵ which are then inappropriate for comparing poverty between times or places. Revisions of PPP exchange rates result in changing poverty estimates, but actually have nothing to do with the actual changes in the lives of the poor (Deaton 2001; Reddy and Pogge 2005). For example, a country's poverty line could change because of a change in the world price of a commodity which affects the PPP exchange rate, while the poor in that country might not even consume that commodity (Srinivasan 2004).

The problems with international poverty lines have led some researchers to conclude that the approach is meaningless and should be abandoned altogether (Srinivasan 2004; Reddy and Pogge 2005). Others at the World Bank have recently revised the international poverty lines, taking into consideration some of the criticisms made (Chen and Ravallion 2008; Ravallion, Chen et al. 2008). The purchasing power parity (PPP) exchange rates and the international poverty line were revised. The new international poverty line is \$1.25 at 2005 prices (instead of \$1.08 at 1993 prices). The new data available in 2005 allowed more accurate figures for PPP exchange rates and also showed how previous PPP exchange rates had led to an under-estimation in the cost of living in most low- and middle-income countries (Ravallion, Chen et al. 2008). These revisions have changed the incidence of global poverty below 1\$ a day from around 1 in 5 people in 2004 to 1 in 4 people in 2005 (Chen and Ravallion 2008), adding hundreds of millions of new people to the ranks of the poor. This shows how small changes can produce radically different estimates about the scale of global poverty. Despite these revisions, critics maintain that the method is "wholly wrong" as it still suffers from the same weaknesses – being way too low for the basic needs of human beings, and weaknesses related to PPP (Reddy 2008).

This paper will not go into the details of problems with international poverty lines, but will focus instead on national poverty lines as these are more meaningful in the Egyptian context. However, the 1\$ a day international poverty line produces ludicrous poverty incidence rates for Egypt: 1.7 per cent in 1995 and down to 0.4 per cent (250,000 people) in 2000 (World Bank and Ministry of Planning 2002, p.ii). With the recent upwards revision of PPP rates, the revised incidence rates are 4.46 per cent in 1990, 2.46 per cent in 1995, 1.81 per cent in 1999 and 1.99 per cent in 2004⁶, which essentially means that poverty in Egypt is a minor issue affecting a minute proportion of the population. This presents a great contrast to the scale of *ashwa'iyyat* in Egypt, and their phenomenal growth over the last few decades,⁷ as well as the scale of poverty seen in the Egyptian countryside. Indeed, Srinivasan (2004, p.4) notes, "There are good reasons to believe that global poverty counts based on the dollar-a-day international threshold are meaningless." While these poverty counts appear to be precise, a great many errors are included in their calculation (Reddy and Pogge 2005). Such unreasonably low figures for Egypt confirm that the 1\$ a day international poverty line is indeed morally indefensible (Edward 2006).

A key problem with such meaningless figures is that they are then used by the World Bank to draw conclusions about global trends in poverty. The World Bank finds, for example, that global poverty has declined recently (Reddy and Pogge 2005). The reality is that we are quite ignorant about what has happened to poverty over the last ten years (Sahn and Stifel 2000). Conclusions about the level, distribution and trend of global poverty must *not* be accepted until these serious weaknesses have been adequately addressed (Reddy and

⁵ For a detailed explanation of the problems with PPP exchange rates, see Reddy and Pogge (2005).

⁶ World Bank: Povcal Net: poverty analysis online tool, <http://web.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTRESEARCH/EXTPROGRAMS/EXTPOVRES/EXTPOVCALNET/0,,contentMDK:21867101~pagePK:64168427~piPK:64168435~theSitePK:5280443,00.html> (accessed 14 November 2008).

⁷ This point will be discussed in detail in Section 3.

Pogge 2005). Still, poverty lines and the headcounts they produce are most commonly used, despite their vast and widely accepted deficiencies.

1.3 Urban poverty lines: under-counting the urban poor

The scale of urban poverty worldwide is on the rise. Key studies on urban poverty, *Planet of Slums* (Davis 2006) and *The Challenge of Slums* (UN-Habitat 2003), present alarming accounts of its worldwide scale. Anna Tibaijuka (2005), the Executive Director of UN-Habitat, warns that if the current trends persist most people will soon be living in slums.⁸ As the world population shifts in 2008 from being predominantly rural to predominantly urban,⁹ urban poverty is expected to become a more significant problem. Recent research finds that urban poverty worldwide is growing and that the poor are urbanizing faster than the rest of the population (Ravallion, Chen et al. 2007). Despite the impact of rural-to-urban migration on urban population increase, natural population growth is and will remain the most important reason behind urban growth (Cohen 2004).

Scholars researching urban poverty generally agree that urban poverty is greatly underestimated (Mitlin 2003; Satterthwaite 2004). A critical review of urban poverty lines by Satterthwaite (2004; 2005) finds many faults. The poverty line methodology has been uncritically transferred from high- to low-income countries, making some of its basic assumptions incorrect. In high-income countries people mostly have access to education, healthcare, water, sanitation and electricity and hence the costs of these are frequently not accounted for in the poverty lines of low- and middle-income countries. Urban poverty lines are usually set too low in relation to the cost of basic needs in urban areas.

The non-food component of poverty lines frequently does not take into account the higher income required for non-food needs in urban areas, such as housing, transportation, childcare and health. Costs of living can vary greatly in different urban areas, and so in some cities prices might be much higher. Hence, a poverty line adjusted broadly for “urban areas” is already problematic. Poverty lines are frequently calculated by taking what a family at the food poverty line actually spends on non-food items rather than what is required to meet its needs. This means that if a poor family lives in only one room, the cost of the rent for that is what would be included in the poverty line, rather than the cost of adequate housing.¹⁰ The poverty line would also not include the health costs of the poor, since many poor people are forced to ignore healthcare because they cannot afford to seek treatment. Children’s costs, such as costs of health and schooling, are also frequently not accounted for. All these factors contribute to poverty lines that are too low, and thus an underestimated scale of urban poverty.

Data errors also arise from “nationally representative” surveys conducted in urban areas. Surveys frequently miss or under-count the homeless, temporary workers, those who sleep in workplaces, those who are in informal settlements where no official data or maps exist and those who rent rooms from households. If they miss such populations, then they are most likely underestimating urban poverty (Satterthwaite 2004). Such measurement issues result in very different incidence rates of urban poverty in different studies conducted in the same country at the same time. For example, Satterthwaite (2004) found that that in the late 1990s in Kenya, estimates of urban poverty in different studies ranged from 1 per cent to 49

⁸ UN-Habitat defines slums as overcrowded areas with poor or informal housing, inadequate access to safe water and sanitation, and insecurity of tenure (UN Habitat 2003).

⁹ http://www.un.org/esa/population/publications/WUP2005/2005WUP_FS1.pdf.

¹⁰ See also Bapat, Meera (2009), *Poverty Lines and Lives of the Poor; Underestimation of Urban Poverty, the case of India*, Working paper, IIED, London, 47 pages and Chandrasekhar, S. and Mark R. Montgomery (2009), *Broadening Poverty Definitions in India: Basic Needs in Urban Housing*, IIED Working Paper, IIED, London (forthcoming).

per cent of the urban population. Furthermore, many low figures of poverty incidence do not match infant and child mortality figures nor undernutrition levels (Haddad, Ruel et al. 1999).

This section has reviewed some of the background debates about poverty lines and their weaknesses, especially in the urban context. It has also reviewed the importance of adequately defining poverty and of using a multi-dimensional measure. Against this background, the rest of the paper will focus on Egypt and on Greater Cairo.

2 The poverty lines for Egypt and Greater Cairo

To understand what poverty lines tell us about poverty in Greater Cairo, this section begins with a review of the Egyptian poverty line studies. It will then extract from these studies the information about Greater Cairo, discussing some of the complexities involved.

2.1 Poverty line studies for Egypt: a review

According to the World Bank's latest poverty assessment, there is still no official poverty line in Egypt and the Egyptian government does not have a system of monitoring poverty in the country (World Bank and Ministry of Economic Development 2007). Poverty lines are available in a number of studies measuring poverty since the 1990s, by different organizations and scholars (World Bank and Ministry of Planning 2002; World Bank and Ministry of Economic Development 2007; UNDP Egypt and INP 1996; Datt, Jolliffe et al. 1998; El-Ehwany and El-Laithy 2001; UNDP Egypt 2003; Jolliffe, Datt et al. 2004; Korayem 1994; Cardiff 1997). The most significant of these studies are those published by the World Bank, and those referred to in the various UNDP Egypt Human Development Reports (EHDRs), especially EHDR 1996 on the theme of poverty (UNDP Egypt and INP 1996). The World Bank and UNDP reports are significant because they can be considered the closest to official national estimates. Both World Bank and UNDP reports are published jointly with the former Ministry of Planning (now renamed the Ministry of Economic Development).¹¹ The World Bank (2002) and EHDR (1996) lower poverty lines, which are frequently referred to as Egypt's national poverty lines, also provide the figures for monitoring MDG 1 on the official UN site for monitoring MDG indicators.¹² They state that poverty incidence in Egypt is down from 22.9 per cent in 1996 to 16.7 per cent in 2000.

The main data source for poverty line studies in Egypt is the Household Income, Expenditure and Consumption Survey (HIECS)¹³ carried out by the Central Agency for Public Mobilization and Statistics (CAPMAS). CAPMAS is the official governmental agency for statistics in Egypt and HIECS is arguably the most important source of data for monitoring poverty in Egypt (World Bank and Ministry of Economic Development 2007). Another survey used in some poverty line studies (Datt, Jolliffe et al. 1998; Haddad and Ahmed 2003; Jolliffe, Datt et al. 2004) was the Egypt Integrated Household Survey (EIHS)¹⁴ carried out by the International Food Policy Research Institute (IFPRI) in 1997 in coordination with the Ministry of Agriculture and Land Reclamation and the Ministry of Trade and Supply.

Before discussing the current Egyptian poverty figures, it is important to clarify that any estimates for poverty based on data from 2005 would certainly be an underestimation of poverty in 2008. Recent rates of inflation have been extremely high. Consumer prices rose by 25.6 per cent between August 2007 and August 2008, driven by rapidly increasing food prices. The poor spend, on average, half of their income on food (Mitchell 2008). With inflation, their real wages have declined and thus poverty has definitely increased in scale and depth. In a study looking at nine low-income countries, it was found that poverty has

¹¹ The latest World Bank 2007 poverty assessment can only be downloaded from the home page of the Ministry. It is not yet available on the website of the World Bank. (Last accessed 14 November 2008.)

¹² <http://millenniumindicators.un.org/unsd/mdg/Default.aspx>.

¹³ The 2004/05 HIECS is the 8th national income and expenditure survey done by CAPMAS since 1958/59. It sampled 48,000 households and claims to be nationally representative. HIECSs have been implemented every five years since 1990/91 and are considered to be fairly comparable despite differences in sample selection and topics covered by the questionnaires (World Bank 2007).

¹⁴ International Food Policy Research Institute (IFPRI) (2000), *Egypt Integrated Household Survey, 1997–1999*, Washington DC (<http://www.ifpri.org/data/egypt04.htm>). The 1997 questionnaire was administered to 2,500 household in 20 governorates and a subsample of 348 households was included in the EIHS 1999 survey.

increased substantially (Ivanic and Martin 2008). Countries like Egypt which rely heavily on food imports are particularly affected by the increasing prices of internationally traded food items. There are two stories in Egypt today: one of optimism given the recent high rates of economic growth of around 7 per cent per annum since 2005, and one of the increased hardship affecting the majority of the population. The official discourse, that economic growth has not yet trickled down to the poor, is quite misleading. It implies that the poor are in the same state but waiting for improvement. In reality the last couple of years have been very harmful for the poor, especially due to the very high inflation rates. Inflation has remained quite high until early 2009; the official inflation ratio for urban areas was 15.1 per cent in Feb 2009 compared to Feb 2008.¹⁵

Increased hardship for the majority of citizens is apparent in several aspects of life in Egypt, such as the recent high number of street protests. Egypt is witnessing the longest and strongest wave of worker protest since the end of World War II. Approximately 222 sit-in strikes, work stoppages, hunger strikes and demonstrations occurred during 2006. In the first few months of 2007, a new labour action took place nearly every day (Beinin and el-Hamalawy 2007). While organized formal labour has been able to negotiate some wage improvements, including a 30 per cent salary increase for public servants announced by Mubarak in May 2008, the urban poor, who work mainly in casual jobs with daily wages in the informal economy, have mostly had no matched increase in wages.¹⁶

Additional evidence of increased hardship includes the violence in Egypt's subsidized bread queues. For example, an Egyptian daily newspaper, *AlBadeel* reported that 6 people had died and 35 were injured in May 2008 in Egypt's subsidized bread queues due to overcrowding.¹⁷ In the eight informal settlements researched for this study, the poor were spending an average of between two and three hours daily just to get their daily bread supplies, and the most pressing question had become how they would be able to continue feeding themselves given the soaring prices of basic daily food items. In every interview people mentioned with disbelief how food prices were rising on an almost weekly basis, with some key items doubling in price over a few months.

Egypt's poverty line studies present the reader with significantly different and in many cases contradictory findings about the scale, trend and distribution of poverty in Egypt. Two earlier reviews of the poverty line studies done in the 1990s looking at trends of poverty from the early 1980s to the mid- and late 1990s also found considerable differences between them (World Bank and Ministry of Planning 2002) (Assaad and Rouchdy 1999). In 1995/96, for example, estimates of the scale of poverty in Egypt using the lower poverty line range from 8.6 per cent (Datt, Jolliffe et al. 1998) to 22.9 per cent (UNDP Egypt and INP 1996). Poverty trends are also paradoxical. While Cardiff (1997) finds that the incidence of rural poverty increased from 32.2 per cent in 1990/91 to 55.2 per cent in 1995/96, the EHDR 1996 finds that rural poverty decreased from 28.6 per cent to 23.3 per cent for the same period. The only somewhat common conclusion about trends of poverty between 1981/82 and 1995/96 is that poverty increased over this period and that "at least one quarter of the population is poor by any standards and another quarter is on the margins of poverty" (Assaad and Rouchdy 1999, p.11). For the key figures of Egypt's poverty line studies, see Appendix 1 at the end of this paper.

¹⁵ <http://www.msrintranet.capmas.gov.eg/pls/fdl/INDIC?Iname=FREE&lang=0> (accessed 5 April 2009)

¹⁶ This was observed during fieldwork between November 2007 and November 2008. The wages of domestic servants, construction labourers and various categories of daily-wage workers did not increase during this period.

¹⁷ *Albadeel*, 13 June 2008, p.2.

The more recent studies (1995–2008) have refined their methods. They mostly consider some of the critical weaknesses mentioned above in Section 1.2, such as considering household size and composition, spatial price differences and household economies of scale. Nevertheless, there is still no consistent estimate of poverty available. For example, the incidence of urban poverty in Upper Egypt in 1995/96 is 10.8 per cent in the World Bank (2002) report while it is 35 per cent in the EHDR 1996, even though they use the same data source. Studies which use the same definitions but different data sources also have large differences. For example, Datt, Jolliffe et al. (1998) using EIHS estimate the national poverty headcount at 26.5 per cent while El Laithy and Osman using HIECS estimate it at 48 per cent (Assaad and Rouchdy 1999).

The difference in per-capita expenditure between HIECS 1995/96 and EIHS 1997 is very large. The EIHS per capita expenditures are 37 per cent larger than those in the CAPMAS survey (Adams 2003). Even studies by the same author for the same year and using the same data sources produce different results. For example, the incidence of poverty in Upper Egypt Urban areas in 2000 was 19.3 per cent in one study (El Laithy, Lokshin et al. 2003) and 36.3 per cent in another (El-Ehwany and El-Laithy 2001), with the lower set of figures used in World Bank (2002). As for the distribution of poverty, World Bank (2002) for example finds that the urban/rural divide in poverty in Egypt changed to an Upper/Lower Egypt divide in the 1990s, with Upper Egypt being significantly poorer than Lower Egypt. On the other hand, a study by Jolliffe, Datt et al. (2004), which corrected for spatial variation of price levels, challenged this “conventional wisdom”. It found that there are no significant differences between Upper and Lower Egypt but that rural areas are significantly poorer than urban areas.

Most of these differences are a result of different definitions, data, conceptual choices and methodologies. Differences between studies include how the poverty line is calculated, whether the household or the person is used as a unit of analysis, and how they have accounted for household economies of scale, spatial price differences and household composition (World Bank and Ministry of Planning 2002). Controversial issues include determining the diet composition which would provide the minimum calories to determine the food poverty line. Some studies used ideal diets which would be nutritious, while others use diets which are actually consumed by the poor (Assaad and Rouchdy 1999). While the former is seen to overestimate poverty (Assaad and Rouchdy 1999), the latter in fact would underestimate poverty as it is widely recognized that the poor’s diets are far from adequately nutritious. Another controversial issue revolves around determining the essential non-food allowance for individuals (Assaad and Rouchdy 1999). This is usually calculated by looking at households whose total expenditure is equal to the food poverty line, and then their non-food expenditure is added to the food poverty line to give the lower poverty line. The logic is that these expenditures must be essential as people give up food to make them. This means that items like nutritious food, children’s education costs and living in humane housing conditions would be considered non-essential expenditures.

These problems are not unique to Egyptian poverty line studies. Questioning the level of poverty in Latin America leads Szekely, Lustig et al. (2000) to conclude that it largely depends on the various choices in definitions and assumptions which can lead to estimating that the proportion of the poor is between 12.7 per cent and 65.8 per cent of the total population. In India, while the government- and World-Bank-affiliated economists find that rural poverty has substantially declined with neo-liberal policies, many scholars find that this has nothing to do with the reality of poor people in rural areas. Looking at various indicators in rural areas, such as falling employment growth rates, declining prices and rising farmer suicides, Patnaik (2006) finds that rural poverty is definitely increasing in scale and depth.

In Egypt, differences can also be accounted for by the large percentage of the population, almost 35 per cent, that is considered to live fairly close to the poverty line (World Bank 2001). This means that small differences in methodology could have very large effects on the numbers of poor people in Egypt. Thus, a political decision about lowering the poverty line by a few pounds can lead to conclusions such as declining rates of poverty over time, which could have no basis in real life. Such political decisions could be made at times when unpopular economic reforms are being carried out and when governments need to defend policies as not increasing poverty.

The World Bank and UNDP reports generally tend to consider that total poverty consists of those below the lower poverty lines. Those between the lower and upper poverty lines are hardly mentioned in World Bank (2002), and are called “moderately poor” in EHDR 1996. The latest World Bank report (World Bank and Ministry of Economic Development 2007) is particularly confusing in this regard. It oscillates between considering total poverty to be all those under the upper poverty line, and only those below the lower poverty line. When the total poor are considered to be those under the lower poverty line, those who are between the lower and upper poverty line are misleadingly called “near poverty”.¹⁸

The conventional story about the trends of poverty in Egypt is that the country is making progress towards achieving its main poverty target, MDG 1, despite the different figures stated by each report. According to the internationally comparable 1\$ a day poverty line, Egypt has already achieved MDG 1. In 2004/05, 3.4 per cent were living on less than 1\$ a day, compared to 8.2 per cent in 1990 (UNDP Egypt and Ministry of State for Economic Development 2008). Note that these figures are different from the World Bank figures for the internationally comparable poverty lines mentioned in Section 1.2 and it is not clear why. According to the UN MDG monitoring website,¹⁹ as mentioned above, poverty is decreasing. The EHDR of 2008 also finds that poverty in Egypt in 2007 is at 19.6 per cent, down from 24.3 per cent in 1990 (UNDP Egypt and INP 2008). Whatever the figures, the trend is positive. However, if the latest World Bank report is looked at in isolation, poverty increased between 2000 and 2005. Therefore, depending on the years chosen for comparison, as well as on the reports and poverty lines, one can reach different figures and thus make different claims about the trends for poverty in Egypt over the last two decades. That said, it is important to remember that these reports are not comparable in the first place due to different methodologies and data. Nevertheless the official story about poverty in Egypt is a good one.

The most positive picture about poverty in Egypt remains that of World Bank (2002), especially using the international poverty lines (mentioned in Section 1.2). Egypt’s figures for poverty incidence are found to be “relatively low by international standards” (World Bank and Ministry of Planning 2002, p.13). The report does not even consider an upper poverty line. This upbeat report is the one used to monitor Egypt’s progress on MDG 1 on the official UN monitoring website.

¹⁸ Different labels are given to groups of the poor in different poverty line studies. In World Bank (2007), the “extreme” poor (below FPL) and “absolute” poor (below LPL) make up “the poor”. Those between the LPL and the UPL are said to be “near poverty”. Everyone below the UPL is part of “all poor” for Egypt (note the confusing labels). World Bank (2002) uses the “total poverty line” (which is the national LPL). The 1996 EHDR used “ultra poor” or “core poor” (below FPL), “poor” or “below the basic needs PL” (below LPL) and “moderately or mildly” poor (between LPL and UPL). The total poor are those below the LPL.

¹⁹ The UN MDG monitoring website: <http://millenniumindicators.un.org/unsd/mdg/Default.aspx>.

2.2 What do the poverty lines tell us about poverty in Greater Cairo?

The previous subsection reviewed the Egyptian poverty line studies. This subsection will now extract what these studies tell us about poverty in the city of Greater Cairo. The overall view from the few poverty line studies which provide information about poverty in Greater Cairo is that it is generally quite low, decreasing and contributing to bringing down the national incidence rates of poverty.

In reality however, most of the studies don't tell us much about poverty in the city of Greater Cairo. As can be seen in Appendix 1, these reports mostly analyse poverty on a regional basis in Egypt. After being classified as urban, rural or metropolitan, Egyptian governorates are grouped together, producing the "Lower Urban" and "Upper Rural" figures in Appendix 1. At best, some studies disaggregate by governorate. Even so, this is not helpful as Greater Cairo is not a governorate. Until May 2008, the city of Greater Cairo was inconveniently divided between three governorates: Cairo, Giza and Qalyoubia. Greater Cairo included Cairo governorate as a whole, Giza city which is in the governorate of Giza and Shubra El Kheima city in Qalyoubia governorate (Sims 2003; Soliman 2004). While Cairo is classified as an urban governorate, Giza and Qalyoubia are classified as rural governorates which means that the remaining districts of Giza and Qalyoubia are considered village administrative units (Sims 2003).

Greater Cairo is rarely handled as a whole city. There is no administrative body which is in charge of Greater Cairo (Sims 2003), and each governorate has its own administrative structure. As of 2008, this has become even more complicated. The president announced in May 2008 that 6th October and Helwan (both suburbs of Greater Cairo city) will become part of two, new independent governorates. The latest 2006 census reflects this subdivision. Thus, in reality the city of Greater Cairo today is divided between five governorates: all of Cairo governorate and parts of four others. Fortunately, all poverty line studies were done before this further subdivision. Still, while there is information on Cairo governorate in a few studies, extracting the data for the parts of Greater Cairo which are in Giza and Qalyoubia governorates is not possible. Therefore, precise information about poverty in the city of Greater Cairo cannot be extracted from most published reports.

Greater Cairo has unclear and ever-changing boundaries. Depending on the boundaries chosen, population figures for Greater Cairo range from 12.5 million to 18 million. The official CAPMAS census data (Table 1) provide the populations of the governorates of Greater Cairo. The total urban population in the five governorates is 13,497,480. Greater Cairo would probably make up the majority of this figure.

Table 1: Population of governorates included in Greater Cairo city in the 2006 census

Governorates	Urban	Rural	Total
Cairo	6,758,581	0	6,758,581
Giza	2,891,275	252,211	3,143,486
Qalyoubia	1,899,354	2,352,318	4,251,672
Helwan	1,202,395	510,833	1,713,278
6th October	745,875	1,835,184	2,581,059
Total:	13,497,480	4,950,546	18,448,076

Source: CAPMAS website (accessed 23 September 2008).

Generally, the urban populations in Egypt, including that of Greater Cairo, are severely underestimated. Areas which are in reality a continuation of the Greater Cairo agglomeration are not included in Greater Cairo's figures and are considered rural (World Bank 2008a). Including these usually poorer peripheral areas into Greater Cairo would change the figures for poverty incidence rates in the city. These areas are not included because the Egyptian

census uses administrative criteria to define what is “urban”, and this definition is limited to five governorates (Cairo, Alexandria, Port Said, Ismailia and Suez), the frontier governorates, capitals of governorates and district capitals (*markaz*).²⁰ Egypt’s 1996 census states that 17.5 per cent of the population then lived in settlements of between 10,000 and 20,000 inhabitants. Despite their size and their urban characteristics, the government of Egypt did not classify these as urban areas, although they would have been in most other nations (Bayat and Denis 2000). Had the Indian definition of urban²¹ been used, approximately 80 per cent of all Egyptians would be living in urban areas.

Thus, if the administrative definition of “urban” is abandoned, a very different picture emerges of the degree of urbanization in Egypt, and the size of Greater Cairo. This is important because it can destroy the foundation upon which many conclusions are drawn from aggregate statistics about differences between rural and urban areas. Thus, general statistics comparing rural and urban poverty, or the size of the informal economy in rural versus urban areas, must be treated with extreme caution as much of what is claimed as rural is in fact urban. For example, in poverty line studies (e.g. World Bank 2007), rural populations are assumed to need 10 per cent more calories than urban populations. This would generally be true if rural populations were in fact rural and worked in agriculture. However, given that many of the areas are not rural, and that many in these actually urban areas work in jobs similar to those of their officially urban counterparts, then such an assumption will contribute to erroneous calculations about poverty in “rural” versus “urban” areas. Another important reason why urban populations are under-counted, is that CAPMAS consistently under-counts populations in informal settlements. This will be elaborated in Section 3 of this paper.

Given that none of these studies offers any explicit information about poverty in the city of Greater Cairo, the closest we can get is an approximate range of figures. One possible approach would be to take the metropolitan figures (where Cairo governorate is situated) and assume that they indicate the incidence figures for Greater Cairo overall. This is inaccurate for two reasons: Cairo governorate is usually stated to have lower poverty incidence than the metropolitan average, and the metropolitan poverty incidence figures are always lower than those for Giza and Qalyoubia (where stated). A second approach would be to take the figures for Metropolitan, Lower Rural and Upper Rural and take an average. Since Cairo governorate is considered a Metropolitan governorate, Giza governorate is an Upper Rural governorate and Qalyoubia is a Lower Rural Governorate, their figures could provide an average. However, this would also be misleading as the poverty incidence figures for Giza and Qalyoubia are much lower than their regional averages (where stated) and their rural parts have much higher poverty incidence rates than their urban parts. Table 2 summarizes the figures relevant for analyzing poverty in Greater Cairo which could be extracted from published reports. The reports were scanned for any specific figures given for Cairo, Giza and Qalyoubia governorates. The Metropolitan, Upper Rural and Lower Rural figures are also included since they represent the three governorates comprising Greater Cairo. The values in Table 2 from the majority of the studies cannot be used to obtain good estimates for poverty incidence in Greater Cairo. Some of them, however, offer figures for Cairo governorate, which forms the largest proportion of the city of Greater Cairo.

²⁰ <http://esa.un.org/unup/p2k0data.asp>.

²¹ The definition in India for an urban area is a settlement of more than 5,000 inhabitants that also meets some criteria for density and for the proportion of the workforce engaged in non-agricultural activities (Bayat and Denis 2000).

Table 2: Data relevant to poverty in Greater Cairo, extracted from published reports

Study	Poverty incidence (percentage) (for the three governorates and their regions)						Metro-politan PLs (LE*/capita/yr)		Remarks
	Cairo	Metro-politan	Giza	Upper Rural	Qalyo-ubia	Lower Rural	LPL	UPL	
WB 2007 (for 2004/ 2005)	4.6	LPL: 5.7 UPL: 18	12– 13	LPL: 39.1 UPL: 64.6	Approx11 (from graph)	LPL: 16.7 UPL: 41.1	1,453	1,921	Exact figures provided by report author in Table 3 below.
WB 2002 (for 1999/ 2000)	5.01	Total PL: 5.1	12.9	Total PL: 34.2	8	Total PL: 11.8	1,097	N/A	Total PL = LPL. UPL is not discussed.
WB 2002 (for 1995/ 1996)	N/A	Total PL: 13.1	N/A	Total PL: 29.3	N/A	Total PL: 21.5	N/A	N/A	Total PL is in fact the LPL. UPL is not discussed.
EI-Laithy, Loshkin et.al. 2003 (for 1999/ 2000)	5.01	LPL: 5.06	12.9 Urban Giza: 9.43 Rural Giza: 16.97	LPL: 34.2	7.9 Urban Qal.: 6.05 Rural Qal.: 9.09	LPL: 11.8	N/A	N/A	Actual value of PLs not given in paper; only incidence rates stated. This is the background paper for WB 2002. UPL is not discussed.
Joliffe 2004 (for 1997)	N/A	LPL: 4 UPL: 26.1	N/A	LPL: 9.2 UPL: 31.7	N/A	LPL: 12.7 UPL: 27	904.8	1550.4	Paper recommends using UPL.
UNDP 2003 (for 2002)		42.5		23.3		30.7	Metropolitan subjective PL: 3,073		Subjective PLs: based on people's own perceptions
EI-Ehwany & EI- Laithy 2001 (for 1999/2000)	LPL: 8.77 UPL: 28.95	LPL: 9 UPL: 31.3	LPL: 21.60 UPL: 53.16	LPL: 34.7 UPL: 69.1	LPL: 16.06 UPL: 52.73	LPL: 11.3 UPL: 44.6	Urban PL: 1,297	Urban PL: 1,953	
EHDR 1996 (for 1995/1996)	LPL: 10.8 Ultra poor: 2.9	LPL: 16	LPL: 12 Ultra poor: 2.6	LPL: 33.7	LPL: 28.3 Ultra poor: 8.8	LPL: 15.4	968	1,326	The poor are those below the LPL. The ultra poor are those below the food PL

Note: * US\$1 = 5.5LE (15 December 2008).

Table 3 summarizes the only available precise incidence figures for Cairo governorate, the urban parts of Giza and Qalyoubia governorates. The 1999/2000 figures are from EI Laithy,

Lokshin et al. (2003), the background study for World Bank (2002). Unfortunately, the paper does not provide any analysis using upper poverty lines. The 2004/05 figures were kindly provided by Dr Heba El Laithy, the lead author of World Bank (2007), and these incidence rates are the most recent estimates. The incidence rates for Greater Cairo as a whole would be somewhere between these three figures. If compared to other regions in Egypt (as shown in Appendix 1), Greater Cairo would generally be considered to have some of the lowest poverty incidence figures in Egypt, using both the lower and the upper poverty lines.

Table 3: Poverty incidence rates in Greater Cairo (percentage)

Governorate	LPL (1999/2000)	*LPL (2004/2005)	*UPL (2004/2005)
Cairo	5.0	4.6	15.6
Urban parts of Giza	9.4	7.1	21.2
Urban parts of Qalyoubia	6.1	7.2	24.3

Note: *Data provided by Dr Heba El Laithy (author of World Bank 2007) for 2004/2005 (not available in published report).

The conventional story about poverty in Cairo governorate is that it is relatively low or almost negligible in comparison with other governorates (World Bank and Ministry of Planning 2002; World Bank and Ministry of Economic Development 2007; UNDP Egypt and INP 2008). metropolitan areas, of which Cairo governorate is one, are said to “have very low poverty” (World Bank and Ministry of Planning 2002, p.8). The two most recent reports, World Bank (2007) and the EHDR 2008, both mention the 4.6 poverty incidence figure for Cairo governorate. The World Bank finds that these low poverty rates help to bring down the national average, especially as areas such as Cairo have low poverty rates and high population numbers. “This goes a long way to explain the relatively low national poverty rate”, says World Bank (2002, p.16), giving Cairo great credit for reducing national poverty. As for the urban parts of Giza and Qalyoubia governorates, their poverty incidence rates are less than the average governorate poverty incidence rates and significantly less than the average of their regions.

Regarding trends of poverty in Greater Cairo, figures are available only for Cairo governorate. Poverty in Cairo governorate and in metropolitan areas is stated to have decreased significantly between 1995 and 2000 (El Laithy, Lokshin et al. 2003). There is a warning in the latest EHDR (2008), however, about increasing poverty in Cairo governorate. The report warns that “the poverty rate in Cairo governorate will increase from 4.6 in 2005 to 7.6 in 2015” because of internal migration and greater numbers of people living in “vulnerable areas”(UNDP Egypt and INP 2008, p.41). It thus finds that Cairo is one of the eight governorates unlikely to achieve MDG 1 by 2015. Achieving MDG 1 for Giza is “possible” and for Qalyoubia “probable”. Again, this is surprising given the growth of slums in these areas. In general, the EHDR 2008 finds that Egypt will probably achieve MDG 1, which is an astonishing conclusion especially given the recent increases in food prices and inflation.

Non-monetary measures of poverty in Egypt show that deprivation levels are falling steadily over time – indicating that the government has had more success in improving non-income elements of poverty (World Bank and Ministry of Planning 2002). These include life expectancy, infant mortality, female literacy rates and child malnutrition. If, however, the numbers of *ashwa'iyyat* and people in them were used as a non-monetary indicator of poverty in Greater Cairo, a very different picture would emerge. This is discussed in the next section, which questions whether the low and generally encouraging incidence figures accurately represent poverty in Greater Cairo, especially given the phenomenal growth of Greater Cairo's *ashwa'iyyat*.

3 Poverty lines for Greater Cairo: the flawed data

The rest of this paper questions the low poverty incidence rates and the low poverty lines for Greater Cairo. This section discusses the flawed data on which poverty line studies depend. Section 4 questions the actual value of the poverty lines in relation to the costs of living in different informal settlements in Greater Cairo.

3.1 The data: under-sampling residents of informal settlements

All household surveys depend on CAPMAS data for sampling purposes. The probability of an area being included in the household survey in the HIECS is proportional to its size in the latest census (World Bank and Ministry of Planning 2002). The latest two HIECS surveys (2004/05 and 1999/2000) both depend on 1996 census data. CAPMAS data are also used for sampling in the only Greater Cairo slum survey which exists (El Zanaty and Way 2004). The survey selects the areas from the CAPMAS Master List of Greater Cairo slums. Areas with small populations are grouped with other nearby slum areas to form larger primary sampling units. Sampling is then based on these primary sampling units (El Zanaty and Way 2004).

Using 1996 census data for sampling almost a decade later, in 2004/05, will produce lower urban poverty incidence rates because it will miss newly formed slum areas and because slum populations are growing at much faster rates than that of formal Cairo. One estimate finds that they are growing at over six times the speed of formal Cairo (Séjourné and Sims cited in World Bank 2008a). More importantly, both CAPMAS census data and the CAPMAS Master List of slums have inaccurate, severely under-counted and out-of-date figures for slum populations. Under-counting slum populations means that these areas will have a much lower probability of actually being part of the household surveys which provide the data for poverty line studies. Given that slums house the vast majority of Greater Cairo's poor, this means that the poor are under-sampled because these areas have a lower chance of appearing in household surveys. While slums in Greater Cairo are extremely heterogeneous and also house middle-class professionals and newly married couples who can no longer afford housing in other parts of the city, they also house a great number of Greater Cairo's poor (Bayat and Denis 2000).

Taking a closer look at the population figures for one slum, Ezbet el Haggana (Haggana hereafter) illustrates what is wrong with CAPMAS population data on slums. The 1996 census records a population of 32,652 in Haggana, and the 2006 census finds that the population increased to 39,432. In the CAPMAS Master List of slums in Egypt, which lists the names and population figures for all slum areas in all Egyptian governorates, the population figure for Haggana is 412 people in 2000 (CAPMAS 2001). Other estimates²² are 400,000 (Soliman 2004) and 1 million inhabitants (Ghazaleh 2002; El-Gohary 2004; Masoud and Moawwad 2007), which makes it the 14th-largest slum in the world, a mega-slum according to Mike Davis (Davis 2006). No sensible average can be concluded from the 412 to 1 million range. Months of fieldwork in the area confirm that CAPMAS figures are a severe underestimation as the area is huge. To arrive at a population estimate, GTZ counted the number of buildings in the area using satellite maps from 2007 and GIS techniques. They then assumed that each of the 8,503 buildings counted had five households with an average size of five people.²³ This provides a population figure of 212,575. Had this figure been used by the Greater Cairo slums survey or the HIECS, the probability of this predominantly poor neighbourhood being sampled in household surveys would have increased significantly.

²² The original source of these two figures is not known.

²³ This is a very rough average, and the area has extremes in types of housing. The main streets have buildings of ten floors and more but many of the flats here are empty. In many other areas, there are plots of land subdivided into small rooms rented out to a family each.

These contradictory figures are not unique to Haggana. Official CAPMAS figures for many (and probably most) areas are consistently and significantly lower than other estimates. Some informal areas with tens of thousands of people (e.g. Arab Ghoneim in Helwan) do not even exist in the Master List of Greater Cairo slums. Some other massive areas such as Bulaq El Dakroul in the Giza governorate are estimated to have 1.2 million residents²⁴ but listed as having only 58,150²⁵ people, in the Master List in 2000. All of Giza governorate in 2000 is listed as having 36 slum areas with a total population of 706,953. This figure is lower than independent population estimates for Bulaq El Dakroul alone!

There is actually no agreement about the number of slums in Egypt or about the number of people who live in them. The information about the number of slums and their populations differs between different government ministries and authorities, and also within them. IDSC states that there are 1,171 slums in Egypt (Nawar and Al Qitqat 2008), the Ministry of Planning (2003, Appendix 34) says there are 1,133 slums, and the Ministry of Local Development's figure is 1,221 slums (Ministry of Local Development 2002). The latest MDG monitoring report finds that the number of slum areas in Egypt has increased from 1,174 in 2004 to 1,210 in 2006 (UNDP Egypt and Ministry of State for Economic Development 2008). CAPMAS figures are the lowest, at 909 slums in Egypt (CAPMAS 2001; 2008).

Besides differences between government authorities, different levels of government, such as the governorate and local government, each have a different story. While in Cairo governorate, the total number of slums is, exceptionally, agreed as 81, in most others there are great differences. In Dakahleyya, for example, the local government says there are 121 slums while the governorate says they are only 27 (Ministry of Housing – GOPP and UNDP Egypt 2006). As for populations of *ashwa'iyyat* in Egypt, figures range from CAPMAS's low figure of 5.7 million in 2001 (CAPMAS 2001) to 16–21 million (depending on the definition) in the latest World Bank Urban Sector Update (World Bank 2008a; 2008b) or 15 million in 2007 according to the latest IDSC study (Nawar and Al Qitqat 2008).

Reported figures for Greater Cairo are just as controversial, with 174 slums according to CAPMAS (2001; 2008), 171 according to the Ministry of Planning (2003) and 184 according to the Ministry of Local Development (2002).²⁶ As for populations of *ashwa'iyyat* in Greater Cairo, the following figures are from a review by the Ministry of Housing (Ministry of Housing – GOPP and UNDP Egypt 2006, p.34). In 1996, CAPMAS provides the figure of 3.2 million, IDSC 4.1 million and the Ministry of Planning 4.5 million. In 2000, the population was either 2.8 million (Ministry of Local Development) or 7.1 million (Egyptian Center for Economic Studies) or 8.3 million (GTZ). In the 2004 EHDR, there were 7 million inhabitants of informal settlements in Greater Cairo (figures supplied by the Ministry of Planning in cooperation with GTZ) (UNDP Egypt and INP 2004, p.106). A recent study estimated that 10.7 million people lived in *ashwa'iyyat* in Greater Cairo in 2006, that is 66 per cent of the city's population (Séjourné and Sims cited in World Bank 2008a). The Ministry of Housing proposes another estimate of 6.2 million dwellers nationwide in 2005, of a total urban population of 30 million (also using CAPMAS data). According to Ministry of Housing figures, 59 per cent of the total Egyptian slum populations lived in Greater Cairo (Ministry of Housing – GOPP and UNDP Egypt 2006, p.40). The question is, despite the inconsistencies, how can these large figures be reconciled with the extremely low poverty rates for Greater Cairo?

²⁴ This estimate was provided by GTZ. It is calculated by multiplying the number of electricity meters by an average household size of 4.5 persons.

²⁵ The Master List divides Bulaq El Dakroul into 10 *ashwa'iyyat*: Sidi Ammar (population: 8,778), AlZohoor (14,349), Al Shorbagy (2,030), Zenein (6,300), Kafr Tohormos (7,000) and five other areas. The total population of the 10 areas is 58,150.

²⁶ Greater Cairo totals are arrived at by combining the total number of slums in Cairo, Giza and Qalyoubia. This method follows what government reports usually do.

A closer look at CAPMAS figures, which are the main source of data for household surveys, finds them to be contradictory and unreliable. Their census figures are different from their Master List figures. A third and also different set of figures is found in an updated CAPMAS print-out of the latest populations and numbers of *ashwa'iyat*. This print-out was obtained from the computer system of the CAPMAS public information centre in May 2008. Table 4 compares Greater Cairo figures and Egypt totals from two CAPMAS reports. Initially, these data look very different, but on closer examination the differences are probably due only to typing errors. The figures for Cairo governorate are either (probably) missing a zero or have an extra one. As for Giza governorate, the second digit is either a 6 or a zero. Thus the totals each listing has for Egypt are also different. So which CAPMAS figures are the correct figures? The difference between the two Cairo figures is around 1.7 million people. Most importantly, all reports refer to using CAPMAS data, but which CAPMAS data? The CAPMAS Greater Cairo Master List report from 2001 or the CAPMAS computerized data, or the CAPMAS census published-on-paper data? Surveys using just these three different sources would have different probabilities of sampling different slum areas. Besides that, the figures are not up to date. If we assume that the figures in Table 4 include typing errors, then the slum populations in 2001 were identical to those in 2005 which is not possible. If they are not typing errors, then slum populations decreased by approximately 2.6 million, in contrast to all other estimates which show an increase.

Table 4: Comparing two CAPMAS datasets on *ashwa'iyat* in Greater Cairo

Governorate	Number of <i>ashwa'iyat</i>		Population in <i>ashwa'iyat</i>	
	**2005	*2001	**2005	*2001
Cairo	76	76	298,469	2,098,469
Giza	36	36	769,533	706,953
Qalyoubia	62	62	589,343	589,343
Total Egypt	909	909	3,086,078	5,666,525

Notes: *Master List for Egypt report of 2001(CAPMAS 2001)

** "Updated" print-out from the CAPMAS computer system for 2005 (obtained May 2008).

An estimate of the growth of slum populations in Greater Cairo between 1950 and 2000 is shown in Table 5. According to GTZ (based at the Ministry of Economic Development), slum populations grew from 0.4 million in 1950 to 6.3 million in 1991 to 8.3 million in 2000. The area of *ashwa'iyat* increased by over 20 times, from 6.7 square kilometres in 1950 to 140.1 square kilometres in 2000. *Ashwa'iyat* are growing much faster than formal Cairo. A recent study finds that in 2006 they were growing at an average of 2.57 per cent per year, while formal Cairo was growing at 0.4 per cent per year (Séjourné and Sims cited in World Bank 2008a). Again, how is it possible that slum populations increased by millions in Greater Cairo while the already small fraction of poor people is claimed to have decreased? Does this mean that the vast majority of slum dwellers are not poor? Any researcher who has done fieldwork in these areas will confirm the great levels of poverty, deprivation and lacking services and infrastructure. The scale of growth of slums in Greater Cairo simply cannot be reconciled with the very low and decreasing poverty rates.

Table 5: Growth of *ashwa'iyat* in Greater Cairo, 1950–2000 (GTZ estimates)

Year	Area (square kilometres)	Population (millions)
1950	6.7	0.4
1977	45.7	2.7
1991	106.9	6.3
2000	140.1	8.3

So what can be concluded from this chaos of government figures? First, it is impossible to know the scale of *ashwa'yyat*, as there are no reliable data about *ashwa'yyat* or their populations. Second, depending on the data used, estimates of poverty in Greater Cairo would vary significantly. If CAPMAS population figures for *ashwa'yyat* are used, then poverty estimates in Greater Cairo would be less, as the areas have a much lower probability of being part of the sampling frame of any household survey. Third, if the, most conservative, CAPMAS listing (CAPMAS 2001) is used, then some of these areas could be entirely missing from the sampling frame for the surveys. Lastly, areas such as those with tents or tin shacks besides train lines or beside the Nile River could also be missing from the CAPMAS master sampling frame. In conclusion, one can safely say that CAPMAS data are not accurate and certainly under-count the populations of *ashwa'yyat* and that this results in under-counting Greater Cairo's poor people.

3.2 Why are the data inconsistent and incomplete?

The differences between data sources could exist for a number of reasons. Different authorities define slums differently. A review of definitions of different authorities by the Ministry of Housing revealed that slums, informal settlements and *ashwa'yyat* mean different things to different authorities and sometimes even to the different data gatherers within the same authority. For many, illegality is the defining factor. However, this is not sufficient as some previously legal areas have deteriorated so drastically as to become, for example, what UN Habitat would define as slums. These include temporary accommodation (*iwaa'*) areas set up by government for people forced to move or whose housing collapsed, which then became permanent as people refused to move out to the public housing provided (Ministry of Housing – GOPP and UNDP Egypt 2006).

Ashwa'yyat figures are political. To many, they represent the failure of government policies. Hence, they are routinely under-reported and accessed with great difficulty. Some have commented that in the chain of reporting information upwards, everyone puts the figures down a bit to scale down the failure and to look better. The topic is a sensitive one for government and hence some are scared to give out information. Furthermore, some high-ranking officials don't share the data as this gives them the power to keep their positions. The lack of transparency of data is a real problem in addressing informal settlements in Egypt (Shawqi 2006).

These perplexing figures are also probably a result of the government's ambiguous relationship with informal areas. Informal areas were recognized by government only in the early 1990s. Islamic activism manifested in violent confrontation with the government, along with an earthquake in 1992, forced the government to stop pretending that the areas did not exist. Until that time, they were totally ignored, appearing as empty desert or agricultural areas on many maps, despite the millions of residents. Since then, the government has dealt with these neighbourhoods using a security approach (Ismail 2006). Efforts to "upgrade" slums are less aimed at addressing poverty and inequality and more concerned with the social order (Denis 1996). The latest rock-slide in Doweiqia in September 2008 which killed hundreds of people was a clear demonstration of this. Despite acute community needs for rescue and relief, the government's main concern was security. State security forces cordoned off the area within hours of the disaster for fear of any kind of mass mobilization. By 24 hours after the collapse, government relief had still not arrived. Even Egyptian citizens who had managed to gather some relief donations and journalists were not allowed access and in many cases had to sneak in. Until today, the government does not have a coherent, well-formulated, informed and coordinated approach to dealing with these areas. The limited government action to upgrade these areas is surprisingly uncoordinated.

As one observer who works in slum upgrading noted:

“If the government finally decides to do something in an area, the lack of coordination becomes very apparent. First they come and put asphalt on the road and the road starts to look better, then a while later they destroy the road to put sanitation pipes and the road is back to where it was. It is as if every government authority works on its own and as if they work against each other.”

The capabilities, technical skills and motivation of employees of the government bureaucracy probably also contribute to the low quality of official data. Authorities such as CAPMAS suffer from the same weaknesses which plague all branches of Egyptian government. Many employees are underpaid, inefficient and low skilled, which raises doubts about the quality of their data collection. As a long-time resident of one of Cairo's *ashwa'iyyat* noted:

“If the government census collectors come here, they only come to the first few streets which are close to the asphalt. Do you expect an employee who is paid a pitiful government salary to go deep into the pockets where most poor people live, especially that many of these areas have a bad reputation – do you expect them to hop on our mini-trucks or walk for kilometres in these puddles of sewage?”

If data are collected closest to the main entrances of the area, they are likely to under-count the poor, as the slum areas closest to the main entrances are usually the most expensive.

Even where the existence of a slum area is recognized, the local maps sometimes show only a fraction of the slum. For example, Haggana is divided into four main areas. The CAPMAS map of 1996 shows only one area, and the rest are depicted as desert. In reality, the part included in the CAPMAS map is the oldest neighbourhood in Haggana and has the highest standard of living, and is mostly connected to water networks today. Other parts of Haggana are quite difficult to access and are significantly poorer. Most houses there have no running water and, generally, the housing standard is much lower. If the map ends at Area 1, none of the other areas would be counted and hence never sampled in household surveys.

Other groups of poor people probably missed by household surveys in informal settlements are the migrant workers. Some building owners will rent rooms to workers without their families who are in Greater Cairo for a few months of work. These men usually live in groups of 3–6 in one room; they work all day as wage labourers and come only to sleep at night. Many of the house owners would not say to a census taker that they have rooms rented out. This is because census takers are considered government employees, and people have extended various illegal connections (e.g. for electricity) to floors where they should not be there, so they will usually say that no one lives up there... that they are just empty rooms.

Flawed data is probably the main reason behind the implausible results of the survey of Greater Cairo slums. That report basically concludes, using a number of indicators, that there is not much difference between living standards in Greater Cairo slums and in the rest of the city. For example, it found that the proportion of children under five suffering from malnourishment in slums is generally similar and sometimes less than that in the urban areas of the rest of Greater Cairo. The proportion of stunted children (i.e. from inadequate nutrition over a long period of time, or the effects of chronic illness) under age five was found to be 15 per cent in slum areas and the same in the rest of Greater Cairo; the proportion of wasted children and underweight children was less by 1 per cent in slum areas than in Greater Cairo!

Outside *ashwa'iyyat*, household surveys can also miss some categories of the poorest in Greater Cairo's better-off areas. Using the World Bank 2007 methodology, areas such as Maadi and Heliopolis have zero incidence of poverty. This means that live-in domestic servants, some of which have a slave-like existence, were missed. Porters in buildings were probably missed as well. Many of these porters are recent rural migrants, with either the

male alone or the whole family living in a room in the garage of an apartment building, or in a tiny corridor at the foot of the staircase. These porters usually earn small salaries which are supplemented by various tips and income from services rendered in the building, such as washing cars, buying the newspapers and running local shopping errands. While some of them might not be income-poor, many of them live in inhumane conditions. Besides porters, household surveys will miss the various poor people who no longer belong to a household. Studies estimate that there are between 200,000 and 1,000,000 homeless children in Egypt, most of them in the cities of Cairo and Alexandria.²⁷ They children are definitely missed if, according to the IPL, Egypt in 2000 had only 250,000 poor people (World Bank and Ministry of Planning 2002).

²⁷ UNICEF: http://www.unicef.org/egypt/protection_144.html.

4 The costs and conditions of living in Greater Cairo's *ashwa'yyat*

“There was a widely accepted idea that for any given society, poverty exists if an individual (or household) was unable to attain a certain standard of living, or ‘well being’, that was deemed the minimum acceptable by the standards of that society (Ravallion 1994). But most societies also share a concept of ‘absolute’ poverty that goes beyond subjective standards. When people lack the basics of nutrition, health, sanitation and housing, they are poor by the principles of any society.”
(World Bank and Ministry of Planning 2002, p.9)

This section examines poverty lines in relation to the costs and conditions of living in Greater Cairo's *ashwa'yyat*. Section 4.1 looks at food and Section 4.2 will examine the non-food allowance factored into poverty lines. The section overall finds that poverty lines fail to factor in the costs of even the most basic needs of life in these areas. Poverty lines are set far too low in relation to the costs and conditions of living.

Given the number of informal settlements in Egypt, there is great diversity of their histories, housing arrangements, extent of services, physical characteristics, layout, costs of living, living arrangements and profiles of the people who live in them. Many of Greater Cairo's *ashwa'yyat* do not look like shanty towns mentioned in much urban literature as they have many multi-storey brick buildings (Tekçe, Oldham et al. 1994). Despite the diversity, it is widely acknowledged that public services and infrastructure such as schools, health centres, clean water and sanitation are lacking in most informal settlements (Ministry of Housing – GOPP and UNDP Egypt 2006; UNDP Egypt and Ministry of State for Economic Development 2008).

The informal areas generally have high concentrations of the urban poor, high illiteracy rates, high rates of unemployment or underemployment because of seasonal or daily jobs, a predominance of work in the informal economy, child labour, environmental hazards, widespread illness due to lack of basic services, narrow pathways between buildings, overcrowding in rooms, lack of privacy, unhygienic conditions due to garbage, insects and rodents and thus much higher infant mortality rates (Ministry of Housing – GOPP and UNDP Egypt 2006). Given these general characteristics, a money-metric measure of poverty which fails to reflect these difficult conditions of life in Greater Cairo slums is inadequate. People living under these conditions may have expenditure a few pounds higher than poverty lines, but it is inconceivable to think of anyone living in such conditions as “not poor”.

Egyptian “national” poverty lines are set in absolute rather than in relative terms. The absolute approach considers calorie requirements and some “essential” non-food needs, rather than a minimally socially acceptable standard of living which will usually rise with the country's overall standard of living (Hanmer, Pyatt et al. 1999). While this paper discusses absolute poverty lines, relative poverty should become a more important concept in poverty measurement in Egypt, especially in Greater Cairo due to the contrasts which now exist. Inequality has become very visible in Greater Cairo, as in many other cities. The growth of real estate as a sector for accumulation is significantly shaping the city. The exclusive residential compounds and gated communities which have emerged on the periphery of Greater Cairo, such as Dream Land and Beverly Hills are a relatively recent phenomenon (Bayat and Denis 2000). These residential areas with golf courses, swimming pools and shopping malls with private security services present a stark contrast to the dreadful conditions in some Greater Cairo slums (Denis 2006).

The intensity of the process of segregation in many cities today is very different from that of the past, and this widening in physical and social distance has many implications. As the wealthy consume private health, education, security and transportation services and different infrastructure, the quality of the facilities they leave behind, which become mostly used by

the poor, deteriorates. Furthermore, the links of the urban poor with the labour market become weaker, further locking them away from opportunities where they can find jobs and access services and training opportunities (Katzman 2005). People feel relative deprivation when they are excluded from aspects of life accessible to others nearby (Wratten 1995). This is confirmed by a study of “subjective poverty” in Egypt, where people defined poverty according to their own judgements and not according to the usual criteria used for poverty lines. The incidence rate of subjective poverty in metropolitan areas, such as Cairo, was by far the highest at 42.5 per cent²⁸ (UNDP Egypt 2003). These results are the exact opposite of absolute poverty lines which show that poverty incidence rates are the lowest in metropolitan areas, with poverty in Cairo less being than 5 per cent.

Based on research in eight *ashwa'iyyat* in Greater Cairo conducted in 2008, this section attempts to understand what basic needs actually cost. As will be shown, the high costs of living are not reflected in even the highest, metropolitan poverty line. Even this most generous of poverty lines is way too low for an acceptable standard of living for residents of Greater Cairo's *ashwa'iyyat*. Clearly, the poor were not involved in setting the poverty lines. Had they been consulted, the lines would undoubtedly be much higher. At the end of the focus groups conducted in the different areas, where the World Bank 2007 poverty lines were shared with the participants, people were infuriated and insulted by how low these amounts were in relation to their actual costs and conditions of living. Some requested that this paper extend an invitation to scholars and government officials who issue poverty lines to come and live their lives for one week with the money allocated in the poverty lines in order to assess whether they can eat, pay rent, send children to school, use public transport to go to work and get any kind of healthcare with the amounts stated.

The HIECS 2004/05 surveyed 118 households in Manshiet Nasser (an informal settlement), within a total of 5,898 households surveyed in Cairo governorate. Of the 118 households, only 6.8 per cent were counted as poor by the World Bank 2007 lower poverty line. A visit to Manshiet Nasser, and a walk around the area, would easily confirm that this figure is simply not plausible. Although sampling issues within the area could be a reason for this low incidence rate, it is also due to poverty lines which are set too low, as will be discussed below. Unfortunately, until today, there are no socioeconomic surveys which focus in depth on one informal settlement and tell us the percentage of illiteracy, education levels, income levels and so on. While the heterogeneity of informal settlements is acknowledged, the degree of this heterogeneity is actually not known.

4.1 The food component of poverty lines

This subsection discusses the food allowance in poverty lines and concludes that they do not adequately factor in the costs of food in Greater Cairo's *ashwa'iyyat*.

Adjusting for spatial price variation on the regional level is not adequate

Most poverty line studies in Egypt now account for regional price differences. Studies arrive at a certain bundle of food consumed by the poor and factor in the prices of these items prevailing in the region. Regional differences in prices generate different regional poverty lines, and poverty incidence rates based on these lines. Clearly, inter-region differences are quite significant, as can be seen in the differences between poverty lines in Appendix 1.

This paper finds that intra-city price differences are also extremely significant. Poor people who live in informal areas, especially on the outskirts of Greater Cairo, sometimes pay much more for the same food items than do those who live in some of the most well-off areas in Egypt. In the eight areas researched, food prices were compared with those at the nearest

²⁸ For subjective poverty lines in other regions in Egypt, see Appendix 1.

market and with those at a supermarket in Heliopolis, one of Egypt's better-off districts. Prices of some of the most commonly used food items by the poor were compared.²⁹ In the areas where people had to take public transport to go to the market, prices of food items were always around 50 piastres higher than at the nearest market or large supermarket. For example, to buy 1 kilo of tomatoes in Haggana or Batn el Ba'ara cost more than at the nearest market. In Ezbet Abou Karn, which is walking distance from the local market, prices are the same as in the market. Thus, a regional poverty line would miss these variations within a region. Poverty lines adjusted for regional prices would underestimate the levels of poverty in areas where people pay much higher prices for basic food items. The importance of adjusting to local prices in Egypt is best exemplified by the study of Jolliffe, Datt et al. (2004). By correcting for spatial variation in price levels, their conclusions greatly differ about poverty distribution in Egypt. Even such small differences could produce significantly different results.

Why are the prices higher in some informal settlements? Food is available in the areas at small grocery shops as well as from street vendors (many of whom are poor). Supplies are bought from intermediaries and not directly from the suppliers, so at a higher cost. Buying food is usually a daily process for the poor, dependent on daily incomes. Since the majority of poor people depend on daily wages, the man usually gives the wife the money for food for one day at a time. Some men buy the more expensive items themselves, such as meat, from outside the area on their way home. Buying food daily means that they cannot afford a daily overhead of transportation costs to go to cheaper outlets or nearby markets. With a daily food budget of 5–15LE, transportation overheads of 1–2.5LE are out of the question. Furthermore, most extremely poor people do not have refrigerators and thus stock very few food items.

Accessing cheaper prices would also require knowing where things are cheaper. Many women, especially recent rural migrants, would simply be too scared to venture outside the slum area without their husbands – they feel very apprehensive of the big metropolis of Greater Cairo. Furthermore, the poorest in the slum actually pay more for the same food items because they buy in smaller subdivided quantities. For example, they frequently buy small packs of ghee suitable for cooking one meal, or some oil in a cup from the local grocer because they cannot afford to buy a full bottle. A 2kg box of ghee, for example, costs 20LE while a small 80 gram pack costs 1LE – so 2kg of ghee in small packs costs 25LE, or 20 per cent more. Such prices mean that poverty lines based on regional prices are not adequate as they do not reflect the true costs of food consumed by the poor.

Food poverty lines: do they factor in a nutritious diet?

The contents of the food bundle used to arrive at the poverty lines in the more recent poverty line studies include an adequate number of daily calories for different household compositions in different places, and was originally based on the relative quantities actually observed in diets of the poor. While this allows for adequate calories, it does not allow for a nutritious diet. In terms of food and nutrition in Egypt, hunger is not the main problem. In fact, obesity in Egypt is close to being an epidemic. Around 70 per cent of women and 48 per cent of men were overweight or obese in 1998 (Asfaw 2007). While people can get their daily calories and more because of the available subsidized *baladi* bread, they do not necessarily get adequate nutrition. Subsidized bread costs 5 piastres per loaf (less than 1 US cent), yet malnutrition levels are quite high. The latest 2005 EDHS found that 18 per cent of Egyptian children and 16.2 per cent of children in urban areas suffer from chronic malnutrition or stunting (El Zanaty and Way 2006). Lack of adequate nutrition for children impairs their mental abilities, learning in school, physical abilities for labour and chances of a

²⁹ These items were identified by those interviewed. They included: potatoes, okra, molokheya, tomatoes, aubergine, fava beans, lentils, macaroni, rice, sugar, oil and ghee.

healthy life (Harper, Marcus et al. 2003). Improved nutrition is crucial to ensure the avoidance of the intergenerational transmission of poverty. Thus, factoring in nutritious food items in the poor's diets, and not only sufficient calories, should be essential.

The various measures of child malnutrition do not match the low poverty incidence rates reported. While the national average for underweight children is 6.2 per cent, this is higher in Cairo governorate at 8.3 per cent (UNDP Egypt and Ministry of State for Economic Development 2008). How is it possible that Cairo governorate has much higher rates of child malnutrition and significantly lower rates of poverty, compared to the national rates? This could be either because the poverty line is set too low to factor in a nutritious diet and/or because of the higher costs of buying food, as mentioned. In various interviews for this study, people reported very cheap ways to avoid going to bed hungry, for example by dipping *baladi* bread in tea with a lot of sugar. This feels like a warm meal and is very sweet so is sometimes also used as a desert. While this will allow people to fulfil their daily calorific needs, it definitely does not qualify as nutritious.

4.2 The non-food component of poverty lines

This subsection examines whether the non-food allowance of poverty lines adequately considers the cost of non-food basic needs of people in Greater Cairo. Using data from eight different informal settlements, the actual costs of some basic needs such as housing, transportation, basic education, and access to basic infrastructure (water, electricity, sanitation) were researched. The conclusion is that the non-food allowance of even the most generous of poverty lines is too low. Raising the value of poverty lines to reflect these costs adequately will surely raise poverty incidence rates in Greater Cairo, especially given that a significant percentage of people are clustered around existing poverty lines.

The "essential" non-food allowance factored in the various studies is calculated in Tables 6 and 7. The annual non-food allowance is calculated by subtracting the food poverty line from the different poverty lines. This is then divided by 12 in order to get a sense of the monthly non-food allowance per capita. Not all studies are included in the table because not all studies have amounts stated for the food poverty line and the upper poverty line. The World Bank 2002 report, for example, does not provide the reader with the national food poverty line nor the upper poverty line.³⁰ Table 7 looks specifically at the World Bank 2007 poverty lines. Its figures will be used in the rest of this section as it is the most recent report and thus the closest to current prices.

Table 7 calculates the non-food allowance for the lower (national) and upper poverty lines for different household sizes, using the average poverty lines mentioned in the World Bank 2007 report. While the report states that different poverty lines were calculated for different household sizes and compositions, these poverty lines are not given in the report. Only their average is given, and so is used here. This section will consider households with four or five people, given that the average urban household size in the 1990s in Egypt was 4.98 (Datt, Jolliffe et al. 1998). According to the figures in Table 7, if a household of four people spends less than 143LE per month on non-food essentials then they are considered poor, if they spend between 143LE and 299LE they are considered "near poor", and if they spend more than 299LE per month they are not counted as poor. To give the reader an idea of how much the non-food allowance of 36LE per capita is, it is US\$6.5 or the price of two coffees at Starbucks in Cairo.

³⁰ It provides only the total poverty line (national poverty line) as well as international \$1/day and \$2/day using PPP conversions. It is surprising that the report ignores the upper poverty line, as this is widely recognized as more reasonable in estimating poverty.

Table 6: Allowances for non-food “essentials” for different metropolitan poverty lines

Study	For year	Using the LPL		Using the UPL	
		LE/capita/ month	For a household of five persons (LE/month)	LE/capita/ month	For a household of five persons (LE/month)
WB 2007	2004/2005	36	179	75	374
El-Ehwany & El-Laithy 2001*	1999/2000	33	165	86	438
Joliffe 2004	1997	25	126	79	395
EHDR 1996*	1995/1996	22	111	52	260

Notes: Figures are rounded to the nearest Egyptian pound.

* The urban PL is used here because the values of the metropolitan PL are not provided.

Table 7: Allowances for non-food “essentials” in World Bank (2007) poverty lines (LE)

	PL (/person /annum)	Non-food allowance per household per month for different household sizes							
		PL (/person /month) (PL/12)	2	3	4	5	6	7	8
Total PL (lower PL)	1,453	121	242	363	484	605	727	848	969
Upper PL	1,921	160	320	480	640	801	961	1,121	1,281
Non-food allowance in total PL	429	36	71	107	143	179	214	250	286
Non-food allowance in upper PL	897	75	149	224	299	374	448	523	598

Note: Figures are rounded to the nearest Egyptian pound.

The costs of housing

Renters are conspicuously absent from the debate on informal settlements in Egypt. Slum-dwellers are mostly seen as those who squatted illegally on land and built their own dwellings, and thus issues of the costs of rent and rental contracts are rarely discussed. De Soto's work in Egypt, for example, emphasizes squatters and ignores renters. He valued the poor's assets in Egypt at \$240 billion in the late 1990s, and argues that the poor in Egypt would be rich if they only had property rights. He finds that the problem of the poorest would be resolved if they were to be integrated into the market economy through formal property rights (De Soto 1997). While this would benefit some squatters, it would harm renters in slums who are usually much poorer. Regularizing and upgrading informal settlements increases what landlords charge for rent and thus harms poor renters. According to the Greater Cairo slums survey (El Zanaty and Way 2004), the majority of households (51 per cent) in slums rent their dwellings.

Renters in informal areas today are at the mercy of the market and their landlords. The state provides negligible public housing opportunities today and the private sector naturally caters to higher-income populations (El-Batran and Arandel 1998). In reality, informal housing is the only option for low-income migrants to the city and to newly formed families of limited means (Bayat 2006). Rent is always on the rise in informal settlements, especially for those who

have no rental contracts. Landlords insist on no contracts and when tenants ask for them, landlords frequently refuse or ask for an advance of thousands of pounds or threaten to increase the rent. While some who live in flats in informal settlements have rental contracts, those who rent a room sharing a bathroom with a number of other rooms never have the possibility of a contract. Thus, the poorer the household, the more vulnerable it is to rental increases. Frequently, tenants do not have money to pay their rent when it is due. While some landlords wait when people are days or weeks late with their rent, some do not, and many households are forced to vacate immediately.

Rental prices in informal settlements today are much higher than all of the remaining rent control apartments in the city, which are gradually being eliminated. While some rent control flats in some prime locations in Greater Cairo still rent for 30LE/month and less, renting a room today with a shared bathroom with 4–8 other rooms in an informal settlement costs 70–100LE/month. The floors of these rooms are usually earth or cement with roofs made out of tin, wood planks, straw and/or plastic. Luckily for most people it rains only a few times a year in Greater Cairo, but when it does their room and belongings get wet. Those who have been renting the same place for many years frequently have rents which are a little cheaper. For example, for those who have been renting the same room for over 10 years, the rent is usually a little less than 70LE per month. For a two-room flat, where the children sleep in the living room, monthly rental prices are now 130–170LE. For a three-room flat (two bedrooms and living room), prices today are 200–275LE per month. These rental figures in *ashwa'iyyat* are clearly not considered in the 36LE /month non-food allowance in the latest poverty line.

Undoubtedly, adequate housing is essential as a basic human need. The national poverty line in the latest World Bank (2007) report allows for a household of five members to live only in one room with a shared toilet in a Greater Cairo slum. If they lived in anything better they would have almost no money to spend on any other non-food “essentials”, not education for children or even transportation to go to work. Here is an example of one real family in Greater Cairo. The only income earner (the father) is an *arzui'i*³¹ who mainly works as a manual labourer in construction. He earns 30LE/day when he finds work. Along with other daily workers, he gathers at a pick-up location every morning: on some days he is lucky and finds work, and on others he comes home by mid-day because there was no work. Transportation to and from the pick-up area costs him 2.50LE. If he works any more than 21 days per month, this family would not be considered poor, but “near poor”. He would earn over 630LE (in comparison to the lower poverty line of 605LE/month). However, the most the family can afford in rent provides them with just one room. They have no running water and share a bathroom with four other rooms. The bathroom is not connected to the sanitation networks and so they regularly have to pay a truck which empties their sewage tank. The state of the dwelling and bathroom are awful, and the bathroom stench is always present in their room. All five of them sleep in this one room where they also cook. How can they not be counted as poor? According to the World Bank 2007, they would be considered “near poor” just because their income is a few pounds above the national poverty line.

Access to education

In Egypt today, anyone who can afford to avoid the public education and healthcare system does so. There are even private schools in informal settlements, with tuition fees of a few hundred pounds a year. With the deterioration of public services in Egypt, there is now a two-tier system of social services in which the poor use degraded public services while the better-off buy private health, education and housing (Bayat 2006, p.139).

³¹ *Arzui'i* is a casual daily-wage labourer.

The universal, free and compulsory education system established after 1952 has effectively become privatized (Bayat 2006; Tadros 2006). Cost-recovery measures were introduced and were expected to improve quality, but have not (Tadros 2006). School buildings, infrastructure, teaching, overcrowded classrooms and the emergence of a parallel private tutoring system all bear witness to this deteriorating quality (Bayat 2006). Private tutoring has emerged to compensate for the decline in real wages of teachers, associated with liberalization, and to compensate for over-crowded classes and the deteriorating quality of education (Tadros 2006). Efforts aimed at regulating private tutoring by the Ministry of Education through the introduction of *majmu'at* (extra classes after school at set prices under the school's supervision) have basically institutionalized the system.

As income from *majmu'at* is distributed to the teachers and the administration, it is basically the official policy to generate additional income for those providing education, and adds incentives for them to expand this system. Students are pressured to enrol in both *majmu'at* and private tutoring, or are threatened with failure (Tadros 2006). In research in Bulaq el Dakrou (an informal settlement), Tadros (2006) found that the poor deal with this situation by paying if they can, borrowing, selling assets, seeking assistance from NGOs, bargaining with teachers to reduce fees, removing children from school and enrolling them in literacy classes which are free, but they very rarely confront the teachers and the system due to their weak position. The findings in research sites from the present study are very similar. Basically, *majmu'at* have become compulsory, even from Grade 1 in primary school.

While in theory the costs of *majmu'at* are set by the government and should be identical for the same year of school across all schools, in practice they vary quite a lot even within the same area. *Majmu'at* for all subjects for Grades 1 to 4 in primary school were found to cost 20–45LE/month. At Grade 5, the cost is 30–60LE. Grade 6 and secondary school become significantly more expensive as the students are charged by subject. Each subject costs 15–25LE. Students are usually forced to take around five subjects. Parents told me that, depending on your bargaining skills and how much pity you succeed in making the teacher feel, you can bargain your way down to three subjects or a lower price per subject. Teachers are reported to respond with comments such as:

"Your son's/[daughter's] performance is weak compared with the rest of the class. Don't send him to majmu'at if you can't afford it, but don't come and complain when he fails at the end of the year. I am telling you from now – he must attend majmu'at for his own benefit."

Students from families who do not pay are publicly humiliated in the classroom, by being singled out and told that their parents are not paying, and are sometimes beaten up, threatened with failure or actually failed. If they fail they then have to pass the re-sit exams at the end of summer, and private tutoring over the summer is much more expensive. As one woman noted:

"We refused to pay majmu'at because I am educated and can help the children with school work. When they failed two of my children in one year and we had to pay the higher prices for private lessons for the re-sit exams, we decided we must pay majmu'at to avoid destroying our children's lives."

Daily expenses to go to school include transportation costs and a child's daily allowance. Children are given 50 piastres (50p) to 1LE per day to buy food or snacks. While on some days this amount is skipped because it is not available, most respondents stated that it is crucial for children, because otherwise *"they eye what other children have"* and then eventually their awareness that they always have less makes them not want to go to school. Transportation to school is another cost burden. Given that schools are absent from many informal settlements, many children go to schools which are a bus ride away. In Haggana for example, there are two public primary schools and no secondary schools. Thus, any child going to secondary school pays daily transportation costs. A bus to school and back costs

2.50LE per day. Thus, monthly transportation costs per child are approximately 50LE. For a nine-month school year, the annual transportation cost is 450LE just to go to school. In Batn el Ba'ara which is in central Cairo the transportation cost of going to primary school was 1LE/day. Children used the local mini-trucks which are extremely unsafe to get to school. For secondary school the daily transportation cost is 2LE per day. As for tertiary education, transportation costs are 5LE per day. Not surprisingly, most children stop going to school at some point during the primary stage. Initially, students miss school days because of the daily costs, and eventually they drop out altogether. Furthermore, students in public schools outside the slums are usually from less poor families, which places additional financial burdens on the slum families, for example to provide the child with a larger daily allowance.

Annual costs of education include buying the school uniform, the school bag, and the cost of books at the beginning of the year. The cheapest school uniform for a primary school child costs 30LE, plus 20LE for the shoes. The cheapest school bag is 20LE and people prefer not to buy it because it tears and then they have to buy another one during the school year. The cost of books paid to the school at the beginning of each year is approximately 30LE for the primary levels and 40LE for secondary.

Education costs are a massive burden on the poor in Greater Cairo.³² The actual costs of education are simply not included in the poverty lines. Below is the range of costs (minimum to maximum) for children going to primary and secondary school in two different areas. The real costs of a child in Haggana going to secondary school are 1,095–1,365LE per school year and in Batn El Ba'ara are 1,005–1,320LE. They vary depending on the costs of *majmu'at*. The non-food component of the lower poverty line is 429LE/year and for the upper poverty line is 897LE/year. This is the amount which is allowed for *all* non-food essentials. Clearly, this means that the costs of education for every single secondary school student in Haggana and Batn El Ba'ara are way above what is factored in poverty lines.

Table 8: The real costs of basic schooling in two *ashwa'iyyat* (LE)

School	<i>Majmu'at</i> / month	Monthly allowance (50p/day)	Monthly transport	Total monthly costs	Annual costs (1 uniform set, 1 school bag, 1 pair shoes, book costs)	Total annual costs (9 x monthly costs + annual costs)
Haggana Primary	20–50	10	0	30–60	>100	370–640
Haggana Secondary	45–75	10	50 (2.50/day)	105–135	>150	1,095–1,365
Batn el Ba'ara Primary	20–50	10	20 (1/day)	50–80	>100	550–820
Batn el Ba'ara Secondary	45–80	10	40 (2/day)	95–130	>150	1,005–1,320

³² Some comments were made that education is better in rural areas of Egypt. People said that in their original villages teachers do not force children to take *majmu'at* this way. This remains to be confirmed.

Not surprisingly, very few children actually go to secondary school. Children stay home and help out and play on the streets or they start working. If the poorest quit education because of the costs, then the methodology used to calculate the lower poverty line excludes children from education. Undoubtedly, children will stop going to school before households stop eating. Even the 2006 census figures state that 1,085,745 out of 5,623,654 individuals who are older than 10 years in Cairo governorate cannot read and write, which is close to 20 per cent of the population. This large figure does not match the 5 per cent poverty incidence rate for Cairo governorate. A multi-dimensional definition of poverty would surely include this large proportion of illiterate individuals. Poverty lines must factor in the real costs of education, and education is one of the best proxies for poverty in Egypt. The value of education for helping to break the inter-generational transmission of poverty cannot be overstated: many studies confirm that education is one of the best ways to reduce poverty in the country (Korayem 2002; El Laithy, Lokshin et al. 2003; Datt and Jolliffe 2005).

Access to health

In the poor environmental conditions of informal settlements, the risks of getting sick are higher. Overcrowded accommodation, lack of clean water and sanitation, the lack of solid waste disposal services and the hazardous locations of some areas all increase the risks of ill health (Wratten 1995). In Egypt, the Ministry of Health confirms that slum populations are a group considered to be among the most vulnerable to health hazards (UNDP Egypt and Ministry of State for Economic Development 2008). Health costs can be high because of an increased possibility of being sick as well as high costs of treatment (Mitlin 2003). Ill health has also been recognized as an important cause of chronic poverty for the poor, especially when a major income-earner becomes chronically or terminally ill (Amis 1995). Even non-terminal illness means that income is lost from days off from work.

Public healthcare in Egypt has severely deteriorated, and this has increased the poor's vulnerability. The system is over-used and under-funded, doctors and specialists are rarely available, equipment is lacking or faulty, hospitals are severely unhygienic and medication and nursing are rarely available so people have to provide for themselves (Bayat 2006; Rabei 2007). In the late 1990s, households were found to spend on average 6.69LE at Ministry of Health facilities, even though the service should be free of charge (Nandakumar, Chawla et al. 2000). Today, people have to pay user fees but the quality of services has not improved (Tadros 2006). Prices of drugs, both locally produced and imported, have also increased with the currency devaluation. Domestic drug production in Egypt largely depends on imported inputs (Korayem 1996).

Although there is a commission system which grants waivers for payment of medicine and in-patient care for the poor, the process to access it is cumbersome and frequently exposes the poor to humiliation and abuse when obtaining the necessary signatures. It also requires form-filling which is a problem for the non-literate. Social connections (*wasta*) help with the approvals, but the poorest are of course without connections, so it is more difficult for them to access the system set up primarily to serve them. The system is also unreliable (Tadros 2006). In many interviews people had actually stopped going to get their monthly medication. One heart patient, who has a paralyzed leg due to a failed back operation, said:

"It took me over one year to get the approval to be treated at the expense of the state. It cost us so much transportation money to get the necessary paperwork and signatures. Finally, two years ago, I was approved. Since then, not even once, did they have the medicine I was prescribed, so they give me a cheaper alternative. I took it and it made me feel like I was going to die so I stopped going to get it. I asked a private doctor and he told me never to take this medicine again. Why should I go? I pay expensive transportation because I have to take a taxi because of my leg. I stand for hours in the queue. Because we're poor, they shout at us and humiliate us. After

all this, they give me this wrong medicine. If I were to buy the correct medicine at the pharmacy, it would cost me more than 200LE per month. Where can I get this kind of money when I am no longer able to work? My eldest son had to leave school when I got sick and this is really my biggest guilt. He gives us almost half his salary. My wife cleans two days a week at the house of a kind old lady. She pays her 40LE per time. She can't work more than that. She has the children, the house and me to take care of and besides she has back pain from years of living here and fetching water. How can I take 200LE from this income for my medication when I have four other children still in school and you know the expenses? We are already in severe debt. How can we eat with these prices, pay the rent and send the children to school and pay for my medication? There is no way. So I gave up and God never forgets anyone. He will take care of me."

This man has chest pains on a daily basis, has been rushed to the hospital emergency twice in the last six months and simply has no solution to get the necessary medication.

According to the World Bank (2007), the non-food monthly allowance for a household of seven is less than 250LE to be considered poor, between 250LE and 523LE to be considered near poor, and above 523LE to be considered non-poor. This family's rent is 200LE per month. They have two children in primary school and two in secondary. Their total monthly transport and *majmu'at* costs are 350LE (see Table 8), the son who works pays 50LE transportation per month, transportation for the wife to go to work is approximately 50LE per month (she has to take two buses each way). This adds up to 650LE and the family is therefore non-poor. If the medication costs were added and the son had not dropped out of school, expenses would be way above the 523LE allocated for them to be non-poor. How is it possible that a family which cannot afford healthcare, has one member who dropped out of school, lives in appalling housing in an informal settlement, has to fetch and carry water and pay for it at least half the year, and has a woman forced to work as a domestic servant, not even be considered below the upper poverty line? This family is actually quite lucky because they receive the social aid and assistance³³ pension from the Ministry of Social Solidarity, and get some help from family. Yet, they are in severe debt.

The scale of untreated illnesses among the poor is colossal. People with diabetes are not getting their insulin and people with kidney and liver³⁴ problems cannot afford their medication. By their forties, they are no longer able to work. They end up in daily kidney dialysis sessions or with an amputated leg because of diabetes or other disabling health conditions. While the state health system does not function for regular medications, it works much better with some very serious illnesses, such as cancer or requirements for kidney dialysis. This is quite costly for the government, and resources could be saved if health problems were treated before they became so major. Also, lower child malnutrition rates would cost the system less in the long term.

According to World Bank 2002, a one-person household in a metropolitan area has a poverty line of 748LE, which is about 67 per cent of the per capita poverty line. The justification is that this significantly lower poverty line factors in age and household composition (World Bank and Ministry of Planning 2002, p.12 and Annex 2). This is 62LE per month. How could this cover rent and food even in the year 2000? What about elderly people living alone? Anyone who has done fieldwork will testify to the sometimes striking poverty of one-person elderly households. In many cases, this elderly person gives up almost entirely on getting healthcare or buying medication as the costs are simply out of the question. Moreover, the costs of transportation to get healthcare and the fear of getting lost in the big city will confine many elderly people to their slums until their death.

³³ For more information about the programme, see Sabry (2005).

³⁴ There are significant numbers of people with chronic liver diseases because the prevalence of Hepatitis B and C in Egypt is very high at a little under 10 per cent of the population (UNDP 2008).

Recently, the government has decided to privatize the public healthcare system officially through the Prime Minister's decree number 637 for the year 2007, which announced the creation of the Egyptian Holding Company for Healthcare. All assets of the public health system were to be transferred to this commercial organization to be run on a profit basis. In 2008, the execution of this decree was suspended by the Egyptian Administrative court on the basis of being unconstitutional in terms of the right to health set out in the Egyptian constitution. Other attempts to privatize the healthcare system are being proposed. They include partial payment for health services, increasing subscription fees for health insurance and converting the health insurance system from a universal one to a limited package.³⁵

Transportation

Poor people do not own private means of transport. Their daily costs for transportation are extremely significant and these costs are not adequately factored into the non-food allowance of poverty lines. An affordable and functional public transportation system in Greater Cairo would decrease the poor's living expenses significantly. Schools within safe walking distance would also significantly decrease transportation costs. Many informal settlements which are on the outskirts of Greater Cairo are not adequately served by the public bus network and the underground. Thus, to get to the public bus network or to the Greater Cairo underground, slum dwellers must take one of the privately operated minibuses. In 2008, these cost around 1.25LE per journey. The overhead of going to work for a day or going anywhere not within walking distance of the informal settlement is thus a minimum of 2.50LE. Many people spend much more than that, if they have to change to another microbus or get on the public transport network once they reach it, or take a bus from the underground to their destination. For example, many people living in Arab Ghoneim in Helwan work in Maadi, the closest affluent neighbourhood, and their transportation costs are 5LE per day. Others work in Kattameyya, which is a new suburb of gated communities in Greater Cairo, and travel costs to get there are 5–10LE per day, as it is not yet well served by public transportation.

Within the informal settlements, there are two main transport possibilities: the tuk-tuk or the mini-truck. The tuk-tuks are too expensive for most poor people, so they use mainly the mini-trucks which cost 50p per journey. These have a set route, and people, especially children, usually jump on the truck while it is moving and then pay the driver. The mini-trucks are all unlicensed and usually very old. They cannot leave the informal settlement as they would not be granted a licence in their state to drive around the city. A lot of the mini-trucks are driven by unlicensed under-age teenage boys who have dropped out of school. While they serve a purpose of moving people from the edge of the informal settlement into the depths of the different areas, they are quite dangerous. Many accidents happen, especially to children.

The costs of infrastructure: water, electricity and sanitation

The costs of electricity, water and sanitation can be quite significant for poor households. According to the Greater Cairo Slums survey, electricity is present in 99 per cent of slum households, 97 per cent have access to piped water in their residence, and virtually all households have flush toilets with around 97 per cent of them connected to the public sewer system. Only 6 per cent of households share their toilet facilities (El Zanaty and Way 2004, p. 3). Comparing these figures with the fieldwork carried out for this study, the only figure which seems plausible is that for electricity because if households don't have an official

³⁵ For more details, see The People's Health Movement: <http://www.phmovement.org/cms/en/node/806>, and the Egyptian Initiative for Personal Rights, http://eiipr.org/campaigns/Health_Insurance/0409.htm.

connection they have an illegal one. Electricity, whether official or unofficial, costs most poor households 15–35LE/month. Those who rent rooms pay 5–10LE per month to the landlord.³⁶

Connections to the public sanitation networks are missing from entire areas, such as Batn El Ba'ara, Establ Antar and Ezbet Kheiralla and also some parts of Haggana and Manshiet Nasser, which are mostly connected. This means that households have to pay the costs of emptying their trenches on average one or two times per month, depending on their size. The cost of hiring the service truck varies: it was 80LE per time in Batn El Ba'ara, and 50–60LE in Ezbet Kheirallah. Costs are either paid by one household or shared between the households which share the trench. This is a large expense for the poorest households, who have the poorest housing conditions. Furthermore, when the trenches are full they must be emptied.

As for water, even where there are connections, low pressure makes it scarce in many areas especially over summer. When water is unavailable for just a few days, people fill containers for free from others in the area who have water or from public taps, or fill up in the middle of the night when water is available for the day's use. When water has been unavailable for weeks, and especially at the peak of the heat in summer, buying water is often the only choice. In entire neighbourhoods in Haggana, for example, from May until the start of winter, water is not available due to low pressure except in the homes of the better off who can afford to install pumps. Officially connected water costs households an average of 15LE/month. Filling jerry cans of water is much more expensive. Each container-full costs 50p to 1LE, and is most expensive in August.

These infrastructure deficiencies cost the poor much more than money. Carrying water is a woman's job, which besides taking up a lot of time ends up causing a lot of women severe back problems. Lack of sanitation infrastructure makes people throw all waste water onto the street, which greatly contaminates the area and frequently causes children to become sick. Years of waste water leaking into the ground has made many areas and housing structures very unstable and risky. The Doweika rock slide in 2008 killed hundreds of people and destroyed many homes, and was blamed on years of sewage leaking into the rocks of Moqattam. People in Batn el Ba'ara were all very worried about the years of underground sewage they are now living on. Many very poor households live under the high-pressure electricity lines in Haggana because this is the area with the cheapest rent. How can people living in such unsafe situations not be considered poor, just because their income is a few pounds above an arbitrary poverty line? The conditions of the areas in which they live must be factored into a multi-dimensional measure of poverty.

Working in the informal economy

Assessing people's poverty through expenditure alone excludes multiple categories of otherwise poor people from poverty headcounts. People's conditions of work in the informal economy can be a source of significant vulnerability and exploitation. Views of the informal economy that do not only regard the poor as successful entrepreneurs who work informally to evade the costs of legality (De Soto 1989), have been convincingly argued by Breman (1996; 2003) and Davis (2006). Within the extremely differentiated informal economy (Meagher 1995), there are some successful entrepreneurs, but the vast majority are wage workers who suffer from exploitative work conditions, have no protection under labour laws and receive incomes that barely offer survival (Davis 2004). While informality does provide opportunities for people to remain alive, it also contributes to the perpetuation of poverty.

³⁶ If the price increases of electricity are factored in from 2003 until 2008, then these prices are in the same range as those in the Greater Cairo slums report, which found that half of all slum households pay less than 15LE/month, and more than a quarter pay over 20LE/month (El Zanaty and Way 2004, p.3).

The deregulation and increasingly flexible and casual nature of the labour market is seen by many as one of the main reasons for the increase in urban poverty and vulnerability (Amis 1995; Breman 2003; Davis 2006).

Most of the urban poor in Egypt work in the informal economy. The labour market in Egypt is broadly divided into: the agricultural sector, the public sector and the private non-agricultural sector, providing respectively 31.0, 32.6 and 36.4 per cent of total employment in 1996 (El-Mahdi and Amer 2005). Egypt's private sector consists mainly of the informal economy, which accounts for 80–90 per cent of it according to studies (El-Ehwany and Metwally 2001; El-Mahdi and Amer 2005). This is where most of the urban poor work. The EHDR 1996 finds that 48 per cent of the urban poor live in households whose heads are casual and marginal workers with no specific occupation in the informal sector. The second highest proportion of the poor was in households whose head was a construction worker (UNDP Egypt and INP 1996). Datt, Jolliffe et al. (1998, p.47) also find that “casual labor is the most important source of employment for poor males.”

Vulnerabilities caused by work in the informal economy affect wage labourers as well as petty entrepreneurs. Casual daily-wage workers suffer from harsh working conditions, the insecurity of finding work every day and low earnings. Physically demanding work, such as carrying and loading, can be done at a young age but not throughout a lifetime. Most men are unable to perform this work beyond their forties. Many injuries also happen in this type of work and, with no unemployment insurance system, wives and children have to compensate for income if men can no longer work. Severe competition and not enough jobs mean that wages are always extremely low. During fieldwork between November 2007 and November 2008, people's wages were not increasing, despite high inflation rates. Unskilled labourers were earning 10–35LE/day. For example, supermarket delivery labourers were earning a fixed wage of 10LE per day plus tips from their deliveries (total income averaging 20–25LE/day), and those working in the construction sector were earning 25–35LE/day.

As for petty traders in the informal economy, many end up with products confiscated by the municipality. In policy discourse in Egypt, the role of the informal economy has shifted from being viewed negatively, as illegal and unregulated by the state, to being relabelled as small and micro-enterprise and central to national economic growth plans which will be fuelled by the private sector (Elyachar 2005, p.86). In practice, the municipality continues to deal with street traders as before: weekend markets are sometimes raided by the government authorities and people are left with a total loss of their goods and their small capital.

This ongoing destructive uncertainty and insecurity traps the poor in what Wood calls the “Faustian bargain”. It forces them “to live more in the present and to discount the future”, and hence any “strategic preparation for the future” is “continuously postponed for survival and security in the present” (Wood 2003, p.455). More importantly, this insecurity and variability in income have irreversible consequences. Children drop out of school and, even when income becomes available again, they do not go back to school. When assessing poverty, the conditions of people's work must also be evaluated in a multi-dimensional measure of poverty.

The sharing assumption: intra-household inequality

Egyptian poverty line studies use the household as a unit of analysis, based on the assumption of sharing within the household (World Bank and Ministry of Economic Development 2007). As in many other countries where gender inequality is prevalent, poverty measures which are gender-blind will miss a large number of poor people *within* households. While Egyptian poverty line studies remain constrained by HIECS data which do not provide information on intra-household distribution of resources, this remains a gender-blind measure of poverty. In a review of the gender gap in critical areas such as

economic participation, economic opportunity, political empowerment, educational attainment, health and wellbeing in 58 countries by the World Economic Forum, Egypt ranked last with the lowest overall score (Lopez-Claros and Zahidi 2005). When gender is mentioned in the poverty assessments, the focus is usually on female-headed households. While it is important to consider these, women and girls in male-headed households must also be included in poverty measurement.

The practice of sharing as assumed by household analyses was absent in many households interviewed for this study. The male head of the household can spend 3LE per day on a pack of cigarettes, while the daughter has dropped out of school because of the costs of *majmu'at*. The male head of household may earn 30LE per day, but gives the wife only 10LE per day to buy food and other necessities for the whole family, keeping the rest for his own expenses such as going to the café and buying hashish. In many cases the man alone was found to spend more than half the income and the rest of the family had to manage with the rest. Shortage of income sometimes makes families focus more on the male children because they are seen as more important to the future security of the family. In a study about gender equity in raising children, it was found there is some discrimination in resource distribution between boys and girls, especially for less educated mothers in larger families (Ragheb and Guirgis 1998). In one household with several daughters and only one son, the father explained:

"I want to give all my children a good future, but of course my son is my number one priority. If I spend on nothing else, I will spend on him. When I grow older and can no longer work, he will take care of me. As for the daughters they will eventually marry and be part of their husband's family. They can't take from their husband to give me. But my son has to."

Gender is not the only reason why individuals in non-poor households could suffer chronic poverty. The chronically sick, the disabled, the elderly and live-in domestic servants are also individuals that can be chronically poor within households that are less poor overall (Mitlin 2003).

5 Conclusion

Poverty is multi-dimensional, and a money-metric measure is a partial measure of poverty. This is well recognized and acknowledged by most authorities, and in most reports. However, despite this recognition, World Bank reports then state that poverty lines offer an “overall scope and distribution of the problem of poverty and thus indicate[s] the direction and magnitude of the work needed to reduce it (World Bank and Ministry of Planning 2002, p.1). Money is taken as a proxy for welfare under the assumption that “with sufficient financial resources, households and individuals in Egypt could conceivably purchase better healthcare and better education for their children” (World Bank and Ministry of Planning 2002, p.9). With the declining quality of public services, this claim does not hold true. In Egypt today, considerable resources are needed in order to get better education and healthcare: a few pounds extra per month would enable people, at best, to get slightly better conditions of housing and to continue education, but still all in the slums. Mobility upwards out of the informal settlements to better education, health and housing requires thousands of pounds.

So how useful is the poverty line in the context of pointing out who is poor in Greater Cairo? How useful is it when it concludes that, despite close to half of the population living in informal settlements in Cairo governorate, only 4.6 per cent are considered poor? Surely, a measure which captures more dimensions of wellbeing than income alone is necessary in the context of informal settlements. This measure must capture housing quality, access to basic infrastructure and services, and the quality of work people are engaged in. It cannot be gender-blind and must consider chronically poor individuals within non-poor households. Furthermore, until conclusive data are available about the scale of slum populations, household surveys will continue to under-sample these areas where poverty is widespread.

If use of the poverty line method is to continue, then poverty lines must significantly increase to factor in some of the real costs of the basic human requirements and needs discussed in this paper. Poverty lines which are set too low in relation to basic needs misrepresent poverty and misinform policy. Using extremely low poverty lines, World Bank 2002 finds that poverty in Egypt is shallow and that the majority of poor people are clustered around the poverty line. This leads to the finding that “it would have required only about 350LE million per year (about 0.1 per cent of GDP in 1999/2000) to lift everyone out of poverty” (World Bank and Ministry of Planning 2002, p.14). This kind of conclusion is a misrepresentation of the scale of resources needed to enable the phenomenal amount of poor people who live in slums to achieve a decent existence.

Under-counting poverty in Greater Cairo will create policies that miss the majority of the poor. For example, a central policy today for poverty reduction is “*wesool al-da`m lemostaheqeeh*”, or subsidies reaching those who are entitled to them. If poverty were truly as low as 4.6 per cent in Cairo, this would be the correct policy and the government should focus on finding this minority of people and targeting them. However, if an accurate measure of poverty shows poverty in the city to be around 50 per cent, then policies need to be overhauled to put the average and below-average citizen at the centre of their concerns.

Appendix 1: Summary of poverty line studies

Study	Poverty lines	Poverty incidence																																																																					
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