

Population Dynamics, Poverty, and Child Well-being in Africa:

"Comparative evaluation of the impact of population dynamics and poverty on the status of vulnerable children in Africa, the case of Khartoum, Sudan"

By

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Among the countries of Africa, the economies of some countries such as, Sudan, and Djibouti, performed poorly, during the last two decades, Affected by a succession of both political (regional and civil wars, armed conflicts) and economic crises (drought, in particular). These crises contributed to a continued deterioration in the country's competitiveness, financial position, and economic and social infrastructure (UNFPA 2004).

As a result, income per capita in many African countries decreased, and simultaneously, key indicators of sustainable human development, such as gross enrollment, juvenile crimes, maternal death rates, and access to drinking water, continued to deteriorate. Unsatisfactory and differential performance of the education systems of these countries is supporting this argument, reflected in the rates of illiteracy; school enrollment and high opportunity cost of girls' education. This weak performance exaggerated by lower rates of school enrollment for girls, governed by a backward mentality that gives priority to boys'. In addition, poor and extremely poor women face two types of inequality, one associated with living standards and another one associated with gender.

The population projections for countries of Middle East and North Africa (MENA) region, indicate that the child population will increase by about 30 percent in 2025, and the expansion will be faster in some countries compared to others in the region (lynkeus, 2004). This expected increase in the number of children may adversely affect their socio-economic situation especially Vulnerable and Disadvantaged (V&D) children.

The countries of the region are experiencing rapid urbanization due to the high rate of natural increase and to the continuous flow of rural-urban migration. The rate of urbanization is even higher in some countries in the region due to rural-urban migration. The rapid rise in population of the African cities has had a profound impact on the most vulnerable groups of the society, namely the children.

African Population is a young rapidly growing one, with high ratio of dependency. Most of the dependent population are young members of the society who has not joined the labor force, and who will demand job opportunities and housing and other means to sustain their livelihoods in the near future. Reasons for natural population growth include sustaining high birth rates, improved life expectancy at birth, declining rates of both infant mortality and under five mortality. It is clear that rates of both net reproduction and net migration are expected to be constant, if not increasing.

Some countries in the region, such as Egypt and Djibouti, will be urbanized societies by 2030. This urban growth will be the outcome of both sustaining high rates of natural population growth and continuous rural-urban migration. This urban growth will require extending both physical and social infrastructures to provide services and generate job opportunities.

Understanding and Measuring Poverty:

The World Bank defined poverty as a multidimensional phenomenon, encompassing inability to satisfy basic needs, lack of control over resources, lack of education and skills, poor health, malnutrition, lack of shelter, poor access to water and sanitation, vulnerability to shocks, violence and crime, lack of political freedom and voice.

The most commonly used way to measure poverty is based on incomes or consumption levels. A person is considered poor if his or her consumption or income level falls below some minimum level necessary to meet basic needs (World Bank 2002). This minimum level

is usually called the "poverty line", what is necessary to satisfy basic needs, varies across time and societies. Therefore, poverty lines vary in time and place, and each country uses lines which are appropriate to its level of development, societal norms and values.

While much progress has been made in measuring and analyzing income poverty, efforts are needed to measure and study the many other dimensions of poverty. Study of Non-income dimensions of poverty should include assembling comparable and high-quality social indicators for education, health, access to services and infrastructure. It also includes developing new indicators to track other dimensions (for example risk, vulnerability, social exclusion, access to social capital) as well as ways to compare a multi-dimensional conception of poverty, when it may not make sense to aggregate the various dimensions into one index.

Poverty, by definition, is lacking access to resources and processes of decision-making. It is a manifestation of inequitable distribution of wealth. In urban settlements of Africa, inequitable distribution of wealth is evident. A number of indicators explain causes and effects of poverty. Poor people are often characterized as illiterate because they are denied the opportunity for education. In poor areas, child labor is the norm. Young children drop out of school to support their families, they perform marginal jobs in informal economy, and they are mostly forced to engage in illegal activities, such as drug trafficking and prostitution.

The widespread and expansion of informal urban sector is another indicator of poverty. Informal economy is a process of income generating economy; its activities are unregulated legally and socially by the institutions of the society. The regulatory framework that governs formal–informal relations is dynamic and changes institutional boundaries.

Reasons for poverty include low quality of human resources that lack skills to be competitive on the labor market; inefficient management of natural resources and unfriendly business environment that is overloaded with regulations and complicated procedures.

Poverty in Africa is a consequent of lack of social justice, inefficient economic system and improper political conditions, and not the result of lacking natural resources evident by the modest Total Productivity Factor Index of some of the countries of the region. Adopting and implementing programs for Economic Reform and Structural Adjustment probably improved the indicators of the economy, such as closing the budget deficit, but did not contribute to eradicating poverty, and in some cases were blamed for accelerating the processes of impoverishment.

Nevertheless, low income cannot be viewed as the only feature of poverty, as poverty is often associated with lower education levels, limited access to labor markets, poor housing conditions or limited access to basic services such as water and sanitation. An examination of the distribution of welfare in Africa should therefore focus on the characteristics of those populations falling below a given poverty line, in addition to their numbers. Such analysis would be of particular value to policy makers entrusted with the design and targeting of poverty alleviation strategies.

Despite impressive progress and the great wealth of many parts of Africa, a considerable backlog of human deprivation and poverty persists. According to UNDP (2000), (UNDP, 2000, Human Development and Poverty in the Arab States, Sub-Regional Facility for the Arab Region), in 1997 13% of MENA population were not expected to survive to age 40, 65 million adults were illiterate., 40% of school children were expected to drop-out., 54 million lacked access to safe water, 29 million lacked access to health services, and the unemployment rate was about 15. Between 1980 and 1995, the region experienced economic decline with GNP per capita decreasing by 1.2% per annum.

Regional estimates of the incidence of income poverty vary considerably. According to the World Bank, in 1994, 4% of the population of the MENA region lived in poverty on less than \$1 a day. Forty million people lived on less than US \$ 1.67 per day. Income poverty was much less pervasive than human poverty; or deprivation in basic human development. Human poverty was about 32.4%, as per the Human Poverty Index (HPI) which measures deprivation in terms of short lives, illiteracy and lack of basic services. For the second half of the 1990s, national estimates of overall poverty in the region ranged between 45% for Djibouti to 23% for Egypt.

Women and children suffer the most. The maternal mortality rate was 396 per 100,000 live births double the rate in Latin America and the Caribbean and four times the rate in East Asia. The tragic toll of female genital mutilation is a disgraceful indictment in many MENA countries. More than half of adult women are illiterate with women's literacy two thirds of men's. In 1997, the majority of women were illiterate in six of the MENA countries for which data on female literacy was available. By contrast in About 15% of children from the relevant age group are out of primary school (68% in Djibouti). GNP per capita varied from US \$260 in Yemen to more than \$17,350 in the United Arab Emirates and Kuwait in 1995. The substantial variations in income levels in the region could be exemplified by life expectancy, which ranges from 50 years in Djibouti, to 76 years in Kuwait and adult literacy rates from 43% in Yemen to 87% in Jordan.

Among the countries of the region, Sudan and Djibouti have been wracked with violence, displacement and death, disrupting any semblance of normalcy. Children have been hard hit by these acts of violence. Ongoing armed conflict continues to undermine the region's efforts to get girls in school. Poverty, gender discrimination, rural versus urban disparities and conflict are the wounds that bind these countries. Like other regions, MENA must face these obstacles head on, daring to be bold in the face of overwhelming odds. Much work remains to be done considering that the country is projected to have a primary net attendance ratio of just 56.4 by the end of 2005. But even these bleak national statistics fail to accurately portray the tragedy facing girls in southern Sudan, where only 1 percent of girls complete primary school and near to 90 percent of all women are illiterate (Lynkeus, 2006). Some 250 Community Schools for girls have been initiated in southern Sudan, Based in part on a successful model from Bangladesh, the learning spaces are shelters from the storm for girls who attend. The schools have flexible schedules and offer protection from outsiders who badger girls to give up their education and instead embrace their roles as young brides, .

The situation in Djibouti is worse, placing 150th out of 177 countries in the Human Development Index. Unemployment hovers around 60 percent, which offers little hope for children to get a job when and if they finish school. Joblessness deters parents from sending their children, especially girls, to school because education is deemed worthless for future economic gains (HDR, 2005). The World Food Program has stepped up to support girls' education in Djibouti, providing two meals a day in 55 schools. Girls who come to school for 21 days each month receive a 5-litre can of oil, some of which can be used at home and the rest sold. There are plans to find host families for secondary-school girls in return for food. In another 27 schools, the World Food Program has helped to create school gardens, which provide children with edible vegetables and money to purchase school items, and teach them income-generating skills (Lynkeus, 2006).

Problems & Issues Facing Urban Children:

As mentioned earlier, many cities in MENA region are witnessing a remarkable and unprecedented rate of population growth. This high rate of growth led to many socio-economic, health, and environmental problems. Needless to say that children and specially V&D children are the most adversely affected by these urban problems. The study in this section will review issues and problems facing V&D children in some MENA Cities. The revision is derived from the studies conducted by MENA Child Protection Initiative in 12 MENA cities.

a. Poor Children: Accurate figures on child poverty in MENA region are not available. However, using the simple proportion of child population, the number of children in poverty (those on less than US\$ 2 per day) in the MENA region would be about 34 million. The general conclusion is that poverty is likely to remain an important threat to the region's children for the foreseeable future. The extent of child poverty among cities of MENA region varies considerably depending on the economic situation of countries in the region. The main problems facing poor children in some cities of the MENA region are summarized in the following: (i) high level of deprivation (ii) inheritance of poverty (iii) social exclusion (iv) Girl child discrimination (v) lack of basic services (vi) involvement in child labor (vii) school drop-out (viii) challenges to child welfare.

b- The Girl Child: Due to gender-related discrimination, girls in MENA region are at double risk of being deprived of their rights, exploited or even abused. However, there are a number of areas (these areas will be thoroughly investigated in this research) in which girls in general even if they do not belong to one of the risk groups are vulnerable to deprivation and rights abuse, most prominently the following:

(1) Education: Although considerable progress has been achieved during the past two decades to increase school enrolment and narrow gender gaps in MENA region, girls above nine years are still more than twice as often as boys likely to be illiterate in several countries in the region. The gender gap in favor of males is believed to be mainly related to poverty. Basic education is costly and does not promise high returns on future income and marriage chances.

(2) Female genital circumcision (FGC): Although the practice has declined during the past decade, the vast numbers of adolescent girls in some countries of the region is still subjected to circumcision with all its negative consequences regarding girls' physical well-being as well psychological and sexual development.

(3) Early marriage and forced marriage: Though, are no comprehensive statistics about early marriage and forced marriages in MENA region, periodic reports suggest that a sizable number of girls are subject to marriages against their will.

(4) Social status and discrimination: Indicators such as physical mobility, decision-making authority and access to resources can be used to define the status and development chances of women. In this respect, prevalent perceptions of gender roles lead to a range of discriminations against girls, notably restrictions of movement and participation in social and community life and consequently deprivation of learning experiences and personal development chances. Girls' chastity and behavior in public are still perceived as a question of honor for the whole family and all family members tend to be concerned with the control of girls' movements and activities, suppressing her conduct, her opinions, her choices and even her thoughts. This has a disempowering effect and lowers girls' self-consciousness and self-esteem.

(5) Violence and sexual abuse: There are no statistics on violence and sexual abuse against girls in MENA region, neither at home nor at the work place or in institutions. However, some findings of surveys in the region pointed out that girls are more often beaten than boys although not necessarily more severely. Intra-familial sexual abuse is rarely reported but certainly exists. It is often concealed to protect the family honor and, unless caught red-handed, adult relative molesters or rapists can often count on being able to blame the girl or claim that she lies.

c- Child labor:

Most of the studies on child labor in countries of MENA region, indicate that child work is observed among poor populations with weak coping mechanisms for economic crises. For that reason, child labor typically is regarded as a response to economic vulnerability. One of the major gaps in the existing literature is the absence of reliable estimates of the prevalence of child labor in many countries of MENA region. The nature of child labor is complex and affected by a number of interrelated socio-economic factors including the structural changes in the economy, urbanization, enforcement of legislative laws and formal education.

The main problems facing working children could be summarized in the following:

- i. Low family income
- ii. Lack of industrial safety and minimum safety regulation.
- iii. Bad working conditions
- iv. Long working hours
- v. Health problems and lack of health insurance
- vi. Deprived of schooling and school drop-out
- vii. Low wages.

d. Street Children:

Street children are defined as: "Child whose family and community were unable to meet his/her basic needs due to social and economic problems which push the child into the street. The child seeks survive on his/her own, and lacks any kind of care and protection. The child is exposed to danger, abuse and deprived of his/her basic rights". The definitions for street children vary from one country to another. According to the studies conducted in some cities of the region, the main problems facing street children in some cities of region are as follows:

- i. Exploitation, exposed to risks of violence and abuse.
- ii. Health problems, drug abuse and addiction.
- iii. School drop-out.
- iv. Lack of shelter and homeless.
- v. Children of illegal migrants, refugees, displaced families.
- vi. Lack of parental care.
- vii. In crime and police arrest.
- viii. Sexual abuse and prostitution.

e. Children with Disabilities:

There is no unified definition of disability and handicaps for the countries of MENA region. The National Council of Childhood and Motherhood (NCCM) in Egypt, defines a person with special needs as: “a person who suffers from impairments preventing him/her to play the role and execute tasks the same way as his/her peers of the same age, socio-economic and medical background do in the area of education or playing or vocational or academic formation or familial and other relationships”. Reliable estimates of child disability are not available for most countries in the region, although estimates for Egypt, Jordan and Yemen suggest that between 25 and 38 percent of all children between the ages of 0-14 years have some form of disabilities.

The following types of disabilities have been specified as the most common among children in cities of MENA region: Down’s syndrome, autism, attention deficit disorder, mental retardation, muscular atrophy, cameral palsy, hearing impairments and visual impairments.

f- Orphans and Abandoned Children:

Abandoned children are defined as children with no family link and live entirely on their own both for material survival and emotional comfort. The main reasons for children being abandoned are illegitimate sexual relations, poverty and family break-ups. Prevailing religious, social and cultural values led many women who become pregnant without being married to hide pregnancy and child birth.

f– Refugees and Displaced Children:

The United Nations define refugee as: “ Someone who is outside his/her country of origin, has a well-founded fear or persecution of his/her race, religion, nationality, membership in a particular social group or political opinion and is unable or unwilling to avail him/herself of the protection of that country, or return there, for fear of persecution”. Displaced persons are defined as: “People who, as a result of armed conflict, internal strife, systematic violations of human rights, natural or human-made disasters have been forced to flee their homes and have crossed an international border, but who are not legally recognized as refugees”.

The group of refugees and displaced children in urban centers of MENA region face many problems such as, poor living conditions, limited basic services, no access to safe water, lack of sewage system, electricity, social and psychological problems.

2.2 Institutions Working for Vulnerable and Disadvantaged Children:

Countries of MENA region have moved from the one where state had sole responsibility for public welfare to where society’s well-being and development depends on collaboration among civil society and governments. In many countries of the region the role of NGO’s is expanding, especially for V&D children. In addition, ministries and governmental agencies.

Case Study from Sudan:

Children needs and rights in the slums and informal settlements, which are widely spread in Africa, are not thought of as priorities, and their concerns are not considered in the strategies of planning. Never the less, children are more likely to be affected by their surrounding environment, as they are largely influence by the family concerns and affected by their households characteristics; quality of residence, parents’ characteristics, family income and other factors.

Research on the status of Sudanese children, particularly, those who are vulnerable and disadvantage (V&D) with regard to their urban development context, is limited due to many barriers. Disaggregated data used in most of the previous studies were not comparable overtime; furthermore, sources of data are weak and defective. The situation was getting more complicated as conflicts and civil wars spread in the country. Thus, reliable assessment of the living conditions of children, their households and community, was an impossible task to perform, specially, if this is to focus on specific categories of children.

The study will try to answer questions like: How the surrounding living environment (quarters where children live) determine children well-being and make some of them vulnerable to the risks? What is the effect of household and parents' characteristics on the improvement of their children status? Whether children at quarters of different levels of living and quality of services are exposed to similar risk factors?

Objectives of the Study:

The objectives of this study are mainly:

- To investigate how the surrounding living environment and household characteristics influence and determine the well-being of children, especially those who are vulnerable and disadvantaged.
- To Investigate and assess the children well-being and situations and the issues confronting V&D children in quarters of various levels of living.
- To investigate the differentials in the status vulnerable and disadvantage children, due to their different living standards and household situations.
- To identify policy options for planners and decision makers to improve slums and informal settlements, and thereby improve the status of children in these dwellings.

Overview:

Sudan is one of the biggest countries of the region with respect to its area, constituted of 26 states, 134 provinces, and 600 localities. With an area of 2.5 million square kilometers and population of 33.6 million in mid 2003 (Central Bureau of statistics, 5th population census listing 2002), Sudan population characterized by young age structure, with a medium age of 18.2 years, while 53 percent are 18 or less, and 43 percent are under 15 years of age, of whom 39 percent are urban.

Khartoum is the Capital of Sudan. The Area of Khartoum State (including the Triangular Capital of Khartoum, Omdurman, and Khartoum North) is estimated as 20,736 km², most of this area lies in a semi desert climatic region, whereas, the rest is in the desert region.

Due to several pulling factors, among them its status as the main capital of Sudan, where services are concentrated and employment opportunities are relatively abundant, Khartoum is the most attractive state in Sudan for the population. Khartoum population estimated as 5.4 million in mid 2003. While the latest report of the characteristics of Khartoum State Localities, 2004, has shown that the total population size in Khartoum localities is summing-up to 6.93 million, representing about 21 percent of Sudan Population, and considered as the most active population in Sudan, as there are 81 percent of the total population of the state, engaged with the labour force.

Methodology:

a. Sources of Data:

The Study depends mainly on primary data collected from Khartoum State. Using the stratified sampling method, a random sample of households was selected from to represent all the localities and quarters in Khartoum according to the following sampling procedures.

b- Sample Design, Screening and selection of the eligible households:

The eligible households for the study were selected randomly from Khartoum State, using the stratification sampling method. Greater Khartoum is divided administratively into three towns: Khartoum, Omdurman, and Khartoum North. The screening procedure for the selection of the eligible households for the survey, utilized the administrative classification of Khartoum state (the sampling frame), based on a list provided by the Administration of Local Governance in Khartoum. According to this administrative classification, the three constituent towns of Khartoum State were classified into localities, as table (1) shows.

Table: (1): Administrative classification of Khartoum Localities and population size.

Locality	Population Size
Locality of Khartoum	
Khartoum	745,938
Jabal Awliya	1,703,950
Total	2,449,888
Locality of Omdurman:	
Omdurman	508,401
Karari	750,000
Ombaddah	1,500,000
Total	2,758,401
Locality of Khartoum North	
Khartoum North	533,700
Sharg Alneil	1,184,000
Total	1,717,700

Source: important characteristics of Khartoum State Localities Report, 2004.

These localities were classified officially into administrative units. The study stratified the quarters in these units into three strata; higher, middle, and lower class, according to the official classification identified by the Khartoum State, Local Administration Secretariat, which identifies three levels of classification for the quarters on administrative bases in addition to the coverage of services, however, for the purpose of this study, whenever the administrative classification located a quarter in a specific class, while its quality of services does not qualify it for this class, the study locates this quarter in the suitable class.

Following these criteria, quarters from these units were randomly selected for the screening process, proportional to the population size of the localities, considering the size of the class in the selected units, to facilitate selection of the eligible households for the interviews. Using this classification 7 quarters were selected from Khartoum, 9 From Omdurman, and 5 from Khartoum North proportional to the population size in each of the towns. Households at the selected quarters were fully screened. The following screening procedures were implemented for each of the visited households:

- A responsible member of the household (preferably the household head) was asked if there were children in the household. If there were none, the interviewer went to the next household.

- If the household had children, the age of the youngest child was first ascertained to ensure including children who were 0 – 18 years of age, if there were no children aging 0 -18, the next household was visited.
- If the household had a child who is vulnerable or disadvantage (disabled, orphan or adoption, refugee, street children, poor children, illiterate or drop-out of schools ...etc)
- The residence status of eligible children is then verified. Residents are defined as children who were born to resident parents (parents here are the adults who had stayed at least six month in the household), if there were no permanent eligible child, the interviewer proceed to the next household.
- If the household had permanent vulnerable or disadvantaged resident child whose age lies between 0 -18, it was included in the study.

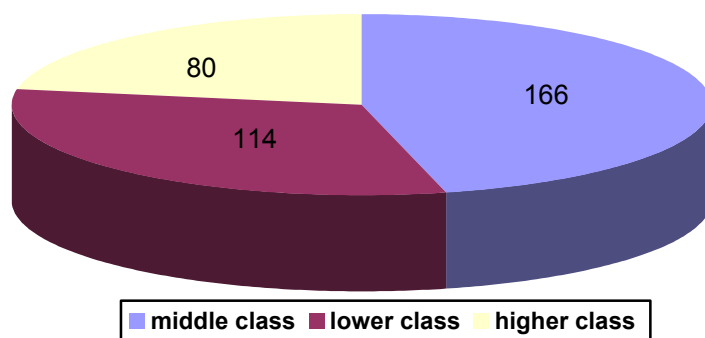
Table (2): Households screened and eligible households

	Households screened	Eligible households	Eligible / Screened
Khartoum	706	147	21 %
Omdurman	809	139	17 %
Khartoum North	499	74	15 %

The total number of households screened was 2014 as table (2) shows; 706 of them are from Khartoum, 809 from Omdurman, and 499 from Khartoum North. In these quarters, 360 households were found eligible for the study, of which 147 from Khartoum, 139 from Omdurman, and 74 From Khartoum North.

The eligible households were distributed over the three levels of classification as Figure (1) shows, 80 from the higher class (22%), 166 from the middle class (46%) and 114 from the lower class (32%). 751 vulnerable and disadvantaged children reported.

Figure (1): Number of eligible households by class



c. Classification of the Explanatory Variables:

The determining variables were distributed in three groups as follows:

- The household level (socio-economic profile of the parents).
- The individual level (the child himself/herself).
- The community level (the environment).

The first group of explanatory factors includes socio-economic indicators. Most measures were based on separate but linked dimensions of socio-economic characteristics: family income, father and mother occupation, and their education... etc. The study utilized the information on these characteristics to identify the most discriminate factors, and to find out whether socio-economic, parental characteristics are most important to determine children situations.

The second group of explanatory factors includes variables relative to demographic characteristics of children or their mothers: birth order of the child, age of mother ...etc. Some of these factors are related to vulnerability. Their effect interplays with that of the socio-economic determinants, both as intermediate variables and as confounding factors.

The third group of explanatory variables includes environmental factors, those relating to housing conditions, poor housing conditions is common among the poor include type of the latrine, animals in the house, water quality, adequacy of food, house density, electricity in the house, type of the house, type of floor, building materials etc. Also inadequate public health conditions, particularly child health, make the health problems of children more complicated and increase the risk of becoming vulnerable, disadvantage or even die.

Analytical Framework:

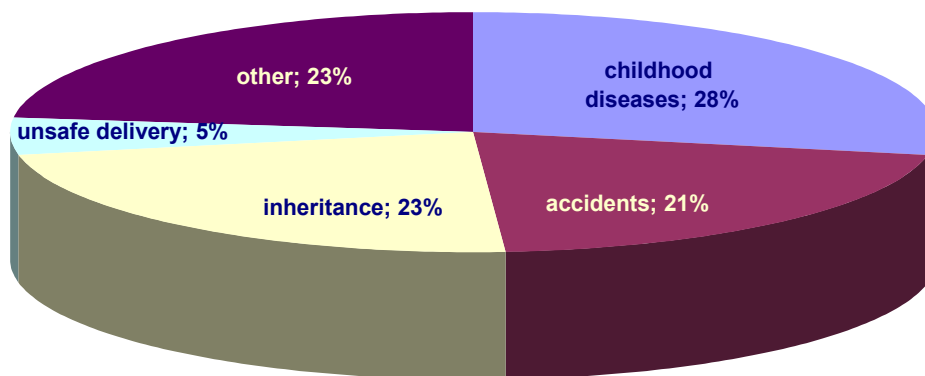
1- Vulnerable and Disadvantaged Children:

The study identified seven categories of V&D children which include: disabled, homeless which includes: (refugee, displaced, street and working children), orphans, illiterate or drop-out of school, poor children, infant and child mortality, and those who exposed to more than one risk.

The sample of the eligible households includes 178 disabled children of whom 61 child with bodily disability, 19 with auditory disability, 32 with visual disability, and 66 with mental lingering disability. Of these disabilities 62 were reported in the higher class, 102 in the middle class and 14 in the lower class. As it is plotted in Figure (2), the disability of 28% of those children was caused by the common child diseases (diarrhea, measles, etc.), 21% is

caused by accidents (car accident, injury, burn, fall down, etc.), however, for 23% cases inheritance is the causal factor, for 5% it happened during delivery and for the rest it is caused by another or unknown causes.

Figure (2): Disabled children by case of disability



Refugee and displaced children were 36, most of them were found in the lower class (32 children), while the 4 children were found in the middle class. Half of the refugee and displaced children performs economic activities and support their families with money, what observed is that all the working children were males. Unfortunately two thirds of those children were not enrolled to schools or dropped-out. However, working children should be considered, of whom girls were the majority, who perform informal and marginal jobs, such as servants, tea sellers, etc... but who didn't report that for personal reasons. All of the refugee and displaced children live with their families.

The number of Orphans was 81, of whom 19 from the higher class, 49 from the middle and 13 from the lower class. Their average age when became orphans was 8 years, the majority of them (62 children) had lost their fathers, 11 of them had lost their mothers, 3 children had lost both of their parents and 5 children are adopted. Almost all the orphan children in the aged of schools were enrolled.

The status of V&D children enforced many of them to drop-out of the schools and deprived them from their right of education, and further prevents part of them to enroll in primary education making them illiterate at early ages. There are 41 children dropped out of schools, their age was 12 years on average, ranging between 7 and 17 years. The lower class includes the highest number of drops-out (23 children), while they were 15 and 3 in the middle and

higher classes respectively. 91% of those children dropped-out from basic education (including primary and intermediate) for various reasons varies from family inability to meet the education expenditure (27 cases), to child intention (15 cases), and need of the family for the child contribution in family income (4 cases). More 11 children were reported illiterate, 8 of them from the middle class.

Family instability accumulates its negative consequences on the children, thus, it can be considered as exposure factor, which expose the child to the risks and dangers. Conflicts of parents have its drawback effects on children and make them aggressive, naughty and offensive; moreover, it could end with them to commit crimes (2 children from the lower class accused in crimes and 1 from each of the middle and third classes exposed to aggression). In 47 households, conflicts were reported between the parents, 29 cases were registered in the lower class, while 14 in the middle and 4 in the higher class. More than half of the cases of parents' conflicts occurred at the presence of the children in the middle and lower class. Divorce occurred in 28 households of which 83% occurred recently, children of these households were contemporaneous of the divorce period. Most of the cases reported in the lower class (16 cases), while there were 10 cases in the middle class.

Infant and child mortality had ever occurred in 50 households (14% of the total number of households) 30 of them from the lower class, while 10 from each of the other classes. Of the total cases, 29 were males and 21 were females. The average age of infants and children died was 1.25 years, 52% of them occurred when the infant age was less than one year and 94% of deaths were under five years mortality, of which 27 cases reported in the lower class. 74% of the death cases had occurred at home, most of them from the lower class, while only 26% of the cases were brought to the hospital. The second child exposed to mortality more frequently than the others (13 cases), other mortality cases were distributed as: the fourth child (11 cases), the third child (8 cases), the fifth child (6 cases), while it happened 2 times for the first and the eighth child, and it happened once for the rest up to the 15th.

2. Analysis at the Three Levels:

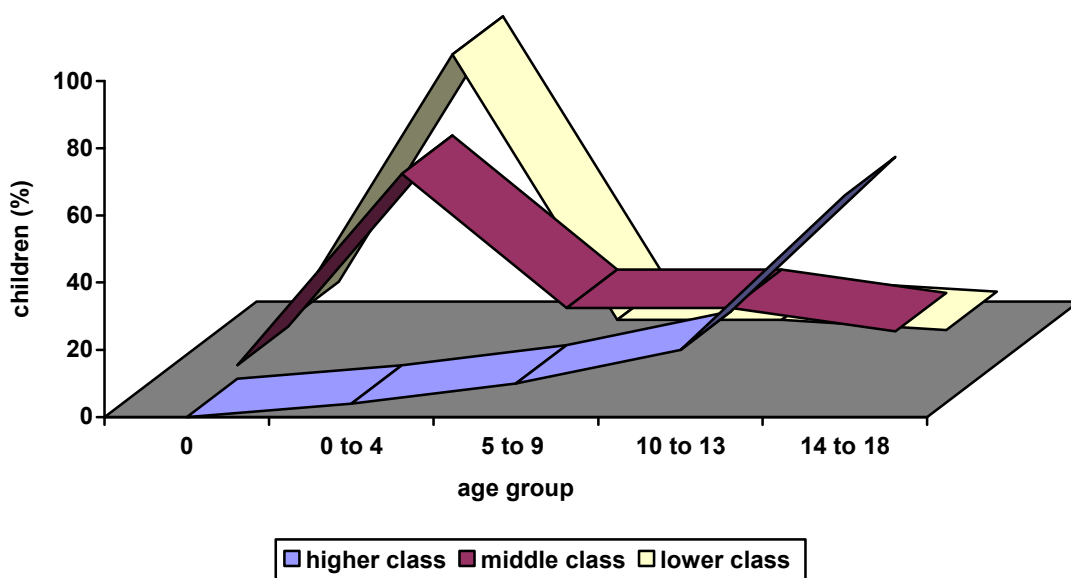
a. The Individual Level:

The eligible households comprised 751 V&D children. Households with only one child, whose sex was male, were 154, while in other 103 households one female child was reported per household, and there were 494 households with more than one child of both sexes, of whom 330 are males and 164 are females, i.e. the total number of males was 484 and females were 267. Their average age was 11 years with 12% of them less than 5 years old and 71 were

14 years old or less i.e. It could be concluded that more than half (59%) of the V&D children selected in the sample were adolescents. Most of those children had become V&D after their birth (80%), while the rest were born disadvantaged. For the eligible households, nutritional status was not adequate, they assumed to be of special needs, while their main need for suitable food was not satisfied, as there were only 43 children whom were provided with special meals by their parents, 30 children out of them from the middle class and 13 from the higher class, while children of the lower class were nourished with what other members of the household fed.

The average age of children in the higher class was 13 years. As it is shown by Figure (3), children of this class had exposed to the risk after their first birth day, this manifests the adequate care provided for their mothers during pregnancy, for them during infancy, and their safe delivery under medical care. The figures reveal that adequate care continued during infancy and early childhood as only 4% became V&D when they were less than 5 years, while complications started with the beginning of the adolescence period, as 66% of the children at this class joined the V&D group at the adolescence age; (start from 14 years). Several children from the other two classes born V&D, about 15% of the children in these classes had become V&D during infancy, while 61% from the middle class were V&D before reaching adolescence. The status is worse for infants and children under 14 at the lower class, where 85% of children became V&D during this age, thus, the status of infants and children under 14 at the middle and lower classes indicates that the adequate care observed at the early stages of pregnancy and delivery in the higher class, which continue until the starting of adolescence was lacked in the other two classes, this exposed children of these two classes to the risks at very early ages and even before their birth.

Figure: (3) Children of the three classes, by age groups of their exposure to the risks



The average age of fathers in the whole sample is 46 years ranging between 25 and 87 years, 50% of them were 50 years age or less, while mothers were reported younger where their average age was 39 years ranging between 20 and 70 years, of whom 82% were reproductive (their age 49 years or less). These figures varies among the three classes, while the average age in the higher class was similar to the overall average (46 years), it exceeded that average in the middle class (51 years), and it was less than the overall average in the middle class (44 years), which indicates that fathers of the middle class are younger than in the other classes. The situation was similar regarding mothers where average ages were 43, 38 and 39 years for the three classes respectively. This indicates that fathers and mothers in the higher class are older, while they are the youngest in the middle class. This phenomenon could be attributed to the late marriage in the higher class caused by education, and the high cost of marriage in this class.

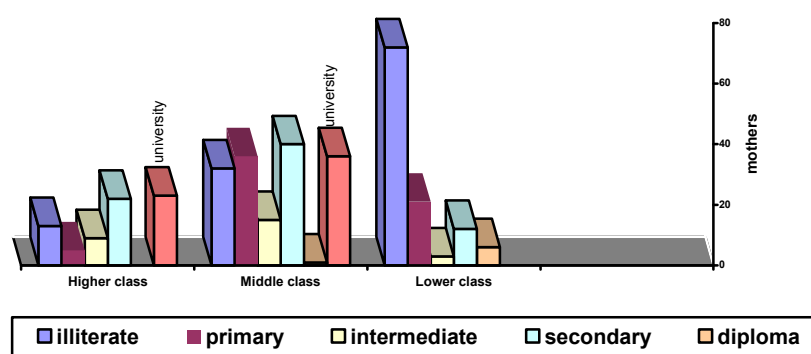
b. The Household Level:

Of the eligible households 74% (267 households) were headed by males, while 26% (93 households) were headed by females, 92% of the fathers were residing at home, 3% were immigrants in and out of the state and 5% were migrants out of Sudan. For the mothers more than 98% were residing home, while only 4 women were immigrants in and outside the province and 2 were migrants out of Sudan whom were reported in the higher class, there were no wide variations between the three classes, regarding residence and migration of parents..

The minimum number of persons per household was two persons, including the child/children, and the maximum number was 17 persons as reported in the lower class, their overall average number per household was 6 persons, this overall average was close to the average number of persons in the higher and middle class, while it was less than what estimated for the lower class (7 persons). This averages when compared to the average number of working persons per household for the whole sample (1 person), indicates a high dependency ratio i.e. as there are 6 dependents for every one working person. What aggravates the problem is the existence of 62 households with no working persons.

Education of mother is very important factor in determining the status of the child, as children of educated mothers are expected to be well cared of, adequately nourished, healthier, and less exposed to the risks and dangers. About 34% of the mothers in the eligible households (284 mothers) were illiterate, as appears in Figure (4), the lower class had the highest share in this percentage as 72 woman out of the 117 illiterate mothers were from this class, a reversal situation is that the lower class had also the singularity of including none of the mothers graduated with university degree or diploma, these degrees were accessible only for the mothers from the higher class (23 woman) and the middle class (37 woman). 61% of all mothers haven't enrolled to the secondary education, and only 17% graduated from universities.

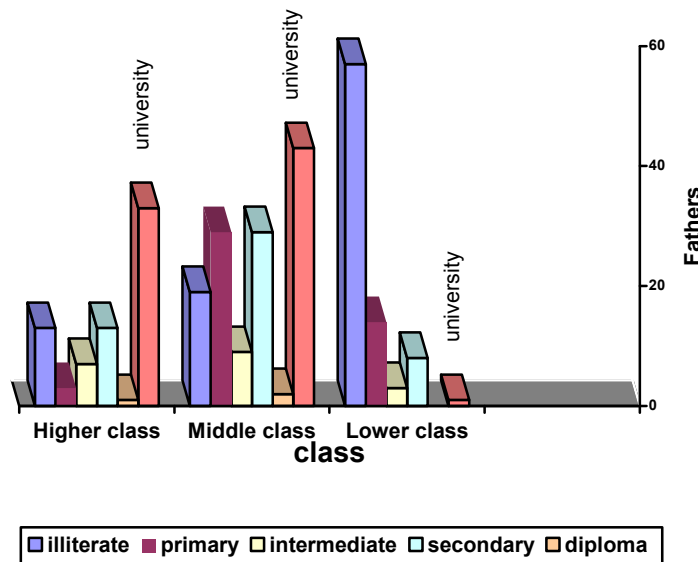
Figure (4): Mother education by class



The situation for fathers was not very different as it is clear in Figure (5), 31% of the 284 fathers were illiterate, 54% haven't attended secondary education, while those who graduated from university are 27%. The widespread of the illiteracy among the parents of the lower class is also confirmed by the educational status of fathers, 64% of the illiterate fathers were

from this class, while as similar as the university graduation for mothers, only one father from this class graduated from university.

Figure (5): Fathers education by class



Regarding the occupation of the parents, labors were 19% of the fathers, 24% were recruited, 13% were merchants, and the rest were farmers and handicrafts, in addition to 10% who were unemployed. 63% of the fathers were working in the private and informal sector and 26 in public sector, and the rest were working in other sectors. On the other hand, 238 of the mothers were house women, an indication of settlement and devotion for child care, while 11% were recruited and the remaining small category were working informally as tea sellers, servants, and other marginal jobs, the majority of the working women were reported in the private and informal sectors (55%), while 38% were public sector workers.

Ownership of the house is an important indicator of the economic situation of the household and its stability. 67% of the eligible households owned their houses, while 14% rented, for the others, houses were provided by employers, or inhabited informally without ownership or rent contract. However, the high percentage of house ownership seems to be inflated by the squatter settlements which are found mostly in the lower class and to some extent in the middle class. Moreover, for the assessment of the ownership status, an ownership index is created by assigning ranks to the assets owned by the household according to its value. The ranks were 2 points for normal value; "recorder, mobile, computer, etc." assets and 4 points for the assets of greater value; "land, house, private car, etc." The ownership index, when applied to the eligible households, was ranging between 0 points for 13% of the households

which own nothing of the index items, and 44 points for the 0.3% of the households which owned all the items of the index. The index revealed further that 47% of the households obtained 10 or less out of the index, 74% obtained 20 or less, 16% obtained between 22 – 30, 6% obtained from 32 to 40, and 4% obtained more than 40.

Incomes of the households indicate that though the average monthly household income was L.E 857,000, 42% of the eligible households' incomes were at maximum L.E 450,000 and thus, fall under the poverty line determined by the WB as one dollar a day per person, and there were more 26% close to the line. These categories were found mostly at the lower class and to some extent at the middle class. However, the income disparity among the households was obviously embodied by the income of the top 25% of the households, whose income was ranging between L.E 1100,000 up to L.E 5000, 000; most of these households were located in the higher class.

Disparity was also obvious when considering consumption. Though the average household consumption was L.E 641,000 per month, 75% of the households consume less than that average. In fact this average was inflated and pulled up by the figures reported by the high consumption households. That inflation could be acceptable if we know that only 19% of the households consume more than L.E 1000,000 per month, 4% of the households consume more than L.E 2000,000 and only 1 % consume more than L.E 3000,000. The inflated average household income and consumption and their concentration in one class, are indicators of the variations in the quality of services, care, living and protection between the three classes, with the advantage of the higher class, this variation was also confirmed by the household consumption for the day before the survey, whereas, the average household daily consumption was L.E 40,000, while the actual daily consumption of 72% of the households was less than that average. This fact supports the argument that a specific class has the domination on the income and consumption of necessary goods and services.

These wide variations between the households in income and consumption, and thus, in their ability to sustain the necessary food and services for their children, are mostly threaten children, as they are the most susceptible group to the risks and shocks. These variations is also expected to shape the priorities of the households, which are furthermore, subject to the socio-economic status of the households, specially the parents, thus, when the households under study were asked about their priorities, food came on the top of the priorities for 59% of the households, while education was the first priority for 21%, and health was the first priority for 20% of the households. Priority of food among the three classes was most frequently reported by households of the lower class (43% of the total households select food

as first priority), while the middle class households mostly select education as first priority, and the households of the higher class mostly selected health as first priority. This influence of the socio-economic status of the households on their priorities could be exemplified by the performance of recreation for children, as only 16% of the eligible households provided recreation for their children regularly; it was provided sometimes for 36%, and rarely for 21%, while recreation was not provided for children of 27% of the households. The majority of the households that provide recreation for their children regularly were from the first class (38%), and the middle class (57%), while only 5% were lower class households. Reversely, 74% of the households in which recreation was not existed for children, were located at the lower class. In general recreation was provided "regularly" by 16% of the eligible households to their children, "sometimes" by 36%, "rarely" by 21%, while it was "not exist" for children of 27% of the households.

Preschool education and kindergartens enrollment was promising among the three classes, as children of 84% of the households were enrolled; however, the yardstick question is whether they continue their education? This is subject to variety of influential determinants at both the individual and household level. Another relative indicator is the way by which families perform guidance and direction of their children, as 71% of the households preferred to advise their children than to resort to the ways of punishment, they found this more adequate, this could be due to the tight relations in the Sudanese societies and the common respect of children to their parents, in addition to their natural commitment to the family obligations and hierarchy. 81% of these households were from the higher and middle class however, of the 24% of the children exposed to punishment by beating, 72% were reported in the lower class. Deprivation of children from their preferences was resorted to, at a lower extent, by 5% of the households.

c. Community level:

Environment surrounding the children, determine their well-being, and highly contribute to shaping their characters. Variety of indicators could be utilized as useful criteria to assess the quality of life at this level; type of the house, its area, building materials, type of light, latrine, are all in addition to other community factors influence the well-being of children.

As common as for most of the Sudanese households, the majority of the households were living in houses of open walls and rooms (77%), however, minorities of 10% and 8% reported in the higher and middle classes live in apartments or villas respectively; types of houses which had never reported at the lower class, where those who were not living in the common type of the wall and room houses, live in huts, pavilion, and other inadequate housing.

Building materials of over 90% of the houses in the higher class were bricks and cement, it was so for 48% of houses in the middle class while the rest of the houses at this class were built of mud and bricks, regarding the lower class, building materials were mud, straw, and other cheap materials.

The average number of years of residence in the household was 11.4 years; an indicator of stability of the households under study, this stability is important factor for children to settle at schools, to live and perform their natural childhood activities, and to interact with the community they were acclimated to. This indicator was reported in a better situation for the households of the middle class where the average number of years of residence in the current house at the time of the survey was 14 years, while it was the worst for the lower class where this average decrease to 8 years, an indication of mobility and unstable life for children.

50% of the eligible households hadn't changed their residence before, Those who had changed in the higher class, moved to residence with the same or better quality than the previous one, this applied also to most of the families which experienced mobility at the middle class, however those who had changed their residence at the lower class, were in most cases moved to residence of lower quality.

Area of the house is an indicator of its capacity and potential to meet children basic needs and rights, such as adequate air and open space for playing and other children needs which is difficult to be satisfied by crowded house of small area and few number of rooms. The average area of the eligible households was 334 squared meters. Houses of the higher and middle classes were of greater average areas than this overall average, as they were 351 and 365 squared meters respectively, while the area of the house in the lower class is limited to 278 squared meters.

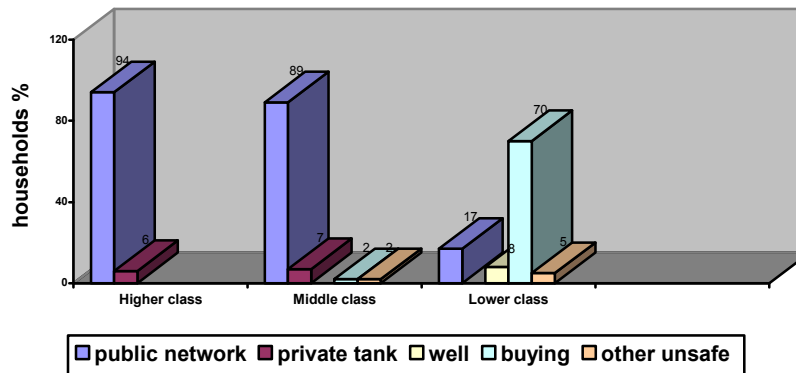
Regarding the sufficiency of the room's number for the members of the households, including children, the overall average number of rooms per household was 3 rooms. If this average is to be harmonized with the overall average number of persons per households which was estimated as 6 persons for each of the higher and middle classes and 7 for the lower class, the distribution of rooms over persons could obviously be estimated as one room for every two persons, however, the figures estimated for the three classes, tells another story and contrast with the generalization of this allocation. The averages for the rooms number were calculated as 4.03 for the higher class, 3.27 for the middle, and 1.97 for the lower class i.e. the actual allocation of rooms over the persons is in fact as: one room for less than two persons in the higher class, one room for two persons in the middle class, and one room for near to 4 persons

in the lower class. This analysis reveals the high density and inadequate habitation for children of the lower class, which deprive them from their basic needs and rights, particularly if they compared to their mates at the other two classes.

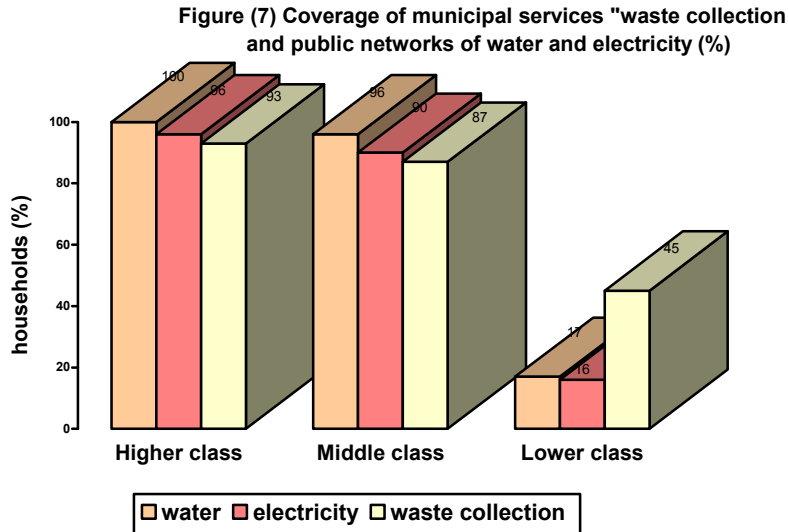
Children are susceptible to household's habits and practices, particularly those concerned with nutrition, health, and environment. Safe source of drinking water, way of waste collection, type of latrine, type of light, etc., inadequacy of any one of these requirements could expose children to the risk factors of infection and pollution.

All the households of the higher class have access to safe sources of drinking water as 94% of them use the public network Figure (6), and the rest have their private tanks, while in the middle class those who have access to public net work and private tanks simultaneously were 96%, other households of this class obtain water from, wells, ponds, buying from sellers, and other sources. The situation is different at the lower class, where only 17% of the households have access to safe drinking water, 70% buy water from sellers who bring water from unsafe sources, 8% bring it out from wells, and the rest obtain drinking water from other unsafe sources.

Figure (6): Number of households by class and source of drinking water



Electricity was available for 71% of the eligible households. High coverage of the public network was observed at the higher and middle classes where it covers 93% and 89% of the households at these classes respectively, while it covers only 16% of the households at the lower class, households that were not covered, use another sources of electricity, like generators, gas, and kerosene which were used by 68% of the households at the lower class.



To assess the adequacy of the environment of the household, it is important to ask about the way in which the household performs the collection of waste and the type of the latrine. Most of the households of the higher class have access to adequate types of latrine; 93% of them use water closet, and the rest use toilets, the water closet was also used by 46% of households at the middle class, where 52% use toilets, while for the lower class, as it is the situation for other services, latrine type was toilet for 70% of the households, shelter for 13%, and 15% evacuate use open spaces, while water closet was available for only 2% of the households at this class. Waste collection inside the house was performed adequately for most of the households, while the disparity arises with respect to the collection out side the house, which to a higher extent was expected to be the responsibility of the municipality and local administration. Waste was collected by municipal labors for 93% of the households at the higher class, for 87% at the middle class, while for only 45% of the households at the lower class.

Conclusion and Recommendations:

Descriptive analysis at the three levels of analysis; namely; the individual level, the household level, and the community level, reflected the flagrant disparities in the status of the V&D children among the three classes. Children of the lower class were deprived from their basic needs, while adequate life is provided for special groups of the society.

The investigation assures the strong association between the socio-economic environment surrounding the child, the quality of the household's / community living, and child well-being, which means, in other words, that the well-being of children or their exposure to the risks of being vulnerable and disadvantage, is function of the household's socio-economic

conditions in addition to the availability of basic needs and adequate coverage of services in their community and surrounding environment.

The analysis also confirms the existence of differentials in the well being of children among the different levels living and socio-economic strata. The exposure of children to risks and death start at early ages in poor quarters, while it starts after adolescence in the other quarters, this is an indicator of shortage in the adequate care during pregnancy and in early childhood, thus, the child born weak and susceptible to risks and dangers, this susceptibility continue after birth to childhood which is a crucial phase in the life of children.

Gender differentiation is confirmed by the investigation as well; this phenomenon is socially rooted in Societies of the less developed countries where male child preference is dominant.

The study recommends the following:

- Urgent actions for promotion of the poor quarters, and in particular for the households of the slums in the peripheries of Khartoum.
- Urban development plans and strategies should take the needs of marginal groups, specially children, into consideration, these needs should be taken in priorities, and the basic needs should be available for all children with their different socio-economic status and levels of living and gender.
- Poor households of V&D children should be supported to satisfy the basic needs of their children, the support should extend to the community surrounding the children, and this could be through the initiation of public utilities at these communities with consideration to the children of special needs and disadvantaged children.
- Public awareness on protection of children from risks and dangers, particularly for the households of V&D children, where further awareness on the adequate ways to deal with their children and to respond to their needs.
- Determination of child-wellbeing indicators. This could be measured by an index for the requirements of child well-being. These indicators should also be determined for child poverty, child gender related development, child development welfare, early childhood well-being, school aged child well-being.

References:

1. Asha El-Karib and Ibrahim, Ibarhim Ahmed, 2004, The Status of Children in Greater Khartoum, CPI commissioned assessment. Unpublished., Arab Urban Development Institute, Riyadh, Saudi Arabia.
2. Arab League, (1999), Pan Arab for Child Development.
3. Central Bureau of statistics (2002), 5th Population Census Listing, Sudan Government.
4. Central Bureau of Statistics (1993) Population Projection, 1993-2018, Sudan Government, 4th Population Census.
5. Department of Statistics, Sudan, 1993, Central Bureau of statistics, population projection 1993-2018
6. Elkarim, Y. et al. (2005), Concept Paper on Data on Urban Children in MENA Region, Unpublished Report.
7. El-Shorbaji, M. (2004), Vulnerable Children in Egypt, Status, Problems, Needs and Services Offered, Arab Urban Development Institute, P.12-14.
8. IMF, 2004, Djibouti: Poverty Reduction Strategy Paper, Washington
9. Hamid G. & Elkarim Y. (2004), Early Childhood in the Arab Towns and the Potential Role of the CPI in Middle East and North Africa, Paper Presented to the Symposium "Early Childhood: Characteristics and Needs", Riyadh.
10. Ibrahim, I. & El Karib, A. (2004), The Status of Children in Greater Khartoum, Arab Urban Development Institute, P. 22-59.
11. KCCW, (2003), Translation of the Study of Children of The Sug, Safe the Children Sweeden,
12. Khartoum Council for Childhood Welfare & Safe the children Sweeden 2003, Translation of the study of Children of The Sug.
13. Local Governance, Khartoum, 2004, important characteristics of Khartoum State Localities Report.
14. Lynkeus and Censis, (2005), Charting the Mediterranean Child, Fondazine Gerolamo Gaslini, Genoa, Italy.
15. Lynkeus, (2004), Charting the Mediterranean Child Report.
16. Ministry of Health (1995), Sudan Maternal and Child Health Survey (Final Report. In collaboration with Pan Arab Project for Child Development (PAPCHILD). Cairo, Egypt. League of Arab States.
17. MENA Child Protection Initiative (CPI) (2004), The Status of Children in Some Cities of MENA Region", Paper Prepared for the Report "Charting Mediterranean Children" 2005.
18. The Administration of Local Governance (2004), Important Characteristics of Khartoum State Localities Report, Khartoum.

19. UN Habitat (2003) Global Report on Human Settlements.
20. UNCHS (HABITAT) (1999), Global Urban Indicators Database.
21. UNDP, 2003, The Millennium Development Goals in Arab Countries: towards Achievements and Aspiration, New York, NY, USA: United Nations Development Programme
22. UNFPA (1999), Safe motherhood Survey (SMS).
23. UNICEF (2000), Multiple Indicator Cluster Survey (MICS).
24. UNICEF (2006), The State of the World's Children, United Nations, Children's Fund, New York.
25. UNICEF (2002), The Situation of Egyptian Children and Women. Cairo, Egypt.
26. UNICEF (2004), The State of the World's Children. NY, 10017, USA.
27. UNICEF: <http://www.devinfo.org>.
28. UNICEF: <http://ww.childfriendlycities.org> .
29. World Bank, Gender and Development in the Middle East and North Africa – Women in the Public Sphere, MENA Development Report, Washington 2004.
30. World Bank (2002), Country Reports on Health, Nutrition, Population, and Poverty. The World Bank Group, Washington.