

Poverty and Environmental Degradation in Uyo Urban, Akwa Ibom State, Nigeria

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Abstract

The high level of poverty in the world today is a major force behind contemporary environmental problems. It is true that the degradation of our environment has been exacerbated by widespread poverty. Thus, it is virtually impossible to effectively discuss the idea of urban environmental sustainability without paying serious attention to the problems of poverty. The poor in cities are both agents and victims of environmental damage. For example, poor families pollute the environment through indiscriminate disposal of wastes just as inadequate residential accommodation often results in overcrowding in decrepit slums. On the other hand, the deteriorated urban environment could lead to the causation of a number of diseases such as cholera, dysentery and diarrhoea, among the urban poor. The work is divided into four sections. The first section deals with the conceptual issues of poverty and environmental sustainability. The second part examines how poverty causes environmental damage while the third part attempts to show how the poor are the greatest victims of environment degradation. The concluding section will examine the methods of alleviating the problem of poverty in the city. The paper concludes that since the poor are the worst affected by environmental degradation, any meaningful development of the urban milieu must take cognizance of the mass of the urban poor in such a way that efforts to improve their quality of life does not in any way jeopardize the environment.

Keyword: urban environmental sustainability, problems of poverty, environment degradation

Background to the study

Poverty is considered a major cause and effect of both local and global environmental problems. Poor people are often seen as compelled to engage in unsustainable exploitation of resources in their environment for short-term survival, and are assumed to be the ones most affected by the problems that result from environmental degradation. Many environmentalists have argued that the high level of poverty in the world today may be a major force behind contemporary environmental problems. It is true that the degradation of our environment has been compounded and even exacerbated by widespread poverty.

Although it may be argued that the poor use fewer resources and create less waste compared to the rich, it must equally be admitted that there is a threshold of poverty

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below which the poor too, become disproportionately and dangerously destructive. Certainly, there comes a point when present survival means destroying resources which could have nurtured the poor for years. Put differently, very poor families lack the resources to avoid degrading their environment. Struggling at the edge of subsistence, they are pre-occupied with day to day survival and sustainability.

According to the Brundtland Commission Report (WCED, 1987) poverty pollutes the environment, creating environmental stress in many ways. Those who are poor and hungry often destroy their immediate environment in order to survive. They will cut down forest, their livestock will overgraze grassland, they will over use marginal land and in growing numbers they will crowd into congested cities with serious socio-economic and environmental consequences. For instance, poor families pollute the environment through indiscriminate waste disposal just as inadequate residential accommodation often results in overcrowding in decrepit slums and squatter settlements.

It is important to note that the relationship between poverty and the environment is a complex one whose ramifications are yet to be worked out. The debate on the characteristics of poverty – environment interaction has been linked to a puzzle (World Bank, 1997) where we possess several pieces, have identified some crucial links and features, but still lack the entire picture (Ekbohm and Bojo, 1999). However, Salau (1993) described the link as circular or as a process of “cumulative causation” where one reinforces and is being reinforced by the other in a vicious circle. According to Uyanga (2003), environmental degradation undermines livelihoods, generating a vicious circle in which poverty and declining environmental quality feed off one another. Considering this nexus, the 1972 Stockholm Conference on Environment observed:

In the developing countries, most of the environmental problems are caused by under-development. Millions continue to live far below the minimum levels required for a decent human existence, deprived of adequate food and clothing, shelter and education, health and sanitation. Therefore, the developing countries must divert their efforts to development, bearing in mind their priorities and the need to safeguard and improve the environment.

The urban poor are commonly bound to reside in areas with poor environmental quality. Majority of the poor live in “ecologically vulnerable areas”, including areas of low agricultural potential and slums or squatter settlements within urban areas. Poor people lack resources to relocate from these areas and to adopt defensive measures. Low level of education increases their vulnerability to health risk. The associated political marginalization decreases the opportunities for environmental protection and provision of basic services such as safe drinking water, access to clean air, functioning sewerage and waste collection (Ekbohm and Bojo, 1999). The poor in the cities are commonly exposed to polluted air, contaminated water, and hazardous and solid wastes. It is quite easy to notice therefore, that “environmental risks go hand in hand with socio-economic deprivation”. The poor also bear a disproportionate share of the costs imposed by environmental degradation and this increases their impoverishment (UNDP, 1998).

The fact that the poor in the cities are both agents and victims of environmental damages makes it virtually impossible to ensure urban environmental sustainability without paying serious attention to the poverty – environment links. Recently, many studies have focused

on the examination of these relationships (see Nwafor, 2006). This work hopes to contribute further to the elucidation of this nexus towards the achievement of two of the millenium development goals namely: the eradication of extreme poverty and hunger, and ensuring environmental sustainability (UN, 2000).

Statement of the problem

Uyo metropolis is characterized by high level of poverty and widespread environmental problems. Using a combination of income and other socio-economic indicators of poverty, Harrison (2003) showed that Uyo is a “poverty endemic area”. According to him, the mean income per capita is as low as N2, 483; the private sector is very weak, employing only 38.7% of the population, while unemployment rate is as high as 8.0%.

Educationally, only 48.0% of the people have tertiary education while about 3.7% have no formal education. Interestingly, the area records an average household size of 5.6. This figure viewed against low household income means that very little resources are available for the use of individual family members.

There is serious overcrowding in most parts of the city. For instance, some residential areas have occupancy ratio of up to 4.7. Given the fact that some of the houses are in a decrepit state, it is easy to imagine the magnitude of housing problem in the city. Also, most houses in Uyo lack basic facilities such as good toilet, kitchen, security, water supply, and electricity, among others. Although the area has fairly well set out road network, their condition is quite deplorable and pathetic. In spite of ongoing efforts, some of the township roads still remain untarred, flooded, pothole ridden and quite appalling.

Waste disposal poses very serious problem in the area. As observed by Salau (1992) and Sule (2000), an important manifestation of the problem in African cities relates to the problem of waste collection and disposal. Due to inefficient urban waste disposal system, refuse is littered in residential areas and streets. Some parts of the city suffer disproportionately from air and noise pollution, while others are prone to water related diseases such as cholera, typhoid, diarrhea, amoebiasis, poliomyelitis and hepatitis, among others.

It is an established fact that the poor are agents of environmental degradation. On the other hand, it is also possible for a degraded environment to breed poverty. So, the issue of poverty and environmental degradation is like that of the chicken and the egg – which one comes first?

Objectives of the study

The objectives of this work include to:

- examine the impacts of poverty on the urban environment in uyo
- examine spatial patterns of urban poverty and environmental degradation in the study area.
- recommend measures that would not only ensure poverty alleviation, but also reduce urban environmental degradation while promoting sustainable development.

Study area

Uyo lies between longitude 70471 and 80031 East, and latitude 40521 and 50061 North of the equator (figure 1). As the capital of Akwa Ibom State, the city has grown rapidly to become the centre of economic, social, commercial and administrative activities in the state. With an area of 155.856 Km³, a population of 188.877 inhabitants, a population density of about 1, 212 person per square kilometer as at 1991 (NPC 1991), Uyo is one of the fastest growing metropolis in the country. This fast rate of urbanization has brought many social and environmental problems. Two of these problems, poverty and environmental degradation, engage the focus of this work.

Conceptual framework

The concept of poverty is multidimensional in nature and its definition and measurement usually presents serious methodological difficulties. In spite of these problems, about four major concepts of poverty are recognized including subsistence, absolute, relative and subjective concepts.

The conceptualization of poverty in terms of subsistence levels of living has had wide acceptance and seeks to describe poverty objectively as lack of income needed to acquire the minimum necessities of life which include food, shelter and clothing. Those who lack the necessities to sustain life are by definition poor (Soyombo, 1987).

In absolute poverty, the poverty line is drawn in terms of the prices of the minimum needs and those whose income falls below the figure are defined as poor. Unlike the subsistence concept, the concept of absolute poverty goes beyond the notion of minimum subsistence requirement by introducing the idea of “basic cultural needs”. This broadens the idea of basic human needs beyond the level of physical survival. Basic cultural needs would include educational, security, leisure and recreational requirements (Haralambos and Heald, 1980).

Relative poverty is measured in terms of judgement by members of a particular society of what is considered a reasonable and acceptable standard of living (Rein, 1970). According to this concept, individuals, families and groups can be said to be in poverty when they lack the resources to obtain the type of diets, participate in the activities, and have the living conditions and amenities which are customary, or at least widely encouraged and approved in the society to which they belong.

The subjective concept on its part is concerned with whether or not individuals or groups feel they are poor. Subjective assessment of poverty relies squarely on the perceptual experiences of the individuals, households or societies concerned (Harrison, 2003).

Environmental degradation explains a process or condition of deterioration in environmental quality due to pollution, overexploitation and unsustainable resource use, among others. Environmental degradation usually results or manifests as environmental problems such as deforestation, erosion, slums, soil infertility, pollution, and so on. Generally, a degraded environment is that whose quality has been lowered and its conditions worsen.

Method of study

The data used for this work were obtained from both primary and secondary sources. The primary data was gathered with the help of a questionnaire. A total of 300 questionnaires were randomly administered to respondents in each of the ten residential districts under study (figure 2). These residential areas formed the basis of the study. The division of the study area into ten residential districts was to enable us bring out the spatial picture of poverty and environmental degradation in Uyo through spatial analysis.

The variables used in this study are a combination of social and economic indicators of urban poverty. They include among others: low income, unemployment, low education, large household size, high occupancy ratio and poor housing. For the secondary sources, various journals, textbooks and government publications were consulted. A combination of factor analysis, simple percentages and the descriptive approaches are used in the analysis of result.

Empirical analysis and discussion of results

The raw data was subjected to factor analysis and at the end, a total of three factors whose eigenvalues were greater than or equal to one were extracted (Table 1). These three factors are the most important determinants of poverty pattern in Uyo.

Table 1 Eigenvalues of the three factors extracted

Factors	Eigenvalues	% of Variance	Cumulative %
1	2.062	22.908	22.908
2	1.703	18.925	41.833
3	1.603	17.813	59.646

Factor one is named the Economic Factor while Social Status and Housing are factors two and three respectively. The performance of the ten residential districts on each of the three factors is shown in Table 2.

Table 2 Distribution of factor score of poverty in Uyo

S/N	Residential Districts	Factor 1	Factor 2	Factor 3
1	Uyo Central	-1.8163	-0.5429	4.9706
2	Anua / Eniong Offot	1.6953	1.5065	0.0243
3	Ewet Housing Estate	3.0756	0.3437	8.4906
4	Federal Housing Estate	2.1387	4.0553	5.0409
5	Ikot Oku / Ikot Ebido	-0.7749	-4.2165	4.5320
6	Afaha Oku	-3.6822	4.9177	-5.1605
7	Use / Nsukara Offot	-0.1916	-1.6432	-11.4872
8	Itiam /Mbiabong Etoi	1.7645	-0.9002	-6.1361
9	Aka/Atan Offot	0.9117	1.3618	-8.9689
10	Effiat / Iboko Offot	-7.7963	-4.8814	3.9713

Source: Computer Print out on field work data.

In Table 2, the negative scores show that the area has a high level of poverty while positive scores indicate otherwise. Based on factor one (Economic Factor), four districts

including Federal Housing, Ewet Housing Estate, Itiam/Mbiabong and Anua/Eniong Offot may be classified as affluent areas. On the other hand, Effiat/Iboko Offot, Afaha Oku, Uyo Central, Ikot Oku/Ikot Ebido and Use/Nsukara Offot are recognized as poor areas. The trend for factors two and three are also shown on Table 2.

Table 3 Occupancy ratio for the residential district in Uyo

S/N	Residential Districts	Occupancy Ratio
1	Uyo Central	4.7
2	Anua / Eniong Offot	3.9
3	Ewet Housing Estate	1.4
4	Federal Housing Estate	1.6
5	Ikot Oku / Ikot Ebido	3.5
6	Afaha Oku	2.8
7	Use / Nsukara Offot	2.6
8	Itiam /Mbiabong Etoi	2.9
9	Aka/Atan Offot	3.3
10	Effiat / Iboko Offot	3.4
	Mean	3.0

Source: Author's Field work

The spatial pattern of occupancy ratio in the town is shown in Table 3. A close examination reveals that the least crowded residential district are Ewet and the Federal Housing Estates with occupancy ratios of 1.4 and 1.6 respectively, while Uyo Central and Anua/ Eniong Offot recorded the highest values of 4.7 and 3.9 respectively.

Table 4 Spatial pattern of house type / quality in Uyo

S/N	Residential Districts	Mud House (%)	Concrete buildings (%)
1	Uyo Central	-	100
2	Anua / Eniong Offot	-	100
3	Ewet Housing Estate	-	100
4	Federal Housing Estate	-	100
5	Ikot Oku / Ikot Ebido	6.7	93.3
6	Afaha Oku	26.7	73.3
7	Use / Nsukara Offot	23.4	76.6
8	Itiam /Mbiabong Etoi	6.6	93.4
9	Aka/Atan Offot	13.3	86.7
10	Effiat / Iboko Offot	6.7	93.3

Source: Authors Field work

According to Table 4, mud houses are found in six out of the ten residential areas under study with the highest percentage of 26.7 and 23.4 encountered in Afaha Oku and Use/Nsukara Offot respectively. It should be noted that most of the houses in the Ewet and Federal Housing Estates have very high quality and are provided with standard facilities compared with housing in other districts.

Table 5 Perception of poverty by households in the residential areas

S/N	Residential Districts	Poor (%)	Not poor (%)
1	Uyo Central	60.0	40.0
2	Anua / Eniong Offot	70.0	30.0
3	Ewet Housing Estate	10.0	90.0
4	Federal Housing Estate	16.7	83.3
5	Ikot Oku / Ikot Ebido	80.0	20.0
6	Afaha Oku	83.3	16.7
7	Use / Nsukara Offot	90.0	10.0
8	Itiam /Mbiabong Etoi	83.3	16.7
9	Aka/Atan Offot	86.7	13.3
10	Effiat / Iboko Offot	73.3	26.7

Source: Authors Field work

Tables 5 and 6 show the perception by households of poverty and residential quality respectively. This subjective assessment is very important because in human affairs, subjective reality often times overrides objective considerations.

Table 6 Spatial pattern of the perception of residential quality in Uyo

S/N	Residential Districts	Satisfactory (%)	Unsatisfactory (%)
1	Uyo Central	10.0	90.0
2	Anua / Eniong Offot	16.7	83.3
3	Ewet Housing Estate	90.0	10.0
4	Federal Housing Estate	86.7	13.3
5	Ikot Oku / Ikot Ebido	13.3	86.7
6	Afaha Oku	30.0	70.0
7	Use/Nsukara Offot	23.3	76.7
8	Itiam /Mbiabong Etoi	20.0	80.0
9	Aka/Atan Offot	16.7	83.3
10	Effiat / Iboko Offot	20.0	80.0

Source: Authors Field work (2005)

A comparative study of Tables 2 to 6 reveal clearly that districts with high poverty levels also have high occupancy ratio, poor housing quality and an unsatisfactory perception of environmental quality. The reverse is the case for affluent districts. For instance, the affluent districts of Ewet and Federal Housing Estates record occupancy ratios of 1.4 and 1.6 respectively. By contrast the occupancy ratios of poor districts like Effiat/Iboko and Annua/Eniong Offot were as high as 3.4 and 3.9 respectively.

The data on table II, IV and VI reveal that affluent districts have a preponderance of high quality housing with good environmental conditions, while houses with the lowest quality are found in the poor residential areas which are also the collecting centres of various social and environmental pathologies. These disreputable and decrepit slums are characterized by obsolescence, overcrowding, deterioration, unsanitary conditions, and absence of facilities or amenities, which endanger the health, safety, morals and psyche of its inhabitants. According to Eni (1998), slum housing is both an index of socio-

economic deprivation as well as environmental degradation in Nigerian cities. The preponderance of the urban poor in degraded areas agrees totally with the tenor of our discussion and further confirms the thesis that there exists a strong correlation between urban poverty and environmental degradation in Uyo metropolis, Nigeria.

Planning implications and conclusion

The fact that poverty is both a cause as well as a consequence of environmental degradation and change demands immediate policy actions towards ensuring poverty alleviation and sustainable development. Although the ramifications of the relationship are not yet fully understood, there is need for careful systematic analysis towards providing a holistic solution. Substantial synergies exist between alleviating poverty and protecting the environment. Since the poor are less able to “buy out of” environmental problems, they stand to benefit the most from environmental improvement. In addition, the economic activities stimulated by environmental policies provide employment to the poor.

Uyo, as indicated by numerous studies, is poverty endemic. The fact that the city is merely “growing without developing” makes the situation quite worrisome as there is absence of solid economic base that could absorb the burgeoning population into productive ventures. This context makes the task of alleviating poverty both a moral imperative as well as a pre-requisite for ensuring environmental stability and sustainable development.

Many approaches are available for poverty alleviation. Ebong (1986) stressed that such approaches should recognize the highly interrelated parameters of poverty in any attempt to identify priorities for action. He further warns that there seems to be no particular policy measure or one “big solution” which would serve as an effective remedy in all cases. Each category of the poor seems to call for specific remedies. But each remedy must be seen in the context of the whole strategy of generative urban development.

Given the fact that poverty is a cause of environmental degradation, it follows therefore that any investment in poverty alleviation invariably helps in controlling and preventing the destruction of the urban environment. In the light of this, policies to eradicate urban poverty should aim at job creation, provision of health care and functional education, discouraging rural-urban migration through integrated regional development planning, attitudinal change, reducing corruption, creation of a conducive environment for investment in the crucial areas of industrial and technological development and encouraging environmentally sustainable development, among others.

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