

Contribution of Poverty to Environmental Degradation in Cameroon

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Abstract

The paper titled contribution of poverty to environmental degradation examines how environmental quality has been decreasing in Cameroon, particularly in the North West and South West Regions. Poverty is the primary attribute of most developing countries; this study aims at investigating the extent to which poverty can contribute to the continual uprising of climate change through specific causes like environmental degradation. The study adopted a mixed methods approach utilizing quantitative and qualitative methods of data collection in the North West and South West regions of Cameroon through interviews and questionnaires. Findings indicate that poverty is among the principal sources of environmental damage in North West and South West regions of Cameroon. The paper further found out that poverty has greatly contributed to environmental degradation as a result of deforestation of existing forests with some statistics of 32.5%. This is explained by that fact that, the massive rural exodus into urban areas creates scarcity of suitable land for agriculture. As a result, the population tends to encroach into the forest thereby destroying the existing ecosystem. Therefore, the efforts to reduce environmental degradation must be comprehensive enough and the priority of environmental policies should in the first place, target poverty reduction.

Keywords: Poverty, Environmental Degradation, Pollution

Introduction

Overcoming poverty and inequality is still one of the biggest development challenges facing economists and politicians both in developing and developed countries. It is universally acknowledged that success can only be guaranteed by a mix of national and multinational contributions. It is for this reason that at the Millennium Summit held in September 2000 in New York, USA, 191 countries with Cameroon present adopted the Millennium Declaration (Kumase, 2009). The declaration which focussed on issues of peace, security, and development and covered areas including environment, human rights, and the sound management of public affairs were worked out into eight major goals and eighteen quantitative targets to be achieved before 2015 and is now popularly known as the Millennium Development Goals (MDGS), (UNDP, 2002). With the expiration of the Millennium

Development Goals in 2015, the MDGs were later replaced by a more ambitious project dubbed 'The Sustainable Development Goals' (SDGs), also known as the Global Goals. The Goals were adopted by the United Nations in 2015 as a universal call to action to end poverty, protect the planet, and ensure that by 2030 all people enjoy peace and prosperity. Among the eight MDGs, three of them (eradication of extreme poverty and hunger, achieving universal primary education, and promoting gender equality and empowerment) occupy a central part in this paper either as important factors determining Cameroon's progress in meeting up the MDGs or as the goals per se under analysis (Kumase, 2009). In the same light the 17 SDGs equally target the same issues which are central to this paper such as in goals one (end poverty), goal 2 (zero hunger), Goal 4 (quality education) Goal 5 (gender equality) and Goal 13, 14 and 15 which targets the environment.

In the Encyclical of Pope Francis, the *Laudato SI* "Praise be to you my Lord" the Pope emphasizes the fact that the Planet in which we live is our common house and we all have to come together to take care of this house. According to this encyclical, this planet which is our common home now cries out to us because of the harm we have inflicted on her by our irresponsible use and abuse of the goods with which God has endowed her. We have come to see ourselves as her lords and masters, entitled to plunder her at will. The violence present in our hearts, wounded by sin, is also reflected in the symptoms of sickness evident in the soil, in the water, and in the air in all forms of life. This is why the earth herself, burdened and laid waste, is among the most abandoned and maltreated of our poor; she "groans in travail" (Rom 8:22)

Traditionally, the poor have been held responsible for causing much of society's problems, including, more recently, environmental degradation. There has been a conventional belief that poverty is the primary cause of environmental degradation. The Brundtland Commission Report, which is acknowledged as the blueprint of environmental conservation, explicitly states that poverty is the root cause of any environmental problems, and poverty alleviation should be considered the key determining factor and central condition for effective implementation of environmental policies (Bijoy et al 1992). In this regard, Jalal (1993), the chief of the environment department of the Asian Development Bank, says that "it is generally accepted that environmental degradation, rapid population growth, and stagnant productions are closely associated with the growing incidence of acute poverty in many countries of Asia" (Bijoy et al 1992).

Over the years, the paradoxical connection between poverty and the environment has gained increasing popularity in sustainability and environment literature. Masron and Subramaniam (2019) believe that poverty alleviation and environmental sustainability are like "killing two birds with one stone". The nexus between poverty alleviation and environmental sustainability has emerged to be a debated issue in post events such as the "United Nations

(UN) World Summit on Sustainable Development" in 1992 and the "UN Conference on Environment and Development" in 2002 (Cheng et al., 2018). Putting an end to poverty in all its forms and ensuring environmental sustainability are among the top priorities of the UN Sustainable Development Goals (SDGs). Although several measures were initiated to achieve the overly ambitious goal of eradicating all poverty forms, they remained unachieved as the poverty rate continued to remain high in many underdeveloped countries. The complexity and significance of the poverty-environment nexus are inextricably intertwined with other institutional, macroeconomic, and demographic factors (Bijoy et al 1992).

While the world is facing some thriving environmental challenges amidst growing inequality and poverty, least developed countries (LDC) are more vulnerable to environmental risk than developed economies. Bijoy et al (1992) posit that LDCs are usually characterized by poor institutional qualities, low adaptive capacity, and disproportionate reliance on the consumption of natural resources. They are in need of financial assistance from developed economies to support their efforts toward the future of sustainable development. In this context, foreign aid granted by the developed nations to developing countries has played a remarkable role in developing countries' progress and prosperity. However, in recent times, as environmental degradation and poverty have emerged in alarming proportions, the aid's objective has enlarged to fulfilling multiple objectives of the United Nations Sustainable Development Goals (SDGs) such as eradicating poverty, mitigating environmental risk, ensuring women's rights, etc. and Cameroon in particular is not left out.

Cameroon is a country that evokes mixed but mostly sad feelings in people. Although the country is well endowed with natural resources, millions of Cameroonians are languishing in poverty. The country is one of striking diversity, unfulfilled promise, and tantalizing potential. Its regions abound in varied geography, climate, people, culture, language, education, and economic structure (Sikod, 2007). Up to 1985 Cameroon's economy had been growing steadily, supported by the agricultural sector. In 1986 the economy suffered a sharp reversal and GDP per capita declined by 6.3% per year between 1985 and 1993. The country adopted an IMF-designed structural adjustment program (SAP), in 1988, which was based on internal adjustments, emphasizing liberalization of economic activity, reliance on markets, and increased competition and efficiency to reduce domestic costs and prices. As part of the internal adjustment, civil servants' salaries were cut by as much as 60%, and thousands were laid off. Poverty rose sharply between 1986 and 1994. A World Bank study (1995) showed that even in the capital city of Yaounde, which suffered the effects of the economic crisis least, the level of per capita consumption was 10% lower than it had been 30 years previously (Sikod, 2007). The number of rural households below the poverty line rose from 49% to over 70% from 1986 to 1994. In Cameroon, approximately 70 percent of the population is rural and depends on farming and livestock for their livelihoods. The

rural population depends on the natural resource base and adopts different resource management strategies that can either improve or degrade the environment. The study reported here examines the role of different rural wealth groups in contributing to environmental degradation in four rural communities in Cameroon. The North West and South West Regions are the case study for this paper.

1. The Cameroon Environment

The territory of Cameroon extends from Lake Chad south through Sahel and Sudan savanna into a gallery and semi-deciduous forest, and then the dense, humid evergreen forest zone. These bands of vegetation run roughly parallel to the southern edge of the Sahara. Complicating this zonation is the orogenic structure: the uplifting of the basement complex into crystalline mountains and a major feature of Cameroon is the overlaying of these by basalt and the creation of volcanic mountains. The parallel zones are broken by these elevation changes into altitudinally determined, distinct vegetational communities, submontane forests, and subalpine grassland on the highest peaks (Tchoungui et al 1996).

The country has exceptionally high biological diversity and high levels of endemism. Plant and mammal endemism is highest in the moist evergreen forest belt along the coast and decreases as biomes become drier. The geographical distribution of many endemic forest species is very narrow compared with that of the drier biomes. These conditions make it possible for the principal economic activity of the human population, agriculture, which also serves subsistence purposes (along with hunting and trapping). While some export crops are derived from industrial plantations, the vast majority of cash crops are derived from smallholder farming. Traditional smallholder farms are less than 2 hectares in area. These occupy 90% of cultivated areas and supply 90% of agricultural production and 80% of marketed products (Tchoungui et al). The farming systems are predominantly based on slash-and-burn and bush fire practices. Traditional farming methods are hampered by limited access to agricultural inputs and equipment. Some small-holder fishing is done in the inland waters and off the Atlantic Coast. There is also commercial logging and some petroleum exploitation.

2. Concept Explication

Definitions of poverty really matter. They set the standards by which we determine whether the incomes and living conditions of the poorest in society are acceptable or not. Definitions of poverty are also important, as they influence the way interventions and policies addressing poverty are shaped. Despite this, there is ambiguity as to how the term 'poverty' is used and as a result, a range of definitions exists, influenced by different disciplinary approaches, world views, and ideologies (Handley et al., 2009).

Historically, poverty has been defined in monetary terms, using income or consumption levels. In order to be able to compare poverty levels across countries and over time, those that live below a given level of income – the poverty line (Ravallion & Bidani, 1994) are classified as poor. Over the last decades, this economic definition of poverty has been complemented by other approaches to conceptualizing poverty: the basic needs approach, capabilities approach, human development approach, and multidimensional poverty approach (Handley et al., 2009). Chambers (2006), a leading scholar on poverty and development, clusters poverty definitions into four groups:

- › Income poverty (or its common proxy, consumption poverty).
- › Material lack or want: besides income, this includes absent, limited, or low-quality assets (such as shelter, clothing, furniture, personal means of transport, radio, etc.). It also includes inadequate access to services.
- › Capability deprivation, refers to what people can or cannot do, or can or cannot be. This goes well beyond material lack to include human capabilities, such as skills and physical abilities, and also self-respect in society.
- › Multidimensional deprivation, with material lack or want, is only one of several mutually reinforcing dimensions.

The environment generally means a natural resource base that provides sources (material, energy, etc.) and performs sink functions (such as absorbing pollution). The term can include resources that people have relied on and no longer do (either because the resources are depleted or because they have been replaced by some other resource or technology). Similarly, it can include things that people do not yet use but could with a change in knowledge or technology (Leach and Mearns 1991 as cited Bucknall et al 2000). Environmental issues are often concerned with public or semi-public goods, such as open-access air- and watersheds or common property grazing land. Some aspects of the environment can also involve private goods, such as the air inside a place of work or household drinking water. In this paper, we use the term environment in a broad sense to include these various meanings of the term (Bucknall et al 2000).

Environmental degradation is a subset of environmental change. The term degradation can be interpreted in different ways indicating different forms of land use (Blakie & Brookfield 1987). As a working definition, in this paper, we use the term environmental degradation to imply:

Depletion: damage to a natural resource system, which affects present or future human needs negatively. This harms welfare indirectly by reducing productivity.

Pollution: leading to damage to human health or decline in the capacity of the environment to sustain natural systems. This harms welfare directly (Bucknall et al 2000).

Environmental degradation is an umbrella concept that covers a variety of issues including pollution, biodiversity loss and animal extinction, deforestation and desertification, global

warming, and a lot more. Environmental degradation is the deterioration of the environment through depletion of resources such as air, water, and soil; the destruction of ecosystems, and the extinction of wildlife. It is defined as any change or disturbance to the environment perceived to be deleterious or undesirable. Environmental degradation is one of the ten threats officially cautioned by the High-level Panel on Threats, Challenges, and Change of the United Nations. The United Nations International Strategy for Disaster Reduction defines environmental degradation as "The reduction of the capacity of the environment to meet social and ecological objectives, and needs". Environmental degradation is of many types. When natural habitats are destroyed or natural resources are depleted, the environment is degraded. Efforts to counteract this problem include environmental protection and environmental resources management

This study, therefore, adopts the definition of poverty by Ravallion (1992) meaning being unable to afford to meet the minimum needs that are deemed reasonable by the standards of the society in question (Ravallion, 1992). Our definition of poverty implies there are needs for basic goods and services alongside social participation. The cost of a minimum standard of living within any society depends on:

- (a) the extent to which goods and services are provided by the state or the market;
- (b) social norms;
- (c) the price of food and other goods.

These can each change over time, meaning poverty also changes with the wider economic context. So, participation includes being able to conform to minimum norms such as buying birthday presents for relatives or social activities for children

3. Methodology

This study adopted a mixed method approach using interviews and questionnaires. A research design is an overall plan for conducting research (Creswell, 2014). The quantitative research design was used to collect data from the field through the use of questionnaires while the qualitative approach made use of interviews for data collection. The quantitative approach provides numeric descriptions of some parts of the population and avenues for research instruments such as questionnaires and observations to be used for data collection, which can be generalized to the entire population.

In addition, the study made use of participant observation to understand how poverty has caused environmental degradation. The study population for this study was therefore made up of scholars, environmental experts, and climate change experts randomly drawn from the North West and South West regions of Cameroon. A total of 50 questionnaires were administered to the remote areas of the North West and South West regions of Cameroon, while six persons were interviewed with three drawn from the South West and North West

regions respectively. Out of the 50 questionnaires sent out to be administered, 50 were returned giving a response rate of 100%. Data obtained from questionnaires were analyzed using the Statistical Package for Social Sciences (SPSS) Version 24. The data were inputted into this software and analyzed in terms of percentages and charts

4. Findings and Discussion

According to Kumase, (2009), the incidence of poverty (Po), indicates that about 41% of the population of Cameroon lived on an annual adult equivalent expenditure of fewer than 232 547 FCFA in 2001. A total of 18.5% of the urban, as well as 43% of the semi-urban population, lived below the poverty line. As expected, the incidence of poverty was highest in the rural areas with about 69.3% of the population living below the poverty line. With a population share of 33.62%, the rural population contributed 57.12% to national poverty (P0) (Kumase, 2009). Due to the high incidence of poverty and the depth of poverty existing among the rural poor, rural areas accounted for about 64.05% of the total poverty gap though they only had a population share of 33.62%.

The first interviewee from the North West region posits that due to rapid urbanization, the big cities and their inhabitants come across several economic, social, and human losses from environmental risks. Environmental degradation continues to rise as many vulnerable populations and assets are exposed to climate extremes. The Sub-Saharan region is expected to experience some of the worst consequences of urbanization on the climate risks, as the area is characterized by inadequate adaptive capacity among the urban populations. He further asserts that poverty has been behind environmental degradation in the North West region and suggests that there exist bidirectional causal relationships between poverty and environmental degradation. Poverty and environmental degradation can feed each other in some kind of cumulative causation process, and this mutual relationship leads to a downward spiral of poverty and environmental degradation. Exposure to extreme environmental risks can force the poor to migrate, creating more poverty. Thus, poverty is the main starting cause of this vicious circle, and therefore, he advocated that in order to reduce environmental degradation, it is imperative to reduce poverty first.

The second interviewee posits that Air pollution is another way in which poverty contributes to environmental degradation. Poor communities like the North West region of Cameroon lack the proper knowledge when it comes to production techniques. Thus, the ways in which they use resources to help them survive are harmful to the resources around them, and ultimately the world at large. Air pollution is one of the major consequences of poor production techniques while water pollution is a result of poor water management, once again due to lack of knowledge. Water pollution affects so many things beyond the poor community itself.

Those interviewed in the South West posit that the increasing rate of urbanization and population in the North West and South West regions of Cameroon has led to the rise of poverty which is greatly contributing to environmental degradation. In recent years, many fellows from the rural area have always developed the mentality that there is much money in the urban areas and for that reason, there is a huge movement from the rural areas to the urban areas. Once their needs or interest are not met in the areas that they have moved to, they are forced to engage in activities that will not be suitable for the environment thereby degrading the ecosystem and causing different global problems like climate change, and global warming.

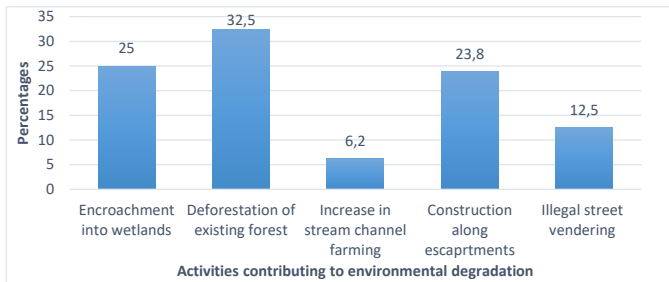


Figure 1: The different activities caused by poverty which has contributed to global warming

According to figure 1 field investigation carried out in the South West and North West of Cameroon shows that poverty has greatly contributed to environmental degradation as a result of deforestation of existing forests with some statistics of 32.5%. This is largely because when rural people leave the rural areas and move to town, they cannot acquire suitable land for agriculture, and as such tend to encroach into the forest thereby destroying existing ecosystem.

The survey carried out in the two regions indicates that overpopulation, land disturbance, deforestation, and landfills are represented above as a result of poverty.

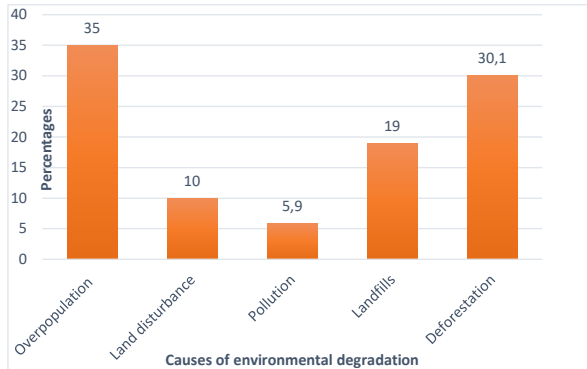


Figure 2: Representing the Causes of environmental degradation

Source: Field Survey 2022

Result statics from the field as represented in figure 2 on the causes of the environmental degradation indicate that overpopulation represents the highest percentage of 35% in the figure. Population especially in urban areas comes as a result of poverty in the rural areas of the North West and South West Regions. Deforestation which comes as a result of poverty represents 30.1% as per the above figure. This representation is a result of rural migration to urban areas because of poverty which resulted in deforestation. Landfills, land disturbance, pollution represent 19% ,10% and 5.9% respectively.

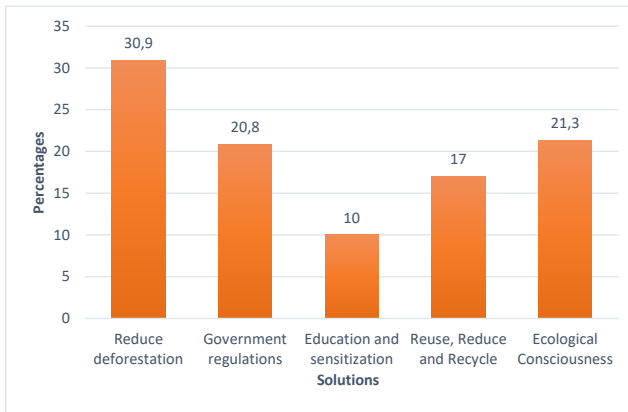


Figure 3: Solutions

Source: Field Survey 2022

The results from the field revealed that there are certain solutions to reduce environmental degradation caused by poverty. In figure 3, the inhabitants of the North West

and South West propose that there should be reduced deforestation as represented by 30.9%, ecological consciousness 21.3%, 20.8% as government regulation, Reuse, Reduce and Recycle with 17% and 10% representing Education and sensitization solutions.

The inhabitants of the South West and North West, rich or poor, consume water, food, and natural resources in order to stay alive. All these economic activities are directly, indirectly, or remotely based on natural resources and any pressure on natural resources can cause environmental stress. Environmental damage can prevent people, especially the poor, from having good and hygienic living standards. As poor people rely more directly on the environment than the rich for their survival, they are mostly on the receiving end of environmental problems.

Poverty often causes people to put relatively more pressure on the environment which results in larger families (due to high death rates and insecurity), improper human waste disposal leading to unhealthy living conditions, and more pressure on fragile land to meet their needs, overexploitation of natural resources and more deforestation. Insufficient knowledge about agricultural practices can also lead to a decline in crop yield and productivity etc.

On the other hand, environmental problems add more to the miseries of poor people. Environmental problems cause more suffering among them as environmental damage increases the impact of floods and other environmental catastrophes. Soil erosion, land degradation, and deforestation lead to a decline in food production along with a shortage of wood for fuel contributing to inflation. In short, the worst consequences of environmental deterioration, whether they be economic, social, or related to mental or physical wellbeing, are experienced by poor people.

Conclusion

More rigorous efforts should be undertaken by the governments of all countries to eradicate poverty and in turn, to save deprived people from the dreadful implications of environmental damage. There should be more collaborative partnerships among all sections of the society so that even the people living in poverty are linked to the world through their participation in social, political, and economical spheres along with their active participation in environmental regeneration. This paper strongly believes that there cannot be any environmental solution without alleviating poverty in the society.

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