

# The implications of poverty, civil wars and AIDS on wildfire management and sustainable land use<sup>1</sup>

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## Abstract

This submission gives an account of how poverty, civil wars and AIDS have impacted negatively on wildfire management and sustainable land use systems in Ghana.

Whilst looking at the general implications of these factors on wildfire management and sustainable land use, it makes special references to the destructive effects of some wars that broke out between certain tribal groups in the Northern Region of Ghana.

For example, the war between the Nanumbas, Gonjas, Dagombas and the Kokombas (all tribes found in the Northern Region of Ghana) left nightmarish experiences in its wake and recorded serious effects on wildfire management and sustainable land use and these have clearly been captured in this paper.

Poverty which loomed as one of the greatest societal plagues has been deepened in those areas which witnessed the war and governments are struggling to bring some socioeconomic relief on the seemingly hopeless situation.

Adequate attention has also been given to how AIDS impacts on wildfire management and sustainable land use.

Keywords: Sustainable land use, wildfire management, deforestation, AIDS, socioeconomic relief.

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## Introduction

Wildfire management constitutes various approaches, interventions and strategies put in place to prevent or control the otherwise adverse effects of fire which occur in natural vegetations, farmlands etc.

Land may be used for many and varied purposes and constitutes one of the major resources of the nation. Land is limited and finite meaning that it does not increase in size.

The same piece of land is potentially capable of being used for many different purposes. The most appropriate use for a given land depends on a variety of factors; technical as well as social which give rise to differences in opinion.

In Ghana because of traditional ownership and other tenurial rights, every piece of land within the nation or a given community is not available to every person within the community for use as a matter of right.

Wildfire is indeed the most important single threat to the sustainable management and development of forests in Ghana.

In recent years, Ghana has lost an appreciable percentage of its Gross Domestic Product (GDP) to the indiscriminate ravages of wildfires. It is also the direct cause of irreversible environmental damage in Ghana. In certain areas of the country, the process of desertification has been hastened due to wildfires, which have permanently destroyed delicate but vital organic soil material. At present, most fire-affected areas show progressive degradation. A number of forest reserves, which were formerly tall, dense tropical forest, rich in biodiversity have become grasslands with scattered fire-damaged relict canopy trees.

As part of efforts to reverse this alarming environmental situation, a comprehensive wildfire management project has been embarked upon by the Forestry Commission of Ghana to help control/prevent the destructive effects of fire on the environment.

However, poverty, civil wars and AIDS have far-reaching and overlapping implications on effective wildfire management and sustainable land use systems and are examined in this submission.

## ***Implications of poverty on wildfire management and sustainable land use systems***

About seventy (70) percent of Ghanaians live in rural areas with very low-income level (less than \$1 a day). This compels the rural folks to engage in activities that impacts negatively on effective wildfire management and sustainable land use systems.

Traditional practices like shifting cultivation, bush burning for hunting, farming and festive purposes, tree cutting for traditional medicines and the production of charcoal and alcoholic beverages are causing serious problems such as gradual desertification.

The poverty levels in such rural communities are so low that people engage in the above activities not as a matter of interest but for survival.

Generally, poverty affects the development and maintenance of adequate infrastructure and manpower to support wildfire prevention & control activities based on appropriate technologies and systems.

Lack of adequate money significantly inhibits the promotion of alternative resource management systems such as agro-forestry, enrichment planting, enhanced natural regeneration and reforestation. Additionally, sustainable rural enterprises such as snail farming, apiculture, ecotourism, domestication of wildlife, mushroom farming and herb gardens all require initial capital input. However, these rural folks have little or no capital to enable them venture in such businesses. Hence, rural dwellers continue to engage in activities that impact negatively on the effective wildfire management and sustainable land use.

## **Implications of civil wars on wildfire management and sustainable land use systems**

Any war, no matter its intensity, has detrimental implications on wildfire management and sustainable land use which have subsequent negative effects on the overall national socio-economic development.

In the early 90s the war between the Nanumbas, Gonjas, Dagombas and the Kokombas (all tribes found in the Northern Region of Ghana) left nightmarish experiences in its wake; property worth millions of dollars were destroyed - not to talk about the thousands of people who lost their lives and those who were displaced.

They fought over vast areas of fertile lands to cultivate yams, millet, shea butter and maize. The warring factions resorted to the use of bows and arrows attached with fires at the tips of the arrows which served as the primary source of serious wildfires in the areas.

Subsequently, the after-war survey conducted revealed destruction of vast areas of productive land sometimes extending to settlement thus rendering so many people homeless. An untold strain was visited on the already limited resources which translated into the deepening of poverty in the areas which experienced the war.

War gives rise to chaotic situation which allows set legislation & policy on wildfire management and land use systems to be broken with impunity. It also causes a major human resettlement.

Wildfire management activities at all levels are carried out based on effective and efficient planning and networking which are impossible in times of war.

During wars, adequate research and collaboration with local and international bodies cannot be sustained to provide the basis for developing best practices in wildfire management and land use systems.

The building of capacity in communities and community structures are interrupted when war breaks out. And also, the provisions of appropriate management logistics as well as technical support are curtailed in the event of war.

### **Implications of AIDS on wildfire management and sustainable land use systems**

AIDS has become a major threat to employment objectives and labour market efficiency. The loss of workers due to AIDS and AIDS-related illness or the demands of caring can result in serious declines in productivity, loss of earning and attrition on skills, experience and education.

The United Nations estimates that among the 25 African countries worst affected by HIV/AIDS, seven million farm workers have died of AIDS –related causes, and an additional 16 million workers could die by 2020. This will surely have adverse effects on the management of wildfire and sustainable land use systems on the continent. Consequently, food security would be sorely affected thereby hindering Africa's efforts to achieve the UN goal of halving hunger and poverty by 2015.

Many of those who die from AIDS in Africa live in rural areas and are adults in their productive and reproductive prime, with severe consequences on wildfire management and sustainable land use systems.

AIDS also reduces total human resources available for production and the demand for goods and services. Planning for wildfire prevention education, pre-suppression and suppression programs suffers a major setback due to the AIDS pandemic on the continent.

### **Conclusion**

Wars, poverty and AIDS have always had irrecoverable implications on the administration of effective wildfire management programs and sustainable land use systems.

And as land and its resources provide the direct sources of livelihoods for majority of rural population worldwide, the avoidance of wars and the prevention of AIDS should be pursued with outmost seriousness to enhance poverty reduction and wealth creation in every country.

**Figure 1**—Shows the predominant use of fire as a preparatory tool for farming



**Figure 2**— Depicts a typical rural setting in Ghana



**Figure 3**— A sample of posters used in wildfire awareness campaign in Ghana



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