

# [Introduction zones based on factors like vegetation](https://assignbuster.com/introduction-zones-based-on-factors-like-vegetation/)

## Introduction

Desertification, usually fuelled by climatic fluctuations, refers to the continuous change from a useful land into a desolate region unfit for habitation. As the issue continues to worsen day-by-day, Africa seems the most hit, with many regions almost vacant as people migrate in search for conducive environments. For instance, Eritrea, an African country, is among the recently founded countries found in the northeastern region of the continent with a land size of roughly 124, 430 square kilometers. The country provides the best illustration of countries severely hit by environmental problems ranging from “…desertification and soil erosion through deforestation and overgrazing to significant loss of lands resulting from the many land mines present in the country” (Swift, 1992, p. 23).

However, the current Eritrea differs significantly from the same Eritrea a century ago when a luxurious flora and fauna dominated the country. The dramatic change, as people claim, arose from the then environmental negligence during the colonial era, which marked the dawn of intermittent famine followed by a momentous slump of the then available natural resources. Although the activities taking place in Eritrea differ from place to place and culture to culture, all seem to contribute positively towards the desertification evident in the country. As the paper unveils, the repercussions brought about by desertification have forced the Eritrean government to intervened thereby implementing strategies that have successfully arrested the situation. The paper singles out the issue of desertification, among the many environmental issues in Eritrea, expounding on the Eritrean flora, the reason behind its desertification and further pointing out the major strategies that the government has put in place to make its fight against desertification a success as it stands.

## Vegetation in Eritrea

In terms of ecological partitions, Eritrea bears six natural zones based on factors like vegetation and altitude among others founded on the works of different researchers and scholars not only from Eritrea but also from other countries in Africa. The central highlands form part of the zones covering a land area of approximately 2.

6 million hectares with the northern highlands inclusive. The zone covers the plateau regions together with the slopes in the western and eastern parts of the country. Rainfall in the western escarpment is quite unpredictable with only two months, July and August, registering the highest amounts unlike the eastern slopes, which receive rainfall virtually every month. Therefore, “ the highland is composed of mixed natural forest such as Juniperus Procera, Olea Africana and Juniperus Procera” (Kiflom, 2008, p. 4).

Dry and hot conditions characterize the western escarpments regions with rainfall levels significantly falling right from the peak of the mountains towards the lowlands in the western parts of the country. Therefore, the foliage is much spread and pitiable dominated by acacia that almost resembles shrubs. However, the country too features a distinctive zone: the green belt zone, characterized by pure and uninterrupted woodland flora with rainfall going up to 1000mm per year. The forests in this zone assume a vast area covering the entire plateau region through the mountainous areas until the starting point of the eastern lowlands. The zone forms part of tourist attraction sites.

The southwestern lowlands feature vast grasslands, scarcely settled and thus harboring an undisturbed species composition. On the other hand, sand dominates the entire coastal zone. However, desertification has paved its way into this vegetation. The paper further seeks to unravel the mystery behind the cause of desertification in Eritrea for instance, its land tenure system.

## Causes of Desertification in Eritrea

As Collins (2001) points out, “ There are three types of land owning system in Eritrea but one, the ‘ Dessa system’, has a negative contribution at water and soil conservation” (Para. 6). The system, carried out by villagers, has a rotation period; too short, that the vegetation cannot have sufficient time to improve. Therefore, even if the villagers grow trees, carry out agro-forestry or rather employ soil preservation techniques, the allocated rotation period of 5-8 years proves short, as no change has taken place before the villagers resume the lands, hence over using the land. Worse, despite the 1994 policy set to address the issue of land ownership, it has never been put to work and hence the continued desertification.

In addition, most of the trees available in Eritrea like eucalyptus and cacti introduced by missionaries hinder the growth of more vegetation and at the same time harming the already existing one. For instance, although the people use the cacti for food, the plant absorbs too much water to the level of making the resource insufficient for other species, which on the other hand respond by dying thus further worsening the conditions. The tarmer-musa, the worst of all plants, neither can one use it for food nor firewood, originally came from Sudan spreading through Ethiopia to Eritrea. The spreading of the plant is so tremendous that despite its being new in Eritrea, it has managed to cover over 70% of the southwestern lowland zone. Despite the government’s efforts o burn it up, its effects continue to worsen day-by-day. The issue of farming in Eritrea has significantly contributed towards the transformation of the forested areas into deserts.

The areas receive plenty amounts of rainfall, which on the other hand has attracted the huge number of people, who wish to settle for farming activities. As a result, the settlement has seen the clearing of the forests in their endeavor to create arable lands and gradually converting them into deserts. Similarly, the inhabitants of the woodland areas receiving less rainfall or no rainfall at all cut most of the trees for charcoal and firewood without replacing them with new ones, hence transforming it into a desert. However, just as pride precedes a fall, an environmental issue like desertification too must precede a success story.

## Success Story behind Eritrean Desertification

Following the deteriorating capability of the Eritrean land to sustain life of both plants and animals including the people, the Eritrean government has implemented effective strategies, which have significantly changed its environmental status. Among the policies are “ The National Environmental management Plan of 1995, The National Biodiversity strategy and Action Plan of 2000 and the 2001 National Action Program to Combat Desertification and Mitigate the Effects of Drought” (Srikanth, 2003, p. 69). In response to the clause 26 of the UNCCD (United Nations Convention to Combat Desertification), Eritrea has extended its electricity to its upcountry people as a way of fighting deforestation.

However, for the few who continue to utilize stoves for cooking, the Eritrean government has improvised a working power saving stove called ‘ Adhanet’, which takes long before exhausting its fuel and thus saving the forests, though indirectly. It has gone further to distribute them to all the rural people, who have in turn welcomed the innovation positively and hence the success behind desertification. In addition, following the efforts to introduce environmental education in the school curriculum, the targeted recipients have heeded to the call with all the Eritrean schools treating the unit as compulsory right from the O-levels. In 2003, the entire country participated in a campaign that sought to address the issue of desertification, addressing the current weird state of Eritrea and the probable state and repercussions of the same, should people fail to corporate in arresting desertification in the country. The campaign message reached many people whose response explains their good share of the success behind Eritrean desertification. Kiflom (2008) further adds, “ As a member of Intergovernmental Authority for Drought and Development (IGAD), Eritrea has participated actively in the development of IGAD sub-region environmental education and training programs” (p. 11).

With the government’s efforts still in progress, Eritrea might pass for the most luxuriant country in Africa in terms of vegetation, despite its past desertification dominated stories. “ Today, it is very encouraging to witness natural vegetation re-generating and the wildlife coming back to its habitat” (Kiflom, 2008, p. 15). The country is visually appealing with a stranger unable to tell whether it was initially a desert.

## Conclusion

Eritrea, a small country in North-Eastern Africa featured recommendable natural vegetation a century ago, which was later completely affected during its colonial period turning the country into a desert.

The condition followed from the then evident deforestation, overgrazing and lack of information concerning the effects of desertification to people. However, as the effects unfolded, the Eritrean government intervened by implementing strategies and policies, as afore-discussed, which have significantly changed the country from a scary desert into home of choice for many people, not only from Africa but also the world at large.

## Reference List

Collins, J. (2001). Desertification. Retrieved April 8, 2011 fromhttp://www. bcb.

uwc. ac. za/envfacts/facts/desertification. htm Kiflom, M. (2008).

Desertification in Eritrea: Causes, Status Report, Solutions, and Current Outlook. Eritrea: Euclid University. Srikanth, R. (2003). “ Challenges of Environmental Management in Eritrea-A Case Study.

” AJEAM-RAGEE, 6 (2), 62-70. Swift, R. (1992). Identification, Propagation and Management for Agricultural and Pastoral Communities.

Kenya: University of Nairobi Publishing.