

# Chapter 6

## Satellite Image Classes Categorization Schemes for United Nations Framework Convention on Climatic Change (UNFCCC): Greenhouse Gas (GHG) Inventory for National Representation – The Botswana Case

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### ABSTRACT

*This chapter looks at the disparities between the UNFCCC – GHG – Land-Use and Land-Cover Change (LULCC) remote sensing images classification scheme with that of Botswana for the GHG inventory for the National Representation. This chapter has points out that the Botswana Scheme maximizes the LANDSAT System electromagnetic waves capabilities and maps produced give more classes and better thematic resolution for the classification of land cover classes. Suggestions are made for these two schemes to be reconciled and use the one which gives the best GHG calculated results for inventories for Inter-Governmental Panel on Climate Change (IPCC) Reporting*

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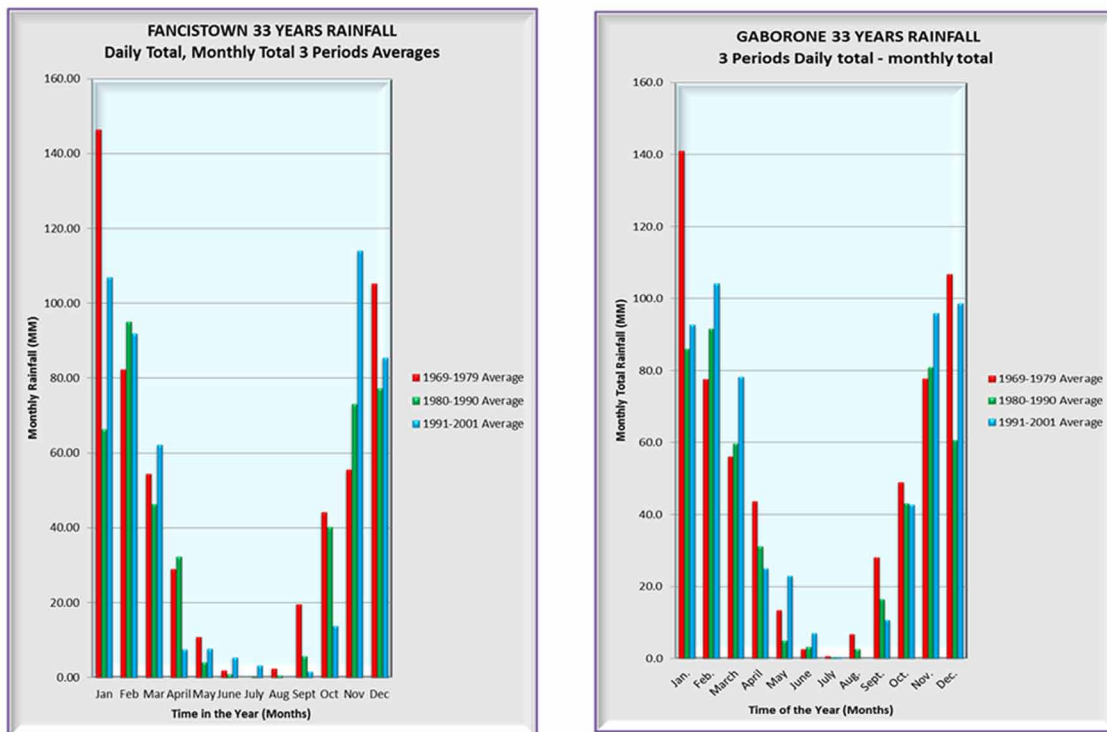
## INTRODUCTION

International Non-governmental Organizations (NGOs), such as the Sierra Club, the World Wildlife Fund (WWF), and Greenpeace played a major role in sensitizing communities in the preservation of endangered animal species and their habitats; the conservation of their environments; and the conservation of natural resources. “*Save the Whales*” slogan was echoed all over the globe by the newly formed Greenpeace in early 1970’s. Scientists through their research had long ascertained that the indiscriminate use of Earth resources is the root cause of depletion of natural resources; global ecological crises; global warming; ozone layer depletion; land degradation; desertification; and pollution. Also, to combat that the land cover mapping is made as a UNFCCC protocol on issues relating to reducing emissions of Green House Gas (GHG) from deforestation in developing countries. All these are precursors of climate change.

The United Nations (UN) answered these concerns by the creation of International Panel on Climate Change (IPCC) outlined in the UN General Assembly Resolution 43/53 of 6th December 1988.

IPCC’s mandate is to review and make a collective setup of all scientific skills and knowledge on climate change; its social-economic impact on communities’ livelihoods and to come up with climate change adaptation and mitigation strategies. IPCC culminated into the Framework Convention on Climate Change (UNFCCC), a freestanding UN entity which was signed in 1992, and came into force in 1994

Figure 1. Botswana rainfall decrease for 33 years’ time period



Botswana Climatic Change – Rainfall Decrease for the Cities of Francistown & Gaborone from 1964 to 2001 Time Period

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