CHAPTER 1

INTRODUCTION

1.1 GENERAL

"The value of soil is rarely appreciated because of its seemingly universal abundance. Except where covered with buildings and roads, or in rocky places in spectacular parks, the entire land surface appears to be covered with soil. Only a small fraction of soil, however, is suited for cultivation. It is this small fraction upon which an ever-expanding civilization must depend most for food and fibre" (Follet, 1989).

Agriculture is regarded as the heart of African economies because a large percentage of the population earns their living from agriculture (Bruton and Gess, 1988). Provision of the staple food and even the food that is required to meet the basic dietary needs must be accomplished through sustainable farming on the limited resources. It is therefore important for the people to look after their agricultural resources in order to ensure sustainable agricultural production. It has been realized that far too little attention has been devoted by farmers to soil protection against erosion and maintenance of soil productivity through good cropping and grazing practices (Bennett, 1945). This has led to widespread erosion and denudation of the landscape. Generally people ignore soil erosion, they only see its destruction when they come across open dongas. Loss of soil through sheet or rill erosion is invisible to farmers. Through soil erosion both soil and water resources are destroyed as rivers and dams silt up, thus reducing their carrying capacity and large quantities of soil are wasted.

Soil erosion does not only leave the landscape with bad scars but it also reduces/lowers the fertility of the soil, reduces underground water supplies and silt up dams, and generally lowers farm income. Low farm income results in poverty and may lead to famine. Soil erosion is an unnecessary and unaffordable wastage of the productive land.

It is everybody's responsibility to increase agricultural production in order to meet the demands of the growing population and improve the rural income through trade with

urban markets, but the major problem facing the African continent is that the capacity of the land to support such production is in the jeopardy (IFAD, 1992). The major concern is the declining soil productivity and loss of whole productive areas, resulting in poor harvests, more work and less food for the farmers. This scenario is also true for the Eastern Cape, which is the province with by far the highest annual soil loss per unit area in South Africa (CSIR Environmental Services, 1992).

Soil degradation is worsening poverty and marginalization of the rural people in the Eastern Cape and hunger has gained territory in the region. Unfortunately very few members of the general public or farmers in the Eastern Cape province are really aware of the implications of this situation and committed to soil conservation. The current agricultural practices are not conducive to the conservation of these precious resources.

To reduce the acceleration of the decline in living standards of the rural population, soil conservation must therefore be central to strategies of agricultural and rural development in the province. Experience in other countries in Africa with soil erosion problems, e.g. Burkina Faso and Niger, has shown that community-based soil conservation approaches and strategies are the most efficient to combat soil erosion in traditional small scale farming areas (IFAD, 1992).

1.2 OBJECTIVES OF THE PRESENT STUDY

The three main objectives of the present study were:

a. To present an overview of the soil degradation/conservation status of the former Transkei and Ciskei areas in the Eastern Cape and the causes of soil erosion in these parts of the province (Chapter 2).

b. To compare the situation regarding soil degradation in three communities in the former Transkei and Ciskei characterized by different degrees of degradation and to identify reasons for the differences (Chapter 3).

c. To study the possibilities of using a community based approach to achieve successful soil conservation in seriously degraded rural areas (Chapter 4).