1. Introduction

The Brazilian cerrado is the second largest biome of tropical South America (Figure 1). Although deforestation of the cerrado landscape has received much publicity, there is little debate or understanding of its role in the larger environment. The removal of vegetation is the dominant factor causing the loss of biodiversity, deforestation, and land-use change. The socioeconomic factors, however, are not well understood, which is important for the conservation of this biome.

The need for expansion of more agricultural areas (and thus deforestation) has been driven by the need to feed the increasing population of Brazil, which is already the largest in South America. The expansion of the agricultural sector is often accompanied by changes in land use and changes in landscape composition. This can lead to a loss of biodiversity and a decrease in the quality of the environment.

Objectives

The specific objectives are:
1. Quantify the areas of land productivity patterns using multiple resolution satellite sensors.
2. Assess the extent of change in vegetation for significant vegetation change in Brazil and in the Cerrado.
3. Assess the effects of fire and deforestation on vegetation and land-use change in the Cerrado.
4. Assess the effects of deforestation and forest growth on the cerrado.
5. Assess the historical and future scenarios of deforestation and forest growth in the cerrado.

In this paper, we have concentrated on objectives 1, 2, and 3, which are discussed in Section 2 below.

2. Results and Analyses - year 1

2.1. Quantify the areas of land productivity patterns using multiple resolution satellite sensors.

2.2. Assess the extent of change in vegetation for significant vegetation change in Brazil and in the Cerrado.

3. Publications


