

18 EIA Performance Standards and Thresholds for Sustainable Forest Management in Ghana

Edward K. Nunoo

Brandenburg University of Technology (BTU), Cottbus

18.1 Introduction

Forests and its ecosystem dynamics constitute nature's most bountiful and versatile natural resource. Tropical forests epitomises its diversity. These are vital assets that provide a wide range of environmental, economic and socio-cultural benefits and services to local communities, national economies and the global environment at large. However, unsustainable use of the resources over the decades has now been a major cause of global concern. Areas under tropical forest continue to dwindle at alarming rates to the detriment of its productive and protective functions.

The annual rate of forest cover destruction worldwide is in the domain of 40-50 million acres (ITTO 1998). Ghana's share of 8.2 million hectares, a century ago, reduced to only 1.6 million hectare in 1998 (Kotey 1998). With the shift in paradigm from unsustainable harvesting practices to *not harvesting the capital of the forest stock*, a clear signal is being sent to stakeholders that any forest project likely to have significant impact on the environment needs to be assessed.

Deliberations on how to maximize utilization of forest resources and at the same time safeguard its protective and productive functions have illicit various scientific technologies to aid in its protection, and environmental impact assessment (EIA) is one of such advances. EIA of forest projects, where performance standards and thresholds are established, is thus seen as a hallmark in the measure of successes towards sustainable forest management (SFM).

This chapter examines implementation of the EIA process in establishing thresholds and standards for sustainable forest management (SFM) with emphasis on forest projects in Ghana. Although a relatively young field in Ghana, application of the EIA process has produced major environmental breakthroughs paramount to the sustainable development objectives of the country.

18.2 Country Background

Ghana is located on the West Coast of Africa with a total area of 239 460 sqkm (CIA 1994). In the world economic order the country is classified into the 'developing' statuses with a real growth rate of 5.9 % and a per capita income of \$ 2000. Agricultural activities dominate the economy with the sector employing 70 % of the rural labour force. It supplies 90 % of the country's staple food, contributes 45 % to the gross domestic Product and accounts for 55 % of exports. The population is estimated at 20 million based on year 2000 population census figure of 18.9 m with an inter-censal growth rate of 2.7 %. Forest resource harvesting is a way of life among forest communities although the degree of association varies across the ecological zones. Timber exploitation for commercial purposes has been an integral part of the economy since the colonial era. However extraction reached its climax (Senamede 1995) during the Economic Recovery Programme in the 1980s as logging was perceived to be a panacea for resuscitating a virtually battered economy. Although it raked in some immediate needed assistance in terms of giving a facelift to the national coffers, cost to environmental damage is yet to be fully assessed.

Following after cocoa and mineral export proceeds, the sector still accounts for 6 % of GDP and employs over 70 000 people (Asabere 1987) annually. It also meets all domestic timber requirements and supplement 70 % of domestic energy needs in terms of fuelwood consumption.

18.2.1 Resource Utilisation and the Environmental Problem

Forest resources are mainly classified into savannah woodlands in the north and the tropical high forest zone (HFZ) to the south. The HFZ are all found within reserves with only half of the estate in favourable conditions (FAO 1995). Off reserves they are seen as small patches of forest or trees on farms. They contain most trees of economic value and rich mineral deposits. The region also happens to be the most densely populated (Ghartey 1990).

Interest in the use of forests in Ghana reflects differences in the people's way of life. Whilst scientist and environmentalist argue for its carbon sequestering and conservation, farmers are waiting to carve off a piece of it into ploughing. Forests are also catching up very fast as alternative resources for satisfying recreational needs within a booming wood industry.

The quest for a progressive socio-economic growth and development has brought with it remarkable damage to the country's landscape and untold hardship to forest communities. The most affected are people who happen to live below the poverty line (Ghartey 1990) in environmentally sensitive areas where their economic activities often compromises environmental vitality. The magnitude of pollution is seen in annual field productivity losses (0.5-1.5 % of GNP), sustainable logging potential, erosion prevention, watershed stability (IUCN 1988b), carbon sequestration and loss of potential new drugs as a result of endangered genetic resources.