
Forest Fires In Trinidad And Tobago - A Background

Forestry Division 2000



Trinidad and Tobago has a well-defined dry season, which normally extends from January to May. Each dry season, numerous fires occur on our hillsides, along roadways and throughout the country biological landscape. The number of fires and the extent of damages they cause, vary from year to year depending on the existing physical and environmental conditions of the land, and the severity of the dry season- essentially the amount and distribution of rainfall.

These fires, when they occur, destroy and damage vegetation, animal habitats and threaten lives, property and economic activities. The most severe consequences are experienced in the rainy season, months after the fires have actually burned the forests. This is realized in severe floods, which occur when the rainfall directly impact upon the soil instead of a protective forest cover and the runoff exceeds the rate of infiltration into the soil. The unprotected slopes are further aggravated by inappropriate slope cuts, farming practices, housing construction and inadequate drainage systems that lead to landslides that cut off transportation routes resulting in traffic disruptions, and structural damages to buildings and property.

For example, in November, 2000 communities located along the plains of the Northern Range experienced severe flooding with widespread damages to buildings and property. In this period, there were also over 200 reported landslides on hillsides and along roadways. These landslides were mainly concentrated on the Northern Mountain Range of Trinidad, and along steep slopes in the southern part of the island.

This type of flooding which usually occurs in low lying areas often leads to destruction of crops and livestock, silting up of waterways, blockage of roads by debris, mud and water. Lives may be lost as a result of drowning, and public health hazards may also arise. This amounts to immense economic losses.

Economist Knolly Beckles in his report on the agricultural sector (FAO Project / CDERA 1999) estimates that agricultural losses owing to flooding for the period 1993- 97 was \$3 million T.T. dollars. The Forestry Division Trinidad and Tobago in its report on the 1998-1999 Fire season reports that for the period 1987- 1999, there were 4197 fires with 57,557 hectares of land burnt. This equates to an average of 321 fires per year, with 4428 hectares burnt, and an average fire size of 11 hectares. During periods of prolonged drought / dry season the incidence of forest fires increases as demonstrated in 1987 – 502 fires/ 21,420 ha lost, 1995 – 516 fires/ 7,245 ha lost and 1998 - 764 fires/ 10,289 hectares lost. (see appendix 1)

The two vegetation types most prone to fires continue to be grasslands and teak plantations. The majority causes of fires are malicious acts and the burning for agriculture. Approximately 54 % of the areas burnt are reported as due to fires which have been maliciously set, while agriculture accounts for 17 % of fires.

Forest fires destroy and damage trees and young regeneration. This can have severe implications on the availability and cost of raw materials for the construction industry. In many cases wildlife may be killed as a direct result of the heat, and habitats and catchment areas are destroyed. Forest cover is lost and soil is exposed to water erosion.

The watersheds which are burnt display an unsightly appearance. The atmosphere becomes polluted with dust and smoke. Soil organisms are destroyed and soil structure and properties are adversely affected. Moreover ecological functioning can be significantly impaired and micro climatic conditions altered thereby affecting the survival of microorganisms and the life form that depend on them.

Forest Fire Prevention

The Forest Fire Season is from **December 1 to the following June 30**

The Forestry Division implements fire suppression and prevention activities and reforestation programmes in the dry and wet seasons respectively. Public is asked to assist in preventing forest fires.

If you see a forest fire call Fire Services **990** or Forestry Division **622-3217 662-5775 643-9595 657-7256**

Obtain a Fire Permit before you light. Under the Agricultural Fires Act (Ch63:02 Act 20 of 1965) a permit is required to light out door fires from 1 Dec-30 June. Permits can be obtained from the nearest Fire Station. **Failure to obtain a permit carries a fine of \$1500 and 6 months imprisonment.**

Reduce available fire fuel. Make compost instead of burning leaves grass and vegetable peelings. The decomposed litter makes an excellent fertilizer.

If you must burn **get a permit** and follow these guidelines:

- Burn only during period specified on the permit
- Avoid leaving cut trees bushes or brush lying around. Discard safely to reduce fire risk.
- Have water readily available to extinguish a fire
- Don't burn during periods of high wind or hot dry periods
- Have extra help available to assist in controlling fire
- Clear fire trace around the area to be burned
- Burn small amounts at a time

For additional information contact nearest Fire station, fire guardian or forest officer. Community groups can and are successfully involved in fire prevention, suppression and reforestation programmes.

Share awareness of the negative effects of forest fires on the environment with friends and neighbours. Encourage them to be part of the forest protection programme.