

IMPACT OF CONFLAGRATION ON BHIVGHAR FOREST OF RAIGAD DISTRICT

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Abstract

The forest resources of Bhivghar-Raigad are in trouble due to frequent forest fires. The important thing is that 90% of these forest fires are man-made. Deforestation caused by forest fire not only damages natural resources, but also threatens the survival of flora, fauna and wildlife. Therefore, it is necessary to undertake a massive public awareness campaign by the Forest Department along with NGOs to prevent deforestation. Each and every year people of this area blame forest deterioration. A frequent fire on a large scale causes an effect on plant diversity. Attempts will be made to study the selected area for observation and effect on forest fire on hills. The paper also deals with how to conserve, manage the forest fire and save plant biodiversity.

Keywords: Conflagration, Bhivghar Forest, Raighad, Forest fires.

INTRODUCTION

Fire has been burning plants since early Devonian and was common in mosaics; it is common in the Cretaceous period where angiospermic plants spread to cover the world. The spread was facilitated by intrinsic angiosperm properties that altered fire regimes in two fundamental ways. The first was to promote more frequent fires than the slower-growing gymnosperms that they replaced. The high productivity of angiosperms would have fuelled more frequent fires, while reproductive innovations allowed for more rapid recovery, particularly in upland areas too dry for ferns. The evolution of flammable grasses is the latest expression of angiosperm innovation, generating even more frequent fires capable of carving into forests, particularly after the spread of C4 grasses. The second major impact of angiosperms on fire was the development of forests. Fire-promoting and fire-excluding ecosystems are a product of angiosperm innovations. (William 2010). The systematic identification and evaluation of the potential impacts (effects) of proposed projects, plans, programs, or legislative actions, relative to the physical-chemical, biological, cultural, and socioeconomic components of the environment. Using this as a base, a working definition for the environmental impact of fire can be defined as: the systematic identification and evaluation of the potential stressors, of proposed projects, existing, built and natural, systems and their contents, resulting from an adverse, unwanted fire event, in terms of the physical-chemical, biological, cultural, and socioeconomic components of the environment. The adverse effect of fire is to contaminate air, soil and natural environmental land /noise pollution. Fire include general pollutants indicators such as metals particulates, polycyclic aromatic hydrocarbons, chlorinate, dioxins and furans, brominated dioxins and furans, polychlorinated biphenyls and polyfluorinated compounds (Turke 2010).

Fire is an ecological shape-shifter. As a reaction, not a substance, fire is what its circumstances make it and synthesizes its surroundings. Its taxonomy reflects this diversity, with the various types of fires distinguished by the combustibles they feed upon. A ground fire burns organic soil.

A surface fire moves through grasses, forest litter, and shrubs. A crown fire flares through the canopy of brush and woods. A single burn may exhibit all these kinds of combustion. A single place may experience a medley of fires across seasons and years, varying in size, frequency, and intensity. (Pyne 2010) Fire can be deadly, destroying homes, wildlife habitat and timber, and polluting the air with emissions harmful to human health. Fire also releases carbon dioxide—a key greenhouse gas—into the atmosphere. Fire effects are influenced by forest conditions before the fire and management action taken or not taken after the fire, and may be long-lasting.

MATERIAL AND METHODS

The botanical survey were conducted during the month of 15 Aug 2019 and 23 sep 2021 during that time we collected different medicinal plants from save and conserve forest but there is unconcerned forest is there hill, some of the plants were not observed we ask the peoples for conservation, local peoples showed me two hills conserve forest and un conserved forest. There is drastic changes in the conserve and unconcerned forest. Attempts will be made in this study to select conservation forest and unconcerned forest of Bhivghar from Raigad. The collected plants specimen were preserve and maintenance of specimen in herbarium will followed technique (Jain 1977) (Singh et.al (2008) (Rao et.al 1990) all collected specimens was correctly identified with flora of Kolhapur district (Yadav et.al 2002). All collected specimen deposited and preserve in department of Botany in S. M .College Poladpur Raigad, although a number of reports are available of medicinal plants of different districts in India (Pandey 2002) (Pandey and Rout 2006), Raut and Pandey 2007). (Jain et.al 2001)



Fig No 1 Shows fire effect on hill.

RESULT AND DISCUSSION

The forest resources of Bhivghar-Raigad are in trouble due to frequent forest fires. The important thing is that 90% of these forest fires are man-made. Deforestation caused by forest fire not only damages natural resources, but also threatens the survival of flora, fauna and wildlife. Therefore, it is necessary to undertake a massive public awareness campaign by the Forest Department along with NGOs to prevent deforestation. From the conserved forest following plants observed *Abrus precatorius*. Linn., *Alternanthera sessilis* L *Amorphophallus campedanulatus* Den. . *Cassia obtusifolia*. L. *Dioscorea bulbifera* L, *Colocasia esculenta*.L. *Dioscorea bulbifera* L, *Sida acuta* Burm

F. Tinospora cordifolia Willd. Miers, *Leucaena leucocephala* (Lam.) de Wit, *Carissia Caraldus* L, *Delonix regia* (Hook.) Raf. *Syzygium cumini* L. *Butea monosperma* Ficus *racemosa* L. *Carissia Caraldus* *LBombax ceiba* L, *Gliricidia-sepium*, *Selegalia catechu* and not observed on fire hill forest.

USE DIFFERENT STRATEGIES FOR THE CONSERVATION OF BIOLOGICAL RESOURCES

Establish protected areas, restore degraded ecosystems and establish ex-situ conservation facilities, establish training and research programmes for the conservation and sustainable use of biodiversity. Educate the public and awareness of conservation. Regulate access to their own genetic resources, and wherever possible, grant other parties access to genetic resources for environmentally suitable.

Encourage technology and biotechnology transfer, establish an information exchange between the parties on all subjects relevant to biodiversity, promote technical and scientific cooperation between parties to enable them to implement the convention; provide financial resources to carry out the requirements of the convention.

The forest fires dry up the trees and alternatively the wood can be easily cut down. In recent times, there has been another objective emerging for these forest fires. Fire helps to create a number of hunting grounds for hunters. When Forests are set on fire, the situation becomes favourable for hunting wild boars as well as wildlife. Once the fire breaks out, the wild animals start running in the opposite direction of the fire. So it was easy to hunt this wildlife. In Karjat, Mangan area, forest fires are set to pick moha flowers. Moha flowers can be easily picked from the burnt grass.

Wildlife survival is also threatened. The animal is being hunted. Initially limited to the jungle, this issue is now becoming a headache for the surrounding area. Uncontrolled forest fires are now beginning to infiltrate villages near forests. Tribal farms are falling prey to these forests. Various parts of Mahad, Poladpur, Pen and Alibag tehsils of Raigad district have experienced the same in the last few years due to uncontrolled forest fires. Even the human beings who have damaged the roots of nature are now becoming victims of nature's anger. Number of houses of tribal people has been burnt down and the lives of their families have been ruined. Along with the house, grains, clothes, utensils, chickens and goats have been burnt to ashes. Even men and women have died in a wildfire in Warandh Ghat area of Mahad. Therefore, it is time to take the man-made problem of forest fire in Raigad area very seriously. Now is the time to implement concrete laws for the protection of forests. Tightening the bar of law alone will not solve this problem, but it is necessary to undertake a comprehensive public awareness program for the protection of these forests. People need to be made aware of the importance of forests and the harmful effects of forest fires on human life. For this, it is necessary to take help of social organizations like Hirval, Sahyadri Mitramandal and Nisargamitra Sanghatana have undertaken some public awareness programs. But it is high time that these awareness programs should be intensified and the movement to save forests from forest fires should become a people's movement. Otherwise, it will not take long for the forest resources of the green Raigad to be endangered.

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