

**FORUM: ECOSOC** 

ISSUE: Risk Reduction and Recovery in the Aftermath of Forest-fires Worldwide

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### **Introduction:**

Forest-fire is one of the most severe and fatal natural disasters occurring all over the world. It seems like there are not many forest-fire occurring now comparing to previous years. Even though the world is developing with advanced technologies, there are still more forest-fire happening out of control now. In 2020, there were about 42 thousand forest-fire. Compared to the last year, there were 20 percent more forest-fires and 40 percent more than in 2017. Unfortunately, climate change is the major factor in the increasing world temperature. Strong lightning and human fire activities all cause severe forest-fire over the world. Thus, a lot of forest fires have been blamed on people and companies by cutting the forest for industry and agriculture. The cruel disaster keep occurs with countless damages and terrible consequences. Moreover, forest-fires burn millions of acres with some unrecoverable forests. Also, unstoppable forest-fires cause dangers to animals, plants, and human beings, especially for extinct animals and plants living in the forests. Besides, forest-fires have huge impacts on economics by damaging millions of acres that are national properties. Depending on various geographic conditions, forest-fires mostly occur in dry areas like the United States and Australia. In 2020, Arizona and California in the United States suffered a lot from the massive forest fires. Global fire experts provide possible resolutions to resolve the problems. Despite those past efforts, issues in terms of the forest fires are still causing worldwide hazardous disasters.

# **Key Terms:**

#### Acre

A unit of land area, one acre equals 4,840 square yards.

# CDC (Civil Defence Commission)

A commission to make plans and conduct operations to deal with all types of disasters in Guyana.

# CDEMA (Caribbean Disaster Emergency Management Agency)

An inter-regional supportive disaster management network of independent emergency units throughout the Caribbean region.

# CDM (Comprehensive Disaster Management)

An integrated approach to disaster management manages all-hazard through prevention and mitigation, preparedness, response, recovery, and rehabilitation.

### **Combustible**

Able to be inflamed easily

# DPI (Department of Public Information)

It is a resolution established by General Assembly resolution 13 (I) to promote global awareness and understanding of the work of the United Nations.

## **Photosynthesis**

The process by which green plants and other organisms using sunlight to synthesize foods from carbon dioxide and water.

#### Prioritization



Treat something more important than other things.

## USFA (United States Fire Administration)

The lead federal agency for fire data collection, public fire education, fire research, and fire service training.

## U.S. Forestry Service

An agency of the United States Department of Agriculture manages national forests and grasslands, including 193 million acres of land. The United States Forest Service works in the Democratic Republic of the Congo with local communities to develop fire management.

# **Major Parties Involved:**

#### Australia

Forest-fires in Australia are not rare but serious. Climate change and extreme weather conditions have affected the forest-fires in Australia with billions of animals' deaths and damages. According to NASA data, Australia has released 350 million tons of CO2 into the atmosphere from 2018 to 2019. In the worst fire season in Australia, the fire burned from last July through March.

#### Canada

Canada is one of the countries where many forest-fires are occurring every year. According to the cold weather and dry conditions in Canada, the country suffers a lot of damages from forest-fires every year. Thus, Canada Wildfire took part in the wildland fire research network to do wildfire research across Canada and support the next generation of wildland fire professionals with innovative wildfire management.

# Guyana

Guyana is also involved in this event. Countries in South America mainly have dry weather causing forest fires, especially in Guyana. Currently, forest fire points are closely being monitored and mapped by the Guyana Forestry Commission (GFC). The Civil Defence Commission (CDC) is also working through the resolutions of this issue in Guyana.

## **United States**

The United States is one of the main parties for the risk reproduction and recovery in the aftermath of forest-fires worldwide. The United States of the U.S. Forestry Service manages lands in developing countries. They provide management to improve fire management in local communities. Also, the United States Fire Administration (USFA) is an essential role, they collect data to provide analyses on the status of the forest-fires in the United States.

# **Previous Attempts to Resolve the Issue:**

In 2014, the University of South Wales published a "Review Article" on forest-fire detection techniques. The most common systems had to manage forest-fires. The system also had fire weather forecasts with the estimates of fuel and moisture. The world forests had watchtowers to monitor fire with optical smoke detection to resolve the issue. Then, the firefighters near every forest had water tankers and spotter planes. Previously, the government provided training and educations through Fire Watch for every house owner to prevent risks from forest fires. Also, the governments had arranged services from fire preventions and protections. The governments of the countries with severe forest fires also contributed a large amount of money to build and develop the systems in the world forests.

#### **Timeline:**



(Year)	(Event)
1950	Fire suppressions have changed the extent and role of fire in the landscapes.
1982	The forest-fire history of Mount Rainier National Park was documented by Hemstrom and Franklin.
1983	A large fire burned 3.6 million hectares of tropical rainforest in East Kalimantan, Indonesia.
1987	The largest forest-fire in China occurred in Heilongjiang province, burned 1.33 billion hectares of boreal forest.
1999	The cost-effectiveness of such practices and impacts have been intensively studied and debated by the United States.
2001	The Food and Agriculture Organization (FAO) Forest Resources Assessment 2000 (FRA 2000) reported on regional data for the situations of forest-fires.
2002	The United States and Australia have brought back the issues raised about the need for prevention through the use of prescribed burning in forests as well as in wildland-urban interface areas.
January 2017	The agreement on the first UN Strategic Plan for forests was at a special session of the UN forum on forests that provides an ambiguous vision for global forests in 2030.
20 April 2017	The UN Strategic plan was adopted by the UN Economic and Social Council.
27 April 2017	The UN Strategic plan was subsequently adopted by the UN General Assembly.
2018	The Department of Public Information (DPI) completed a Comprehensive Disaster Management (CDM) audit through a consultative process with technical and financial support from Caribbean Disaster Emergency Management Agency (CDEMA). The audit assessed all phases of the disaster management cycles.
2019	The Gospers Mountain fire. The devastating forest-fire and the world's biggest mega-fire did not end until 2020. Also, the "mega-fire" directly killed 1 billion animals and burned about 30 million acres.
2020	The Guyana commission started to support the office of climate change in the country's disaster recovery posture. They were also involved in the technical and financial assistance to develop a National Disaster Recovery Policy.

# **Possible solutions:**

Forest-fires can be prevented in more effective and efficient ways. Firstly, the governments in the world and the United Nations can support and improve the forest-fire prevention systems. Especially, the government of the



Northwest Territories is able to provide forest-fire management services in forested areas. Those institutions can provide and insult optical sensors and digital cameras for fire detection. The development of wireless sensor networks is automated early recognition and warning of forest fires. Moreover, the forest-fire prevention systems have advanced weather stations with more sensitive lightning detection sensors and power systems.



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