## COP2030

Dear delegates,

Welcome to the 8th edition of the TJMUN. We, Fernanda Esquivel Vila and Ana Paola Badía de la Peña, are so proud to be your moderators and chairs this year. We are going to try to make this edition unforgettable by having an excellent time, learning from each other, but mainly about the importance and commitment we all have to act upon the threat of climate change. We have been participating in the TJMUN for many years so we can assure you that this model will be unique and full of surprises.

We have a keen interest in our COP2030 committee because we consider climate change essential and necessary. We have to take action as quick as possible for our world not to result as we picture it in this committee. We want to reflect that the world we propound by 2030 in this committee is based on actual facts of what will happen if we continue to treat our planet the same way as today. Explore your ideas, be creative but realistic, and remember that all the best solutions come from innovation and creativity. We are looking forward to hear your proposals and see you. Thank you so much for choosing COP2030, we promise you would not regret it.

Sincerely,

Fernanda Esquivel Vila and Ana Paola Badía de la Peña.

## COP2030

#### Introduction:

From November 30th to December 2015, COP21 took place in Paris. Representatives from each participating country reached a universal agreement with the aim of keeping global warming below 2°C. A year after this agreement, COP22 took place in Morocco. The results were poor, some evidence is that in 2016 in Latin America, eleven "signatory" countries broke the agreements reached in COP22 by not regulating emissions, which resulted in the world temperature increasing 2°C. In the European Union, only five of the 27 members states successfully reduced CO2 emissions. This lack of action has lead the planet to its actual state. Now in 2030, CO2 levels have caused global temperatures to reach 7°C more than 2016. This has brought severe environmental consequences to the world.

# Topic Outline:

According to multiple studies conducted by the World Health Organization (2030), hundreds of thousand deaths have been caused to climate change. The main causes are malnourishment, vector-borne diseases, diarrheal disease, exposure to unbearable heat, bad quality water, and natural disasters of extreme levels of danger. According to the World Bank there are more than hundred thousand people living in poverty around the world.

#### America

Due to the increase of CO2 levels, pollution, and rising sea levels, there have been several changes in rainfall pattern, and almost all the glaciers have melted. Also, there have been many changes in agricultural regions. As a consequence, diseases that were virtually eradicated are returning stronger and more evolved, causing damage to people and animals.

Due to the melting of glaciers, 70 million people do not have access to water. The Mesoamerican region, for instance, is currently suffering from a serious water deficiency. Every country in Central America is suffering losses of coastal land and biodiversity, saltwater intrusion and damage to coastal infrastructure.

**Costa Rica:** The consequences of climate change on Costa Rica are reflected in the lack of water in the country, causing in itself a lack of electrical power and increasing the risk of vector-borne diseases such as dengue and malaria. which kill many people every year.

**Cuba:** In Cuba, the sea is rising in coastal areas and is causing a severe drought. The decline of the country's water, both surface and underground deterioration of water quality caused seawater intrusion, the lack of water availability and increasing human demand. These are provoking a general deterioration of the environment such as the loss of land and low-lying coastal biodiversity. Consequently, impoverishing the fertile properties of the soil, and reducing agricultural props lowering to the quality of the overall national diet.

Colombia: Bogota roads and houses are having problems due to frequent withstand storms, storms and even hail. In the case of Nariño, Quindío and Risaralda the increase in the country rain is causing landslides. The veredales water and road infrastructure in mountain areas and flooding in flat areas also increase damage. The agricultural situation is also bringing many addiction problems as they are facing across the country to the movement of pests on monocultures. The increase in temperature, coupled with changes in land use has increased desertification. They also face declining productivity of agricultural soils, loss of sources and watercourses and heat waves. Similarly, increases in the number of mosquitoes that transmit the dengue virus and chikungunya have taken the life of thousands of people.

**United states:** Suffers from rise in the sea level causing several floods and shoreline erosion deeply affecting the soil. This affects citizens living in coastal areas, several homes have been destroyed and people are systematically loosing their homes. The coastal ecosystems are dying due to the contamination of the ocean surrounding the country. People are dying due to the constant heat waves,

water-borne diseases, and water quality, respiratory illness, air pollution and vectorborne diseases.

**Mexico:** Mexico is suffering from severe air pollution. In certain areas within Mexico City, the government recommends people to wear masks when leaving their. Many states that were already suffering from a lack of water have now run out of their own supply. Climate Change has caused an increase in the amount of rain, resulting in constant floods and rising sea levels. Diseases are not extremely common among citizens, especially in big cities. Nonetheless, viruses like Zica have reached Mexico and have become one of the leading causes of dead.

Canada: Canada has had one of the highest rates in temperature increase. Causing irregular rain patterns, snow and ice. Moreover, there is a higher risk of extreme weather events affecting the region such as heat waves, heavy rainfalls and related flooding, dry spells/droughts, and forest fires. Sea levels around the Canadian coast have risen due to the melting of the ice caps, and many species have been extremely affected due to extreme changes in their ecosystem. Even though Canada is one of the most bio-diverse regions, it faces great ecological challenges that affect its flora and fauna.

Brazil: Unfortunately, 80% of the Amazon Rainforest, better known as the "lungs of the world" has been deforested, bringing terrible consequences around the world. Lumber activities have caused a mass release of greenhouse gases, which has rapidly increased CO2 levels in the atmosphere. Other chemicals like Sulphur Dioxide or Nitrogen Oxide rise to the atmosphere, which later fall as acid rain producing severe damage to the soil and delicate ecosystems. Acid rain has killed millions of freshwater fish by polluting their habitat, as well as plants and animals that depend on neutral or alkaline conditions to live. Activities such as hunting, destruction of habitat due to human activities, and the introduction of foreign species have diminished the number endemic ones, thus provoking a huge decline Brazil's natural fauna. The coastal areas have also suffered from constant flood all the time due to the rise of the sea level.

El Salvador: Rainfall is scarce across large swathes of the country's territory resulting in coastal flooding and mountain landslides. El Salvador is the largest producer of geothermal energy in Central America. It has invested in renewable energy, including hydroelectric, geothermal, wind, and solar. However, El Salvador is the second most deforested country in Latin America: nearly 95% of native forests have disappeared since 1960. Forest and natural areas compose approximately 20% of the country's territory and land.

Argentina: Mild weather has made an impact on penguin population of Southern Argentina. Extreme weather and heavy rain have driven the total population of penguins to the edge of extinction. Autumn and spring have essentially disappeared, it seems that we go from summer straight to winter. The Upsala Glacier is clear example of how global warming is causing a fast meltdown of the Polar Regions. The Peninsula of Herminita for instance has virtually disappeared, while the territory surrounding is starting to flood as well.

# **Europe**

In Europe, the temperatures have increased, especially in the southern region. There has been a large reduction in rainfall throughout most of the continent, and inconsistent increases in the North and Northwest. Giving a result of the increment of intensity and frequency of heat waves and floods and changes in the distribution of infectious diseases affecting human health. Climate change alters ecosystems, therefore, diminishing endemic species of plants, while displacing many animal species to the north and to higher territories.

On the other hand, Southern and Central Europe are increasingly affected by heat waves, forest fires, and droughts. The Mediterranean area is a drier region, therefore undergoing increasingly severe droughts and fires in natural areas. Northern Europe is a more humid area and there are often winter floods. People are exposed to heat waves, floods, and rising sea levels.

**Austria**: In Austria, the temperatures have increased in tremendously, due to the impact of several heat waves during the past 30 years. It's estimated that since 2008

until now the temperature has increased by 1.5 C°. These changes have affected the Alps due to a systematic increase in temperature, consequently causing consistent decrease in the snow cover. This dramatic change is provoking major floodings, precipitation deficit, and severe convective storms.

**United Kingdom:** The effects on the United Kingdom are that there are mild winters caused by the Gulf Stream. There are warmer temperatures and the frost and winter cold are fewer than ever. London is the warmest place now, it's annual mean temperature is from 11 C°. In the south-east of England, the number of hot days had increased from 20 to more than 50 days per year. London has started to flood as sea levels rise, the capital is almost unrecognizable.

**Germany:** The temperatures in Germany are increasing rapidly and continuously. The strongest increase has been in winter and not in the summers, causing seasonal variability. Extreme heats and heat waves have had definite trend during the last decade. However, the ice days have not changed significantly.

**Iceland**: Iceland is on constant volcanic activity causing the shutting down of flights and spewing ash in the air. Thousands of people have already died due to the constant volcano eruption, also, the people who survived became homeless. At some sites in south and south-central Iceland, where five of the largest ice caps are located, ice is melting on a 60% decreasing the territory on the surroundings.

**Switzerland:** Switzerland reduced greenhouse gas (GHG) emissions 50 percent. The annual rainfall in Switzerland increased 240 mm. The daily and Heavy precipitation are lasting between 5 to 10 days increased in autumn and winter. Measured wind gust speeds have increased strongly in Switzerland. Ice covered rivers and lakes most of the year time. A recent analysis has revealed that 45% of the volume of Swiss glaciers is lost.

**Norway:** Westerly winds, moist air masses flow regularly in from the ocean are resulting in abundant pre-cipitation over most of Norway. The seasonal precipitation is increasing in the region extending to all seasons, with the largest increase during winter and spring, however it will scarce during the winter.

The Norwegian coastal glaciers have disappeared in a 90% killing most of the species of the area and generating floor which is ending with human lives and their places to live. Air temperature change is happening during autumn and winter.

**France:** France had an increase in autumn and winter rainfall between 35% and 50% and a drop in summer rainfall. France is currently experiencing a heat wave, which is now extending into its 8th year. France has many flood problems within it. There has been an uncontrolled deforestation on an 80% of its forests, causing severe damages in the country like the increase of CO2, also damaging natural habitats, endangering the existence of dozens of species.

#### Asia

The sea level has risen 30 centimeters, causing massive floods in cities, penetration of saltwater into low lands and coastal erosion. The Mekong river in Vietnam, is one of the many examples of the effect of salt water in low croplands, due to the rising sea levels, the river has now salt water. The rice industry has already lost 11% from current levels of their crop production.

At the same time, the increase in the intensity of storms is likely. A significant part of the population now lives in low areas, the majority located in the east, southeast and south Asia. They live in dangerous Manousos land and islets, which are now flooding, severe typhoons, other extreme weather events and the rise of diseases. Which have already taken and put in danger many human lives. Forest fires, droughts, are producing acrid plumes of smoke and other factors have already caused heavy air pollution in cities across Southeast Asia.

**Japan:** It has experienced frequent heat waves, intense rains, strong typhoons and even snow cover. This is causing drastic effects on public health, agriculture, water, and wildlife. The 30% of coral reefs have been lost already, and the rice yields have decreased into the 40% in the south and center.

**People's Republic of China**: It's suffering from rising sea levels, glacier retreat, and air pollution. All of this has effects on the population's health and in the economic

development, having a worldwide impact. For example, in the agriculture, the warming in the region the wheat yield has reduced to a 3 to 10%. Also, some regions are exposed to higher Malaria transmissions. People cannot go out without masks on their faces.

Russian Federation: Cold temperatures in Russia have changed dramatically, since there has been a systematic rise in temperature levels. It has increased 2°C from 1980 to 2030. There are higher air temperatures, while there is a decrease in ice cover, contributing to the rise in sea levels. A significant change was that the surface of the water of the Barents Sea is 6 degrees C° warmer than what it has always been.

India: There are spells of hot weather frequently and are covering many areas. There is high-temperature climatic regimen provoking a negative impact on agriculture. There are now considerable irregularities within the rain patterns; India now goes from heavy rain periods to severe droughts, most commonly in the northwest region. Crop yields are falling significantly because of the extreme weather changes.

**Sudan:** Most of the land has changed in temperature and precipitations. The regular annual temperature has now reached 47° C, which is causing stress on agricultural production. Extreme weather changes are also a danger for society, since diseases proliferate and contagion is more viable. Food production is determined by rain patterns, and each year the rainfalls are becoming scarce in some parts affecting agricultural production cycles.

### **Africa**

Deforestation in the continent is approximately 6 times higher than the global average. Temperatures are rising and causing a disastrous impact on the people, lowering water supplies, unreliable farming seasons, increased droughts, heat waves, storms, and flooding. In Africa, there have been calamitous effects because of the rising of sea levels and coastal storms around North Africa, some of them in Kenya. For instance, it is not surprising to see floods in the coastal city of Mombasa.

Because of this, the floods have contaminated drinking water storage, producing diseases and shortening water supplies.

**Nigeria:** It's suffering horrible climatic conditions, experiencing extreme droughts and sudden floods, during rainy season. Mainly, drilling activities by oil companies, have impacted the rural agricultural areas. There is an environmental degradation that can't be reversible, farmland is arid due erosion, while marine diversity and population life has been deeply affected due to pollution resulting from fracking.

**Chad:** Its ability to maintain a consistent food supply is weakening, crops can't be grown anymore, which in turn leaves no suitable land to graze animals. Rainfall levels have been systematically deceasing around 5 to 10mm per year. The stability of lakes has been compromised due to water extraction and irrigation, causing problems for the fishermen. In general, all effects of climate change have impacted the country in many respects.

### **Oceania**

Oceania has experience one of the biggest droughts in its history. The Continent's biodiversity and landscape have changed a lot, damaging the livelihood of millions of people. For instance, farmers exploit every drop of water, grain fields, pastures, crops, and vineyards are dried up. Consequently forcing dozens of species of animals to indiscriminately compete for resources. Sea animals are migrating due to Coral bleaching, which kills corals, and increases ocean acidity, making it harder for species to survive. In fact, migration of fish towards the poles has caused a great disruption of global fishing areas

**New Zealand:** Temperatures are rising due to climate change, especially in the Northern region. Temperature increases are worrying, as droughts (in the east) and floods are more common and severe. More importantly it has brought significant changes in rainfall patterns, impacting the ecologic balance of the country.

Australia: The extreme heat in Australia is causing longer droughts. Actually rainfall patterns have been severely modified, becoming problematic due to how heavier it

has become and how infrequent it is, and it happens to be more in the summer than in the winter.

#### Essence of the Debate:

Keeping in mind that this is a futuristic committee, we will focus on issues affecting our world in the year 2030. First of all, we should focus on the causes of all the issues presented above such as violated agreements based on (COP21), for example. Delegates must meet a resolution to attack the roots of this issue. We encourage you work together to find a prompt solution to control the effects climate change, which are damaging people, animals, plants, and the world's ecologic balance in general. Remember that you are ought to involve citizens in all aspects since this is an international emergency.

Finally, you have to create a fully detailed agreement including policies that will temper these issues, while ensuring full commitment of all signing member estates.

#### Questions to Consider:

- What will developed countries can do to support developing countries economically to reach the same sustainable goals?
- How countries will force to aim and maintain the agreements that will be done?
- How can diseases and malnutrition, be controlled by the underdeveloped and developed countries?

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