



CSPCMUN2017

International Atomic Energy Agency

Committee: International Atomic Energy Agency

Topic B: Securing Regions Near Radiation Affected Areas

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“Men make history and not the other way around. In periods where there is no leadership, society stands still. Progress occurs when courageous, skillful leaders seize the opportunity to change things for the better.” – Harry S. Truman

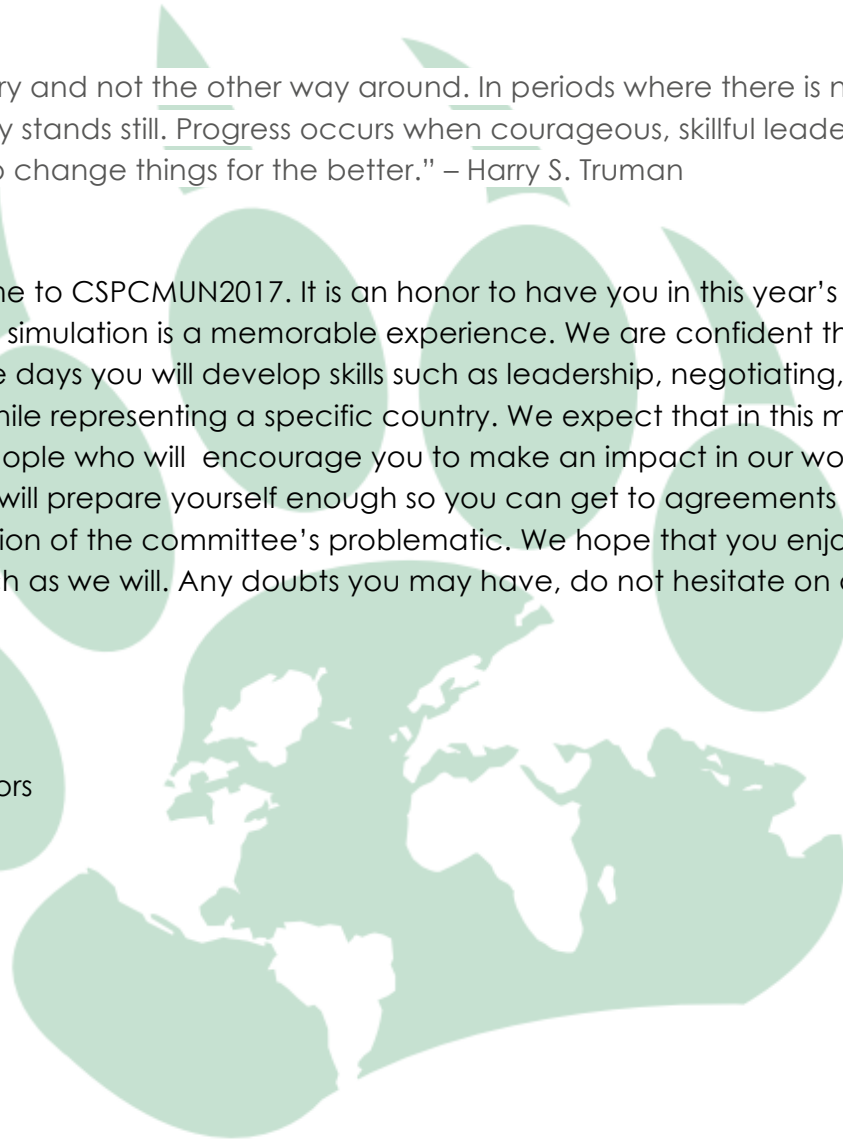
Dear Delegates,

First of all, welcome to CSPCMUN2017. It is an honor to have you in this year's edition. We hope that this simulation is a memorable experience. We are confident that during these three days you will develop skills such as leadership, negotiating, and critical thinking while representing a specific country. We expect that in this model you meet new people who will encourage you to make an impact in our world. I am sure that you will prepare yourself enough so you can get to agreements and help in the resolution of the committee's problematic. We hope that you enjoy this simulation as much as we will. Any doubts you may have, do not hesitate on asking us.

Sincerely,

Mariana Lazo

Chief of Moderators



I. Committee Overview

The International Atomic Energy Agency was founded in 1957 because an agency was necessary to give and promote nuclear peace to the countries that were being threatened by nuclear technology. IAEA's general director in modern days is the Japanese Yukiya Amano, he has been in the post since December 1st of 2009. IAEA works with the committee member states to secure them of being affected by the nuclear technologies that are manipulated by some countries. In the United Nations family, IAEA is known as the "atoms for peace".

IAEA also helps in the path of achieving the 17 Sustainable Development Goals with the use of nuclear techniques and helps with 9 of the mentioned goals. To achieve food security, the committee helps by using the techniques that are needed to protect farms and agriculture lands from insects. In generating clean energy, IAEA helps by using nuclear power, which is among the "lowest energies that doesn't need the use of carbon to produce and distribute it."

II. Topic Information

Many countries had been affected by wars in different ways but the most important and alarming one is that they had been affected by radiation. Everyone is exposed to radiation, the most common ones are the ionising and the artificially created radiation but countries can also be affected by the detonation of nuclear bombs or by the destruction of nuclear plants. The most known example is the one of Hiroshima and Nagasaki, where atomic bombs were dropped during World War II.

Belarus, a small country in Eastern Europe was greatly impacted by the Chernobyl disaster. Of the total radioactive fallout from the accident, 70% descended on one-fourth of the country's population. After the accident, the UN organizations sought different ways to provide immediate assistance to the persons that were exposed to massive radiation amounts. Even with all the assistance given by the UN, Belarus still suffers Chernobyl's disaster consequences.

A) History of the Topic

Higher energy kinds of radiation beyond ultraviolet light are used in medicine and we all get them from the air, the rocks, the space and the earth in low doses. This kind of radiation can be referred as ionising radiation and it can cause alterations in matter. Exposure to high levels of this radiation is very dangerous, so that's why it is necessary not to expose to high levels. We cannot feel this type of radiation but it is constantly measured because its exposure can be monitored with facility.

The environment in which all the living organisms have evolved has high levels of ionising radiation. But it can be said that many of us are alive because of the help of the artificially produced radiation, we can find them in X-Rays which show hidden problems, other types of this radiation are used to cure diseases and to revise food.

Many of the products by which we get benefit may be created with the careful use of radiation.

Radiation which is naturally presented in our environment is called "Background Radiation" and the level of this type can vary greatly. People that live or work in high altitudes receive more amounts of "cosmic radiation" than those who work or live in mineralised sand or granite areas, because they receive more "terrestrial radiation". "Radon" is a gas that seeps from Earth's crust and presents in the air that we all breath, is the responsible for most of the natural exposure.

B) Current Issues

Canada: Canada has 19 nuclear reactors which are able to storage 13.5 Gigawatts, which meant the 16.6% of the electric energy that the nation had in 2015. Canada has not been affected by nuclear wars but it has the first major accident of a nuclear reactor in the world, this happened in Ontario when a hydrogen explosion occurred due to malfunctions. Canada's latest accident occurred in 2011 when 73,00 liters of demineralized water leaked into Lake.

Japan: 30% of Japan's electrical power had been generated from Japan's nuclear reactors and the country is planning to increase the number to 40%. Japan wanted to increment the nuclear power and make it a priority but then doubts started coming out about Japan's plants ability to support seismic activity and tsunamis. First Japan accident was dated to be in 1975 in Mihama were nuclear power plant released radioactivity.

Brazil: Brazil's main studied areas are the Araxà, Poços de Caldas, Tapira, Guarapari (Espírito Santo State, Atlantic Coast). 1,300 people live in Araxà; 6,000 in Poços de Caldas; and 12,000 in Guarapari. Urbanization and the movement of people away from background areas had considerably changed the exposure levels of the area since the first publications. Recent investigations had been made in Guarapari and Poços de Caldas and in there, Guarapari's radiation was said to be normal except from some spots. In Poços de Caldas only urban areas are considered to be normal and rural areas are HNBR areas.

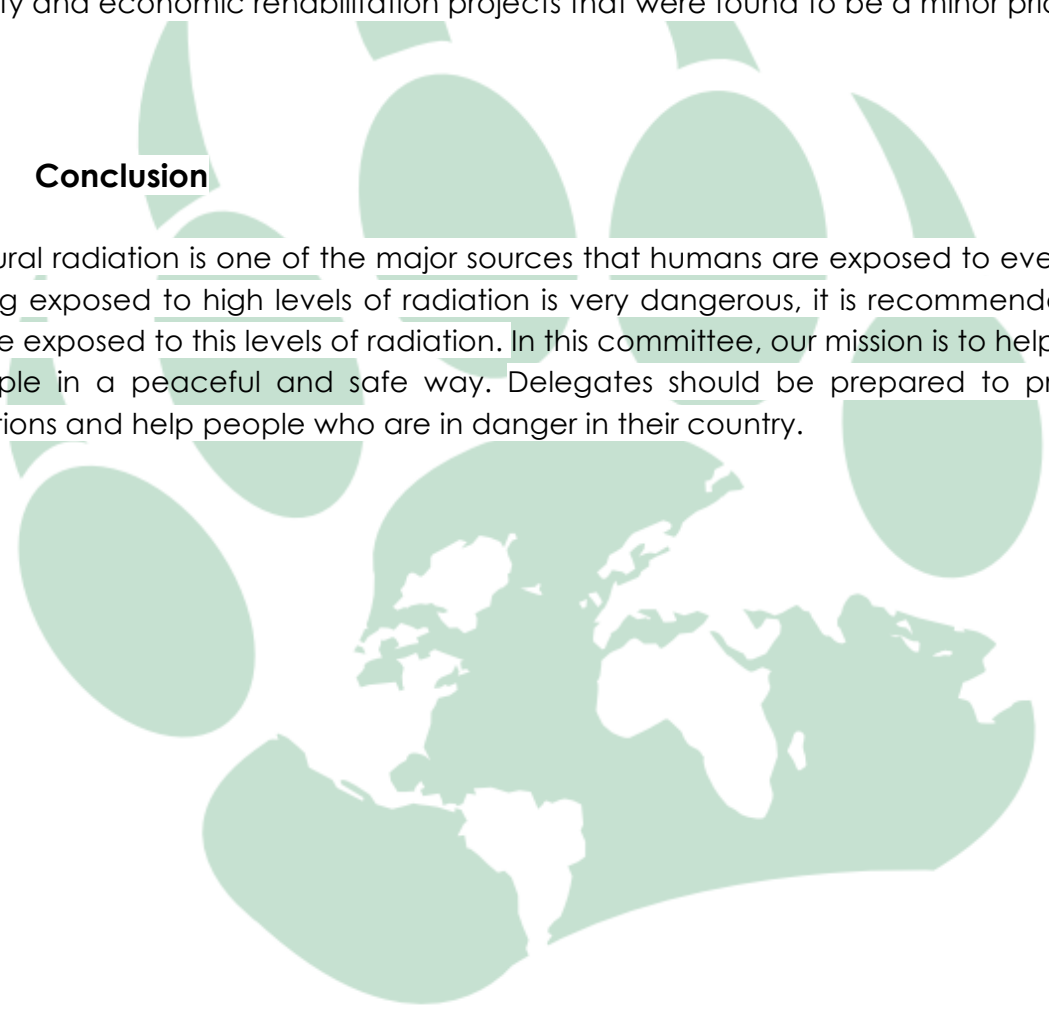
India: Kerala, a densely populated coastal region, in southwest India has radiation exposure mainly due to thorium and its decay products that exist in its surface oil. Its resident receive, generally, external doses of about 4.5 mGy from gamma-rays. First disaster in india was on May 4th, 1987 were an accident broke the reactor core which caused a two year shutdown. The latest disaster occurred in October 22nd, 2002, 100 kg of radioactive sodium fell onto a purification cabin ruining valves and operating systems.

C) UN Action

The importance of safety and security of human beings and the environment in the use of radiation is a topic that the UN has wanted to accomplish since a long time ago. The United Nations Scientific Committee on the Effects of Atomic Radiation, have served the vital function, they had provided scientific analysis on the sources and effects of radiation, it is more important the use of radiation for peaceful purposes in the world. The UN system organizations focused on projects that had provided health to the people that have been affected. As well, radiation safety and economic rehabilitation projects that were found to be a minor priority.

III. Conclusion

Natural radiation is one of the major sources that humans are exposed to everyday. Being exposed to high levels of radiation is very dangerous, it is recommended not to be exposed to this levels of radiation. In this committee, our mission is to help those people in a peaceful and safe way. Delegates should be prepared to propose solutions and help people who are in danger in their country.



IV. Essential Questions

1. How do nuclear disasters affect the world?
2. Why is it important to ensure affected areas?
3. What is your country doing to solve this problem?
4. Is there any organization working on the restoration of affected areas?

V. References

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