

## Letter from the Chair

Dear delegates,

We sincerely welcome you to 2015 Central Titan Model United Nations and to the General Assembly Fourth Committee: Special Political and Decolonization (SPECPOL).

The chair of this year will be Ying-Chih Peng. He is currently studying as a senior at National Central University in Business Administration major. Along with the co-chairs, which are Ming-Chen Hsieh and Yu-Chien Chien, we will serve as the dais team of this committee. CTMUN provides the opportunity for delegates to experience a diplomatic occasion where all of you can express thoughts and opinions on behalf of each country about the critical issues the international community is currently facing.

The Special Political and Decolonization Committee deals with a variety of subjects which include those related to decolonization, Palestinian refugees and human rights, peacekeeping, mine action, outer space, public information, atomic radiation and University for Peace.

GA Fourth committee allows all member states to have an equal right and voice on whichever topic, which means, every country attending this committee will equally have one vote regardless of the country's size or power. The topics this year will be Topic A: Nuclear Usages and Waste Disposal and Topic B: Dealing with the Growth of Slums.

Below will be the study guide on both topics, hopefully you can gain the basic knowledge of the issues through reading it comprehensively. We strongly recommend delegates to do further research about each country's position and policies on those issues in order to get a more in-depth understanding. During the preparation, all of the delegates will be required to submit a position paper on behalf of your country on both topics before the conferences.

Looking forward to meeting you at 2015 CTMUN!

Sincerely yours,

Ying-Chih Peng, Chair

# Topic A: Nuclear Usages and Waste Disposal

## Definition:

According to *Glossary of Environment Statistics, Studies in Methods, Series F, No. 67, United Nations, New York, 1997*, a nuclear power plant is a facility that converts atomic energy into usable power. In a nuclear electric power plant, heat produced by a reactor is generally used to drive a turbine which in turn drives an electric generator. Nuclear power is characterized by the huge amount of energy produced from a small amount of fuel, the responding waste it leads to is also small, and however, a part of the waste lies radioactive, therefore must be carefully managed as hazardous waste.

## Background:

### 1) History

The dropping of the atom bomb on Hiroshima, Japan, by the United States in 1945 initiated the atomic era. Nuclear energy immediately became a world-known military weapon of terrifying power. It represented the first large-scale use of nuclear power. For the physicists who worked on the atom bomb, the mission of nuclear energy was not merely military. Actually, military usage was just a small part of it. They viewed nuclear power as a safe, clean, cheap, and abundant source of energy that would end society's dependence on fossil fuels.

Throughout the 1950s and the early 1960s the US and the USSR (Union of Soviet Socialist Republics) both worked hard on developing nuclear technology, to prevent the other power from acquiring nuclear supremacy.

When thinking of problems that lie ahead which require long-term solutions, nuclear waste management and safe usage of nuclear power come to mind rather quickly. With half-lives ranging from 30 to 24000, or even 16 million years (Strontium-90, Plutonium-239, and Iodine-129 respectively), the radioactive elements of nuclear waste could remain harmful to human body and the environment. The question of what is the best method to deal with that waste has been a serious matter since the 1950s.

### 2) Current Situation

Nuclear usages mainly consists of two parts: military use and electricity producing.

The former causes the tensions between countries. Cold War began in the first

two years after the end of the Second World War in 1945. The two superpowers (US and USSR) never initiated an actual combat, but they each armed themselves thoroughly in preparation for a possible all-out nuclear world war. As a reminder, the nuclear weapon usage lies in the scope of General Assembly First Committee, therefore shouldn't be the main discussion within this committee.

The latter causes the argument of construction of nuclear power plant. Nuclear power plants are some of the most sophisticated and complex energy systems ever designed. Three Mile Island event in 1979 was a disaster in the nuclear development. One malfunction led to another, and then to a series of others, until the reactor itself began to melt, which led to an evacuation of 140,000 people.

Every accident disclosed serious deficiencies in a system to the society that was meant to protect public health and environment. The Chernobyl disaster was a catastrophic nuclear accident that occurred on 26 April 1986 at the Chernobyl Nuclear Power Plant in Ukraine. The health statistic in Belarus and Ukraine has shown worrying trends after the Chernobyl disaster occurred. In Belarus, incidence of birth defects had risen by 40% within six years of the disaster, which became the major cause of infant mortality. In one specific district of Belarus, it was reported that 95% of children have at least one chronic illness. The Ukrainian Ministry of Health estimated in 1993 that around 70% of its population were unwell, with large growth in respiratory, blood and nervous system diseases.

### **Statement of the Issue:**

#### **1) Pros and Cons of Nuclear Power**

##### **Advantage:**

1. The generation of electricity through nuclear energy is an alternative to fossil fuels, so the consumption of fuels such as coal or oil is reduced. This reduction of coal and oil consumption benefits the situation of global warming and global climate change. By reducing the consumption of fossil fuels we also improve the quality of the air affecting the disease and quality of life.
2. Its continuity benefits the electrical planning. Nuclear power does not depend on natural aspects. It's a solution for the main disadvantage of renewable energy, such as solar energy or Eolic energy, because the time duration of sun or wind does not always coincide with the hours with more energy demand.

##### **Disadvantage:**

1. Like fossil fuels, nuclear fuels are non-renewable energy resources. And if

there is an accident, large amounts of radioactive material could be released into the environment. Accidents such as Chernobyl and Fukushima are great examples.

2. Nuclear waste remains radioactive and is hazardous to health for thousands or even millions of years.

## **2) Types of Radioactive Waste**

### **Low-level and Intermediate-level Waste:**

Low-level waste includes items that have become contaminated with radioactive material or have become radioactive through exposure to neutron radiation. It comprises paper, rags, tools, clothing, and filters etc. which contain small amounts of mostly short-lived radioactivity. It is not harmful to human bodies, but must be disposed of more carefully than normal garbage. Usually it is buried in shallow landfill sites. Worldwide it contains 90% of the radioactive waste volume but only 1% of the radioactivity of all radiate.

Intermediate-level Waste contains higher amounts of radioactivity. Generally short-lived waste (mainly from reactors) is buried, but long-lived waste (from reprocessing nuclear fuel) is disposed of deep underground. Worldwide it makes up 7% of the volume and has 4% of the radioactivity of all radiate.

### **High-level Waste:**

High-level Waste may be the used fuel itself, or the waste separated from reprocessing this. While only 3% of the volume of all radiate, it holds 95% of the radioactivity. Used nuclear fuel is very hot and radioactive. Handling and storing it safely can be done as long as it is cooled and plant workers are shielded from the radiation it produces. High-level wastes can remain highly radioactive for thousands of years. They need to be disposed of deep underground in engineered facilities built in stable geological formations. While no such facilities for high-level wastes currently operate, their feasibility has been demonstrated and there are several countries now in the process of designing and constructing them.

## **3) High-level Waste Disposal Concepts**

In present global community, there is clear understanding that each country producing nuclear power should be responsible for its own wastes.

Appropriate disposal arrangements are required for High-level waste, due to its prolonged radioactivity. Disposal solutions are currently being developed for High-level waste that are safe, environmentally sound and publicly acceptable. The solution

that is widely accepted as feasible is deep geological disposal. The basic requirement for any geological formation is its ability to contain and isolate the radioactive wastes from human's environment until the radiotoxicity of the wastes has decayed to non-hazardous levels. In some countries, repository projects are currently well advanced, such as Finland, Sweden and the USA. The countries that have made the most progress towards a repository for high-level radioactive waste have typically started with public consultations and made voluntary siting a necessary condition. This approach is believed to have a greater chance of succeeding, but the process is correspondingly slow.

However, most communities do not want to host a nuclear waste repository as they are "concerned about their community becoming a site for waste for thousands of years, the health and environmental consequences of an accident, and lower property values". Therefore, the most urgent issue would be: where and how can the international society establish a site for deep geological disposal that can provide safe and stable depositories that won't lead to the opposition from civilians.

#### **UN Past Action:**

The **International Atomic Energy Agency (IAEA)** is an international organization that seeks to promote the peaceful use of nuclear energy, and to inhibit its use for any military purpose, including nuclear weapons. The IAEA's relationship with the United Nations is guided by an agreement signed by both parties in 1957. It stipulates that:

*"The Agency undertakes to conduct its activities in accordance with the Purposes and Principles of the United Nations Charter to promote peace and international co-operation, and in conformity with policies of the United Nations furthering the establishment of safeguarded worldwide disarmament and in conformity with any international agreements entered into pursuant to such policies."*

Through cooperation with UN, IAEA now has huge influence among the international society on nuclear-related matters.

*The Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management* is the first legally binding international treaty to directly address these issues on a global scale, it was opened for signature on 29 September 1997, the first day of the 41st regular session of the IAEA General Conference. It entered into force on 18 June 2001. It represents a commitment by participating countries to achieve and maintain a consistently high level of safety in the management of spent fuel and of radioactive waste as part of the global safety regime for ensuring the proper protection of people and the environment.

The Joint Convention encourages Contracting Parties to report and to promote open and transparent discussions on the safety of spent fuel and radioactive waste management. Therefore, delegates can check out the latest national reports made by each member state to get to know relevant information. ` `.

## **Possible Solution:**

### **1. Alternative Energy**

Alternative energy is any energy source that is an alternative to fossil fuel. These alternatives are intended to address concerns about such fossil fuels.

Our current rate of fossil fuel usage will lead to an energy crisis, and the awareness of the safety of nuclear usages will lead to an energy concerns. In the future, civilization will be forced to research and develop alternative energy sources.

Current alternative power includes: solar power, wind power, biomass energy, and Geothermal Energy, etc.

### **2. International cooperation on “Deep Geological Disposal”**

A well management of nuclear waste causes less concerns about the leakage of radioactive substances. To upgrade the management of nuclear waste, international cooperation is necessary. **“The Pangea proposal”** is a major research program in the 1990s by Pangea Resources, a UK-based company, identified Australia, southern Africa, Argentina and western China as having the most appropriate geological site for a deep geologic repository, with Australia being favored on economic and political grounds. It would be located where the geology has been stable for several hundred million years, so that there need not be total reliance on a robust engineered barrier system to keep the waste securely isolated for thousands of years. The anti-nuclear movement in Australia stood against the idea of such a facility. When the federal minister responsible for the issue, Minister for Industry Science and Resources Senator Nick Minchin, indicated that ‘the Pangea proposal will go nowhere, Pangea ultimately abandoned its advocacy.

Early in 2002 a new, non-commercial body to promote the concept of regional and international facilities for storage and disposal of all types of long-lived nuclear wastes was set up. This is **ARIUS – the Association for Regional and International Underground Storage**. As a successor of Pangea proposal, a key objective is to explore ways of providing shared radioactive waste management approaches and facilities, in particular storage and disposal facilities for smaller users. Membership is open and comprises countries with small nuclear programs as well as industrial organizations with relevant interests.

Further multinational cooperation are needed in order to build up the ultimate solution of High-level waste disposal. Thus, we highly recommend delegates to discuss about such matters during the conference.

**Questions to be Answered :**

1. Is the benefit that nuclear power brings to us worthwhile taking the risk of potential devastation it might lead to?
2. If the nuclear decommissioning is going to be implemented universally in the near future, what are the consequences?
3. What's the most practical way to accomplish "Deep Geological Disposal"?

### Reference:

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3. <http://www.world-nuclear.org/info/Current-and-Future-Generation/Nuclear-Power-in-the-World-Today/>
4. <http://www.world-nuclear.org/info/Non-Power-Nuclear-Applications/Overview/The-Many-Uses-of-Nuclear-Technology/>
5. <http://www.un.org/en/globalissues/atomicenergy/>
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## **Topic B: Dealing with the Growth of Slum**

### **Definition:**

The UN-habitat defines any specific place, whether a whole city or a neighborhood, as a slum area if half or more of all households lack improved water, improved sanitation, sufficient living area, durable housing, secure tenure, or combinations thereof. The distribution of slums, according to UN-habitat, tend to be categorized into three types: countries in which both poor families and rich families live within slum areas and non-slum urban areas are virtually absent; countries in which slum areas are distinct settlements only in capital and large cities; and countries in which non-slum areas are predominant and are home to both high- and low-income families.

### **Background:**

#### **1) History:**

Slums are poorly organized sectors in a city or town which rise upon political and economic condition. In early industrial cities of England and the United States, the need for cheap housing, near the factories, had increased. While there were few factory owners, such as Robert Owen, who were willing to create good housing for their workers, many employers were not. These employers harshly exploited their workers by erecting poor, and often unsanitary built houses. Workers often paid high rents for sub-standard housing. In the rush to build houses, many were constructed too quickly in terraced rows. Some of these houses had just a small yard at the rear where an outside toilet was placed. Others were 'back to back' with communal toilets. Almost as soon as they were occupied, many of these houses became slums.

The uncontrolled proliferation of slums became the results since 1960s, when cities in developing countries have faced an unexpected rate of urbanization and increasing poverty. Governments have tried to deal with this problem in different ways. However, their urban policies often failed because of bad governance, corruption, inappropriate regulation, dysfunctional land markets, and, above all, an absence of political will. One response to prevent expanding urban poverty involved the relocation of residents to resettlement sites that were usually outside of the city. Yet, slums emerged in city centers because these were places where the poor can find work more easily. Consequently, moving the people or replacing their physical facilities did not work well. Governments not only had to spend resources clearing slums and resettling inhabitants, but also later had to finance public transportation to

facilitate access to employment in the central city.

## **2) Current Situation:**

Slums were common in the 19th and early 20th centuries in the United States and Europe. More recently slums have been predominantly found in urban regions of developing and undeveloped parts of the world, but are also found in developed economies.

According to UN-HABITAT, around 33% of the urban population in the developing world in 2012, or about 863 million people, lived in slums. The proportion of urban population living in slums was highest in Sub-Saharan Africa (61.7%), followed by South Asia (35%), Southeast Asia (31%), East Asia (28.2%), West Asia (24.6%), Oceania (24.1%), Latin America and the Caribbean (23.5%), and North Africa (13.3%). Among individual countries, the proportion of urban residents living in slum areas in 2009 was highest in the Central African Republic (95.9%). Between 1990 and 2010 the percentage of people living in slums dropped, even as the total urban population increased. The world's largest slum city is in Mexico City.

Slums form and grow in many different parts of the world for many different reasons. Some causes include rapid rural-to-urban migration, economic stagnation and depression, high unemployment, poverty, informal economy, poor planning, politics, natural disasters and social conflicts. Strategies tried to reduce and transform slums in different countries, with varying degrees of success, include a combination of slum removal, slum relocation, slum upgrading, urban planning with city wide infrastructure development, and public housing projects.

### **Statement of the Issue:**

The UN-Habitat states that the dwellers in urban poverty must face the daily challenges as the following: limited access to employment opportunities and insufficient income, inadequate and insecure housing and services, violent and unhealthy environments, little or no social protection mechanism and limited access to adequate health and education opportunities. According to UN report, the characteristics of slums are listed of the following:

- I. A lack of basic services
- II. Substandard housing or illegal, inadequate building structures
- III. Overcrowding and high density
- IV. Unhealthy living conditions and hazardous locations
- V. Insecure tenure; irregular or informal settlements
- VI. Poverty and social exclusion and minimum settlement size

According to UN-Habitat report, some of the negative attributes of slums are the

following:

- I. Marginalization and dumping of the underclass, particularly in the North – slums are places where those who of lower income live. Therefore, there are high chances of destitute people, those who are permanently unemployed and criminals can be forced to live together due to their financial situations. The result of such groups of people living together results in neighborhoods developing serious issues that spill over.
- II. The mixing of disparate populations- many of the populations living in slums are brought together through immigration. This presents a problem as the groups may understand very little about each other’s culture or may have an unpleasant history.
- III. Family disruption- the loss of a partner not only reduces the income generated in the family but also increases the burden on the remaining guardian.

#### **UN Past Action:**

On March 22, 2010, the UN Secretary General, Ban Ki-moon, addressed his dismay to the living conditions in slums. He stated, “Conditions in slums are a violation of human rights... The children who have no clean water, the women who fear for their safety, the young people who have no chance to receive a decent education have a right to better, and we have a responsibility to do better [to help them].” The Secretary-General then stated that the plan to launch the World Urban Campaign would help to better living conditions.

Back in 2010, the World Urban campaign, coordinated by the UN-habitat, has been launched. It acts as a global partnership platform to promote dialogue, sharing and learning about how to improve our urban future. Based on the World Urban Campaign website, the vital principles of the campaign include the following:

- I. Accessible and pro-poor land, infrastructure, services, mobility and housing
- II. Socially inclusive, gender sensitive, healthy and safe development
- III. Environmentally sound and carbon-efficient built environment
- IV. Participatory planning and decision making
- V. Vibrant and competitive local economies promoting decent work and livelihoods
- VI. Assurance of non-discrimination and equal rights to the city
- VII. Empowering cities and communities to plan for and effectively manage adversity and change.

#### **Cities without Slums:**

Another UN’s step towards dealing with the situation of slum settlements is the “Cities without Slums” action plan that was developed back in July 1999. While the

actual plan was created by Cities Alliance, the Secretary General Kofi Annan, strongly advocate the plan to the extent that he asked all UN member states to endorse and act on it. The plan was then reflected in the United Nations Millennium Declaration in addition to the other targets under “development and poverty eradication”. The goal is “by 2020, to have achieved a significant improvement in the lives of at least 10 million slum dwellers as proposed in ‘Cities without Slums’ initiative.” The “Cities without Slums” goal is also Target 11 of the Millennium Development Goals. The progress will be examined through the proportion of people with access to improved sanitation and the proportion of people with access to secure tenure.

A project that objective was to “strengthen the capacity at the city and nation levels to monitor the MDG 7 Target 11, namely to arrive at a significant improvement in the lives of 100 million slum dwellers by 2020” was also completed successfully.

### **Possible Solution:**

Lessons from history make it clear what should not be done: ignoring slums or harassing the people that live in them through evictions and clearances. Although few governments openly advocate such repressive policies, arbitrary evictions are still common in many developing countries. In any case, slum eradication and resettlement create more problems than they solve. Most residents pushed out of their homes soon have little option but to return to the same area, because they need the work that drew them to the city in the first place.

Improving slums, rather than relocating their residents, is a much better approach. But in developing countries, resources to build new housing rarely exist. Instead, government-aided “self help” is more realistic. Loans for home improvement and investment in infrastructure are crucial for upgrading slums. But the central problem is that slum residents rarely have the formal rights to remain on the land they occupy. Therefore, they have no incentive to develop the land for the future, and are unable to raise the money to do so.

### **Questions to be answered:**

1. How to prevent slums to construct in the industrialization process of those developing countries?
2. How are the living conditions in your country? If there are slums in your country, what have the governments done to deal with the problem?
3. How can you help those people in slums to improve their living quality?
4. If your countries have not face the problem, are there ways for you to give aid to your neighboring countries?

### **Reference:**

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