Free research paper about the event of hiroshima and nagasaki

Technology, Development



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The twentieth century saw number of significant developments and inventions that changed the overall outlook of the world. Out of all these inventions and explorations, atomic bomb was one that had greater impact on the world. The impact of nuclear bomb was strategic, political, economic, social and moral.

The first of these events and so far the only instance when the nuclear bomb was experimented took place in the middle of Second World War over Hiroshima and Nagasaki (Langley, 88). It occurred when the atrocities and offensives of Japanese troops and fighters grew beyond the bearable threshold and United States of America was enticed into launching an offensive.

The bombing of these two cities remains unprecedented six decades after the incident took place. The bombing was done on behalf of United States of America and this particular event brought a virtual end to the war that was being fought for a period of six years between the Allies and Central powers. The bombing of two cities brought the overall outlook of the cities to ruins

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and shambles. The devastation did not hit the human life only, rather destroyed the entire infrastructure of the twin cities.

As a result of the colossal impact of the bombing, the world drew number of outcomes from it. The nuclear bomb became the most potent weapon a country could possess. The nuclear bomb was a cause of complete annihilation of whole towns and societies, and its existence and usage was directly reminiscent to the destruction of nations, mankind and whole of humanity.

Keeping this in view, many movements, recommendations, and political moves have been brought forward with the aim of making the world free from the nuclear weapons. This along with the various treaties, proposals and agreements regarding curtail of spread of the atomic bombs and replacing them with the social and economic packages that would enable living in a nuclear bomb free world.

First Nuclear Age:

The stage wise development of atomic bombs, their experimentation, testing and development from one phase to another is called the nuclear age. The first formal nuclear age began with the attacks on Hiroshima and Nagasaki (Lavine, 2) but the journey was taken up couple of years before with the experimentation and testing in laboratories in Chicago and other states of United States of America under the controlled environment. Manhattan Project initiated in 1942 (Kelly, 34) was one of the major event of the development of the bomb that was tested in Hiroshima and Japan.

This age went on to linger on till the continuation of the Cold war that lasted

for over five decades with the two super powers relying upon their nuclear arsenal as a show of strength and possession of might against one another. The joining of ranks by Soviet Socialist state made it the second state of earth to possess the nuclear weapons and as a result intense competition started off for the gaining of more strength. United States of America took it a level further with the development and experimentation of hydrogen bomb which totally surprised U. S. S. R and diverted their attention towards building an equally potent bomb. The establishment of nuclear power plant in United Kingdom in Calder Hall in 1956 marked another development in the same process (Sarkisov and du Clos, 57).

The second nuclear age saw the spread of the nuclear arsenal beyond the possession of two world powers and countries like China, Israel, Pakistan and India embraced themselves in to the race and possession of nuclear arsenal giving them an edge over the other countries in terms of warfare. As of present in the second nuclear age, a total of seven declared states possess the nuclear bombs, while there are number of undeclared states that have the potential in offing and have not experimented and tested them in large scale to become the declared states that possess atomic bomb. The second nuclear age has resulted in the overall spread and potential threats of the proliferation of the nuclear technology with the allies in different parts of the world. This serves as a severe concern for the humanity as every state capable of possession aims at attaining the nuclear arsenal.

Weapons of Mass Destruction:

A generic term used for the nuclear weapons that are being used by states in offensives against other nations. The history has seen events of declared and undeclared usage of the weapons of mass destruction over others. Iraq was alleged to possess the weapons of mass destruction and based on that United States of America went into war against Iraq. Syria recently saw one similar event and incident where reports of chemical weapons were came to forth with no major party claiming its responsibility and accusing one another.

During the middle of First Nuclear age, with the nuclear arm race in full throttle and bringing the two nations towards the brink of war on multiple accounts. Better counsels prevailed and it was decided and realized that mechanism would be devised towards the slowing down of the overall progress of the nuclear material and experimentation. As a result of it number of treaties and agreements were signed in the name of P. T. B. T, C. T. B. T and various other moves.

P. T. B. T:

The partial Test Ban Treaty was came into accord and existence between the then super powers United States of America and U. S. S. R. the aim of this treaty was the curtailment of the nuclear experimentations and under this agreement and accord, only the underground experimentations could take place and any other experimentation and testing would be banned and refrained from by each side. The agreement became part of the official accord in 1963 (Arnold and Wiener, 173). P. T. B. T was also termed as the Limited Test Ban Treaty reducing the chances and restricting its

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experimenting mode to the underground experiments. President J. F

Kennedy and Nikita Khrushchev were the two signatories who signed the

agreement and brought it into force.

Impact of P. T. B. T:

P. T. B. T was practically little valuable with regard to the implementation and it was replaced by many other serious and strict agreements, however its significance cannot be undermined based on the fact that it led o the initiation of the debate and concept of curtailing the overall flow and spread of nuclear arsenal. C. T. B. T, S. A. L. T were two of the major accords that can be possibly attributed to the developments that took place as a result of P. T. B. T.

N. P. T:

Acronym for Non Proliferation Treaty was considered as a milestone in the overall environment of arms race with the aims of bringing the race and overall spread of nuclear weapons to a virtual still. The significance of this accord was the participation of the major world powers beyond the two super powers at that time. France, Great Britain and China were also part of this agreement and move towards the curtailing of nuclear arsenal. The agreement set forth the condition of not promoting the spread of nuclear technology and keeping it away from the markets and military arsenal of any state that was not a nuclear power at that time. Apart from the major five powers, over 50 plus states became its signatories and the accord went into action in 1968 (Joyner, 20). North Korea is one instance of state that withdrew from this agreement in early 21st century.

Apart from the few exceptions large number of countries comes into fold of

this treaty and agreement. Pakistan and India are two instances of states that have yet to sign the N. P. T, each terming it a conditional affair with the signing of the other arch rival and the economic interests and other conditions association.

Nuclear Proliferation:

The term pertains to the spread of nuclear technology to the non nuclear members or the non state actors. With number of states being vulnerable and posed with various threats, the fears of nuclear proliferation loom large over the spread of this technology. The disintegration of U. S. S. R brought about severe fears of the spread of the technology into the disintegrating states and the world was gravely concerned. Recently the potential spread of nuclear technology from Pakistan was another hot debate that held the world's attention and drew the attention with the measures and steps that were needed to be taken to ensure that the nuclear arsenal does not fall into the hands of the unauthorized personnel or sources which could cause trouble worldwide and trigger a potential nuclear war.

Significance of N. P. T:

Amongst other treaties such as SALT, P. T. B. T, NPT stands as the most effective and widely acclaimed and accepted. As a result of this, the history has not seen any major leak or breach of this agreement and all major states stand by its resolve and accorded conditions that were part of the manifesto of N. P. T.

S. A. L. T:

Acronym for Strategic Arms Limitation Treaty, this was brought up as a

suggestion and moves to reduce the overall growing rate and number of arsenal possessed by each country. With the Cuban Missile Crisis bringing the two super powers to the brink of the war and dividing the world into a bi polar world, realization was made that reduction in the arms race should take place. As a result the first of such events and agreement took place in 1972 while the SALT 2 agreement came about in 1979 with the same aims of reducing the impetus of the arms race between the two super powers. The focus of these two agreements was the usage and control of the intercontinental ballistic missiles that were being used to carry the nuclear war heads across the continent.

Official government figures entail the exact number of nuclear war heads possessed by a given state and under agreements and accords the countries must share the stats and figures in order to ensure that no extensive piles of nuclear material is being developed by a given state. United Nations Nuclear watch dogs and International Atomic Energy Agency administers these actions and any country that performs any missile test or nuclear experimentation must inform the I. A. E. A and other associated states and agencies about its number of war heads.

C. T. B. T:

Acronym for Comprehensive test ban treaty came into existence and recommendation in 1996 by the United Nations for the purpose of controlling and banning any kind of nuclear experimentation. This came about as a move and motive to stop the overall spread and make the world a nuclear weapons free world, however with the disagreement and non conformity of number of states, the treaty still stands inactive with regard to its universal

and uniform implementation. Apart from the world declared nuclear powers, various other states that have either not declared or aimed at acquiring the technology have kept themselves away from the signing of this agreement. Pakistan, India, United States of America are few of the states that have kept themselves away from this accord and agreement. Egypt and Iran also come as the two states that have kept themselves away from the Treaty signing (Doyle, 252) and as a result the world lives under the dark and dangerous shadows of nuclear arsenal possession and experimentation. As a consequence of non adherence to its enactment, many countries have experimented in recent times with regard to the testing of nuclear material. C. T. B. T though brought up in 1996, was in offing and work was in progress for couple of years and Conference of Disarmament as it is termed was adopted and initiated with formal procedures and substantive developmental work aimed at bringing a strong manifesto that would bring the global partners into its fold and make the world nuclear weapons free. The final work came forth in June with the recommendations of banning all kinds of nuclear tests in shorter and longer future. Large number of states such as Turkey, Vietnam, Mexico, Japan, Romania, and Hungry entail the list that realized and adhered to the conditions of C. T. B. T and the few states that are aforementioned have still kept themselves away from this agreement even a decade and a half after this agreement and suggestion was brought forth as an aim to start the new century and new journey hand in hand.

Conclusion:

The overall aim of these steps and actions has been to make the world a better and safe place to life. With all the investments and resources consumed in developing the nuclear arsenal, the energy and resources must be invested in the direction of bringing about social order, prosperity, development, justice, peace, environmental considerations and various other problems that are faced by the world. Many of these agreements still stand valid and open towards the approval of the states that have kept themselves away from this agreement and they can do so by signing the terms and conditions, making the world a more better place to live.

The nature of nuclear bomb makes it ever so threatening that the concept of nuclear war cannot be imagined, it could lead the entire world to the brink of a Third World War and potential annihilation of the entire mankind keeping in view the overall strength and development that has taken place in the past six decades with regard to the nuclear developments and experimentations that have been performed by different declared states and those that aim to acquire this technology.

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