

CHAPTER II

THE DYNAMICS OF IRANIAN NUCLEAR DEVELOPMENT PROGRAM

The second chapter of this undergraduate thesis covers the dynamics of Iranian nuclear development program, particularly on each Supreme Leader of Iran. Each sub chapter explains the reasons and expectations of the government at that time in developing nuclear energy.

A. General Overview of Iran

Geographically, Iran is located in the Middle East which has neighboring countries such as Turkey and Iraq (west), Turkmenistan (north), Afghanistan and Pakistan (east), Persian Gulf and United Arab Emirates (south). The size of Iran is 1.65 million km² which has Tehran as the capital city. Iran has nearly 30 provinces which are surrounded by plateau, desert, and gulf. The map of Iran as follows:

Picture 1

Map of Iran



Source: Iran: A Country Study, Library of Congress, 2008

As it is located in Middle East, Iran has quite hot climate around the year. Iran has 80 million of population and it is increasing nearly 1% each year. The common ethnic groups in Iran are Persians (65%) as well as the common language, Azerbaijani Turks (16%) Kurds (7%) and the rest 12% consists of Lurs, Arabs, Baluchis and Turkmens. The population of Iran consists of 90% of Shia Islam, 8% Sunni Muslims, and 2% are Christian and other religions or faiths. It has been clear that the Shia Islam in Iran as the majority and running the state regulation based on Shia values (Curtis & Hooglund, 2008).

Iran had experienced as a constitutional monarchy state before they became a democratic state because of the Iranian Islamic Revolution in 1979. The government system in Iran is unique. Since 1980 until 1989, Iran does not only have a president but also the prime minister. As a republic country, normally a state is led by the president which is elected once in four years. Iran has a president to be the head of the government which is democratically chosen by election. After the Islamic Iranian Revolution in 1979, Iran decided to create the Islamic Republic and re-establish the governmental system.

Beside the president, there is a more powerful leader called Supreme Leader of Majlis. The Supreme Leader of Iran, as the head of the state, responsible to supervise the government. Previously, Iran experienced the Shah Pahlavi administration without supervision from the Majlis and it caused the divergence and abolition of Islamic value in the state. The Supreme Leader has no particular period of administration. The decision from Supreme Leader is the final decision in Iran, particularly on environment, economic, declaration of war or

peace, etc. Since the Iranian Islamic Revolution in 1979, Ayatollah Ruhollah Khomeini was chosen as the Supreme Leader until he passed away in 1989. It was continued by Ali Khomeini since 1989 and still incumbent.

Economically, Iran is dominated by the natural resources sector. Iran is a country which has one of the biggest oil reservations in the world after Venezuela, Saudi Arabia and Canada. The natural gas of Iran is the second biggest in the world after Russia. The abundance of natural resources in Iran especially oil and the natural gas, made it as the main income for state. Iran was not only focus on oil and natural gas but also nuclear energy. Iranian government was insisted to develop nuclear energy in spite of condemnation and rejection from international community which resulted many sanctions against Iran. Although Iran faced many sanctions from the international community, Iran is still able to survive as a state. However, it could not be denied that the restrictions were affected much on the economic sector of Iran. (Curtis & Hooglund, 2008).

B. The History of Development Nuclear Energy of Iran

The history of nuclear energy development in the world was started when Martin Klaporth discovered the fuel of nuclear energy which is uranium in 1789. After the discovery of uranium, there were many inventions that led the occurrence of nuclear energy. The examples of the inventions are radiation of x-rays by Wilhelm Rontgen in 1895, the radioactivity by Pierre and Marie Curie in 1896, the neutron by James Chadwick in 1932, the artificial radionuclide by Irene Curie and

Frederic Joliot in 1934. One year later, the artificial radionuclide had expanded to have greater variation by Enrico Fermi. The early stage of potential nuclear fusion was successfully conducted by Enrico Fermi in University of Chicago, United States (World Nuclear Association, 2014).

When the global war happened, it was among the axis powers (Japan, Italy, and Germany) against the Allies (United States, Great Britain, Soviet Union, and China). Actually United States was not involved in the Second World War and remained neutral until 1941. In December 1941, Japanese launched sudden attack in the United States naval base at Pearl Harbor, Hawaii. This attack was motivated United States to join the Allies to get revenge on Japan. At that time, it was also the time when the scientist discovered that nuclear energy is able to be changed into the atomic bomb. Therefore, United States secretly formed the “Manhattan Project” in 1942 to build the atomic bomb. On August 1945, as the revenge, United States dropped two bombs called Fat Man and Little Boy in Hiroshima and Nagasaki and ended the Second World War. This event was marked that United States has proved their advancement of nuclear energy proliferation.

The Cold War was happened because of the division of the liberal (United States) and communist (Soviet Union) ideology caused by their indirect war. Both of the parties aggressively spread their ideology throughout world. In the Middle East, United States tried to approach Iran in 1953. It was such a perfect time because of two reasons, the struggle for containment of Soviet Union in spreading their influence in middle East and there was an opposition that intended to

overthrow the current government of Iran namely Emperor Shah Pahlavi. Actually, Iran was close with Great Britain by their bilateral cooperation called Anglo-Iranian Oil Company in 1951. Unfortunately, Great Britain intended to nationalize the Anglo-Iranian Oil to be owned by Great Britain. It created the hatred of Iranian people toward Great Britain and turned to United States side (Galvin, 2010).

The approach of United States to Iran has been stated by Üzmez (2010) in his thesis. Compared with Saudi Arabia, in 1968 Saudi Arabia was under the internal crisis about sectarian & politics. On the other side, internal politics and security of Iran significantly grew up. It made United States attempt to prepare Iran to be the main regional player in Middle East (Üzmez, 2010). The close relationship of United States to Iran covered in many aspects, such as economic, security, and energy. United States was the one that introduced a new energy source, the nuclear energy, to Iran by giving the first nuclear reactor (Inskip, 2015). The dynamics of the nuclear development of Iran was actually dependent on its leader. Therefore, the development of nuclear energy was dynamics. The history of nuclear development of Iran in this undergraduate thesis is divided into three periods according to the administration period of each state leader of Iran.

a. Shah Pahlavi administration 1953 – 1979

Shah Pahlavi is the eldest son of Reza Shah (prior leader of Iranian monarchy), who was educated in Switzerland. He was accustomed to the western value and implemented it during his administration in Iran. The nuclear development of Iran was started during the administration of Shah Muhammad Reza Pahlavi. Iran was

not alone in developing the nuclear energy; it was supported by western countries such as United States, France, and Germany. But it was begun by United States assistance to Iran to develop nuclear energy. It has been stated from Ali Vaez, a senior analyst of International Crisis Group who grew up in Iran, that the United States provided the small reactor for research about electricity with 5 megawatt (MW) power. He also added that, in 1960 United States through 'Atom for Peace' program supported the reactor with its fuel which was actually had same level as enriched uranium to create weaponry to Tehran University (Inskeep, 2015).

The program 'Atom for Peace' was initiated by President Eisenhower in 1957. Through this program, United States gave assistance to Israel, Pakistan, and Iran, by supplying the research institution with information and equipment. Iran as one of the state members of Atom for Peace program happily received the assistance from United States. Volha Charnysh from Nuclear Age Peace Foundation explained that, the one of the sequence of Iran transformed into modern state was through developing nuclear energy (Charnysh, 2009). At that time, Iran was not capable to operate the reactor given by United States. Iran was sending their students to join the research at Massachusetts Institute of Technology (MIT) in United States. The wealth of Iran because of the abundance of oil, made Iran afford to send their master degree nominees to MIT to be specialist in nuclear proliferation (Clarion Project Research, 2014).

In 1960s the development of the nuclear proliferation of Iran was slow. In 1968, Non-Proliferation Treaty (NPT) was open for signature and Iran became the first country that agreed to sign. The signature of Iran in NPT portrayed the

possibility of the obedience regarding the safeguard agreement and the restriction. The aggressive thought of Shah Pahlavi in developing nuclear increased in 1974. It has been stated by Ali Vaez and Karim Sadjadpour about the ambition of Shah Pahlavi in their report entitled *Iran's Nuclear Odyssey* (2013). In the same year, Iran showed their solemnity through making the Atomic Energy Agency of Iran which was headed by Akbar Etemad. Moreover, Shah Pahlavi unilaterally decided to put nuclear energy proliferation as the top of his priority before oil (Vaez & Sadjadpour, 2013).

The tremendous expansion of nuclear energy in Atomic Energy Organization of Iran was supported by internal and external aspects of Iran. Internally, the wealth of Iran proved that it can afford to spend money on nuclear development and get support from western countries as the external. By hiring thousands high skilled workers, the significant advancement of nuclear energy was clearly hold by Iran in 1977. The expenditure of the advancement of nuclear increased by the year, in 1975 around \$30.8 million, only in one year was escalated \$1.3 billion in 1976. Surprisingly, the expenditure for the cost was tripled around \$3.5 billion (Vaez & Sadjadpour, 2013).

The cost of nuclear energy development was relied on the Iranian government itself. In 1978, there was a failed negotiation among United States and Iran regarding the American companies that sold the reactor and nuclear technology. Therefore, Iran was started to shift to France and Germany to replace the position of United States. Both of the parties agreed to build a new nuclear construction in Bushehr which costed around \$4.3 billion and new two nuclear

power generators \$2 billion at Darkhovien (Vaez & Sadjadpour, 2013). It showed that Iran independently affords to pay the expenses of the nuclear energy advancement.

The high effort of Iranian in nuclear development was equal with the high expectation. The expectation of Iranian people in developing nuclear especially under Emperor Shah Pahlavi actually was sole for alternative energy to produce electricity power. As the time goes by, the nuclear development of Iran was not only intended to establish the electricity. The nuclear energy was not solely able to be produced as electricity power but also Weapon Mass Destruction (WMD). The aggressiveness of Shah Pahlavi at that time in developing nuclear was different with the previous plan. As it was mentioned by Mansour Salsabili, the researcher of Harvard Kennedy School's Belfer Center for Science and International Affairs, in 1960s nearly eleven Iranian officers was trained in United States Army of chemical and biological weapons (CBW). Therefore, the reason and expectation of Iran in developing nuclear was shifted from civilian purposes to military defense purposes (Salsabili, 2013).

According to Dr. William J. Taylor, in his book entitled 'The Nuclear Freeze Debate: Arms Control Issues for the 1980s', he explains the nuclear objectives of the state in developing nuclear in 1980s. Although some of the states developed the nuclear energy to be used for civilian purposes but the nuclear energy for non-civilian purposes was also impressively high because of the Cold War. Generally, the objectives of the state in developing nuclear energy were deterrence, strategic policies, minimum finite, unacceptable damage, and Mutual

Assured Destruction (MAD). During the Cold War, many of states searched for self-defense and deter other states. The states, such as United States, Russia, China, Pakistan, Iraq, etc was secretly built their own reactor with the cooperation of their allies to produce nuclear bombs. In order to prevent and secure themselves against other states, the states have to build the same capacity and capability of one another. By this time, the development of nuclear bombs is remarkably high (Taylor, 1983).

The advancement of nuclear energy proliferation created wary in the international community. As it is stated above, Emperor Shah Pahlavi had spent much money on the development of nuclear energy. The report from Institute for Science and International Security (2006) stated that, Shah intended to get nuclear weapons. However, the Iranian officials denied the statement from Shah Pahlavi. The statement from Shah Pahlavi clearly created the western countries especially United States condemned this action (Institute for Science and International Security, 2006).

Unfortunately, although Iran government affords to pay all the nuclear advancement expenses, it was affected the economic situation became unstable. The modernization in Iran was not sole in nuclear energy aspect but in education, culture, and economic system. Instead of gaining the support from the Majlis of Iran, Shah Pahlavi gradually lost his support because the modernization was not in line with Islamic values. Moreover, the increasing gap among civilians, unemployment, poverty and corruption in Iran created antipathy to Shah Pahlavi (Cooper, 2008). By the reasons above, the dissatisfaction of Iranian people toward

Shah Pahlavi administration led to Iranian Islamic Revolution in 1979. The revolution forced Shah Pahlavi to resign and was replaced by Ayatollah Ruhollah Khomeini.

b. Supreme Leader Ayatollah Ruhollah Khomeini end of 1979 – 1989

Ayatollah Ruhollah Khomeini was born in Khomeyn on 1902. He was grown up in Shi'ite/Shia religious family. Before being known as Ayatollah Ruhollah Khomeini, his name was Ruhollah Mousavi but he changed his surname into the name of the place he was born. Since 1920 he was sent to Arak to learn about Islamic studies with Islamic Scholar namely Yazdi Ha'iri and followed him to move at Qom in 1923. In 1950s the popularity of Ayatollah Khomeini increased because of the religious crisis in Iran. Later, the emergence of Emperor Shah Pahlavi as the state leader in Iran weakened the religious leader position in Iran because of his modernization policy. Thenceforward, Ayatollah Khomeini became the opposition of Shah Pahlavi that always criticized the government.

Ayatollah Khomeini was forced to exile from Iran because of his extremist-opposition movement in Iran. Later, he was returned to Iran and led the Islamic Iranian Revolution in 1979 which succeed to overthrow Shah Pahlavi. Ayatollah Khomeini was intended to restore the Islamic values in Iran through shifting the governmental system in Iran. For instance, the existence of Supreme Leader as the head of the state, the executive power led by president through election, legislative power held by parliament, the Majlis. Practically, all the power and decision within the government have to be agreed by the Supreme

Leader along with Council of Guardians. The president of Iran was Ali Khamenei 1981 – 1989 (Jones, 2009).

The invasion of Iraq to Iran which was called as First Persian Gulf War was marked the early administration of Ayatollah Khomeini in 1980. The conflict was started because of the border dispute of Iran and Iraq. During the war, it was reported that Iran was faced huge loss from the casualties of war and destruction of infrastructure also affected the unstable economic sector. Actually Iraq was intended to be the regional players in Middle East by invading Iran. The chaos in Iran, as one of the biggest oil suppliers in OPEC, created the increase of oil price in the world.

At the end of Ayatollah Khomeini administration, Ali Khamenei the president of Iran in 1979 - 1989, was secretly dispatched by Ayatollah Khomeini to allocate the budget to restart their nuclear program again which had been halted for some years (Vaez & Sadjadpour, 2013). Until the end of Ayatollah Khomeini administration, the expectation in developing nuclear was relatively low. The nuclear development partner was shifted from western countries to China, Russia and North Korea for the nuclear proliferation assistance (Clarion Project Research, 2014). Iran started to concern toward their nuclear development in the end of the Ayatollah Khomeini administration. Particularly on nuclear energy, it was reported that the destruction on many nuclear facilities because of the Iraq invasion hampered the nuclear development of Iran until 1989 (Jones, 2009).

a. Supreme Leader Ayatollah Ali Khamenei 1989 – Incumbent

Ayatollah Ali Khamenei was the president of Iran during Ayatollah Ruhollah Khomeini administration. He turned into the Supreme Leader of Iran in 1989 because Ayatollah Ruhollah Khomeini passed away. Ayatollah Ali Khamenei was a prominent figure of Iran who was born in north eastern of Mashad in 1939. Islamic teaching has been adhered to him since he was young as his father was one of the cleric's families in Iran. He was not born in rich family but his family was tried to still educate him to be pious figure. In the age of 5, he went to Islamic school in Mashad. Then he continued his study to Qom (the same place with Ayatollah Khomeini started his syiar). Ayatollah Ali Khamenei was imprisoned 6 times in 1960 – 1970 because of his action which was seen as the opposition against Shah Pahlavi (Sadjadpour, 2009).

Before Ali Khamenei was chosen as the Supreme Leader of Iran, there was the opposition perspective that saw him as the weak figure. Ali Khamenei was popular because he was a moderate cleric. Actually many point of views that distinct with the follower of Khomeini because he seemed as not radical as the previous leader. The popularity of Ali Khamenei was below the president of Iran, such as President Akbar Hashemi Rafsanjani (1989 – 1997), President Mohammad Khatami (1997 – 2005), and President Ahmadinejad (2005 – 2013). His position as Supreme Leader of Iran was underneath of those presidents. But the position of Ali Khamenei remained exist until now (Sadjadpour, 2009).

According to Karim Sadjadpour, the leading Iran analyst and researcher of International Crisis Group, there were different focus of each president under

Ayatollah Ali Khamenei administration. For example, in President Rafsanjani administration, it was mainly focused on the Islamic technocrats and restored Iran post Iran-Iraq war, President Mohammed Khatami was concerned on the student movement and democratization in Iran and President Ahmadinejad was centralized on individual rights and safeguards of the revolutionary and radicalism in Iran. President Ahmadinejad was well-known as the brave and radicals person and he was clearly opposed with the notion of western values.

Related to the nuclear development of Iran, under the President Akbar Hashemi Rafsanjani, IAEA reported that there is no concern toward the nuclear development in Iran. However, the United States was still wary about the nuclear development of Iran and blocked the development of nuclear by giving sanction against Iran. In Iran's side, Iran decided to change their partner with other states. Early of 1990s, many states was started to be the trade partner of Iran especially in nuclear trade and China became the main partner. In 1991, China was interested to share nuclear technologies to Iran by partner in trading around \$60 millions. In 1993, Argentina agreed to create agreement regarding the provision of uranium as the nuclear fuel around 115.8 kilograms to Iran. In 1995, Germany as their new nuclear development partner, started to upgrade reactor of Iran in Tehran Research Reactor worth \$500.000 (Vaez & Sadjadpour, 2013).

During this time, Iran was portrayed the increase of the nuclear development activity by allocating more than \$800 million of their national budget. The high expectation of Iran regarding nuclear development was reflected from the big amount of budget allocation for nuclear development. Although Iran,

at that time, was abandoned by United States, Iran proved that they were able to self-sufficiency in developing their own nuclear (Vaez & Sadjadpour, 2013).

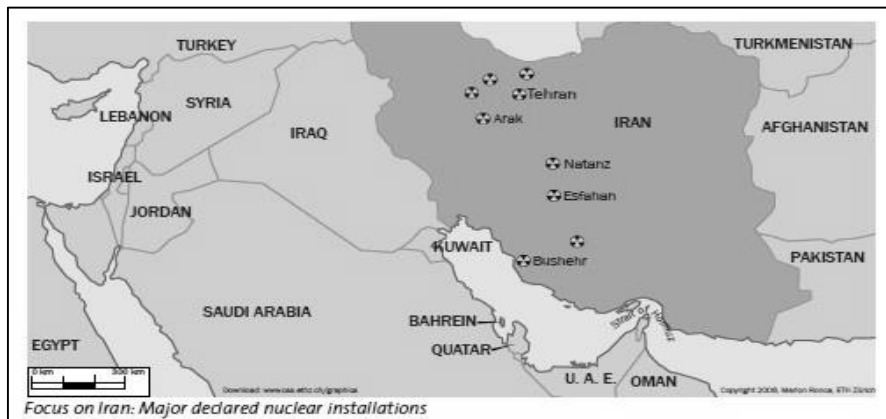
In 1997, the position of the president of Iran was replaced by President Mohammad Khatami (1997 – 2005). In the early of the new president administration, President Khatami was attempted to invite many engineers and researchers from China and Russia to work in Iran. Since Iran government decided to rebuild and reconstruct their nuclear energy, almost 3000 technicians and engineers from China and Russia worked in Iran. Iran was still continuing their nuclear development but the activity of Iran created worried. In 1998, United States decided to give sanction against Iran because there was possibility of Iran to build nuclear weapon. Because of the sanction, it was affected to the decline of nuclear development of Iran a bit (Clarion Project Research, 2014).

In 2001, there was a shocking attack of airplane crashed to the World Trade Center (WTC) 9/11 in United States which marked the terrorist action was real. George W. Bush, the former president of United States, was completely fury and condemned the action of terrorism. Iran was considered as the state-supporter terrorist, because this attack created the Iran acknowledged as the ‘axis of evil’ by George W. Bush. Moreover, the image of possession of WMD created instability in Middle East, and also became supporter of Al-Qaeda created Iran was bullied in international community. This time, the relationship of United States and Iran becomes worse.

Until 2002, the development of Iranian nuclear was not as significant as in Shah Pahlavi regime, although the steady progress of Iran proved that Iran still

continued their nuclear energy. During this time, the public still did not know exactly whether Iran builds nuclear or not because Iran was always secretly developing nuclear. In the end of 2002, it was revealed that Iran clandestinely continued to develop nuclear since Shah Pahlavi regime. There were 9 sites of nuclear development in Iran which are three in Tehran, two in Arak, one in Natanz, one in Esfahan and two in Bushehr, as the picture portrayed below:

Picture 2
Map of Iranian Nuclear Sites



Source: CSS Analyses in Security Policy, Vol. 3 No. 43, November 2008.

The existence of nine sites of nuclear development in Iran was surprised the international community. Whereas, after toppling down Shah Pahlavi regime, Iran issued *fatwa* that they had no intention to continue the nuclear development because it was not in line with Islamic value. *Fatwa* is basically when the Islamic religious leader released provision or determination about particular issue. Nuclear is one of the issues that is under the final decision of Supreme Leader. However, the *fatwa* from Iran actually was changeable, Supreme Leader was not hampered by previous *fatwa* or contradicts, revoke, or anything depends on the Supreme Leader itself (Clarion Project Research, 2014).

The unpredictable behavior of Iran could not be fully trusted. As it is mentioned before, the nuclear development of Iran was created wariness in international community, whether Iran use it for peaceful purposes or secretly created Weapon Mass Destruction (WMD). Furthermore, Iran with their self-sufficiency in terms of economic was believed to be able to support the future Iranian nuclear development.

After the nuclear development of Iran was revealed, the special agency, which specifically concern toward the nuclear proliferation and use the Nonproliferation Treaty (NPT) as their guidance, called International Atomic Energy Agency (IAEA) started to put their attention to Iran. Iran as one of the signatory state of NPT has to follow the three main pillars which are nonproliferation, disarmament, and peaceful uses. Since the international community was wary about the nuclear development of Iran, the E3 (European main powers such as Britain, France and Germany) attempted to negotiate with Iran. The negotiation was intended to influence Iran to refrain from pursuing the nuclear weapons and working together with IAEA to oversee the transparency of nuclear proliferation of Iran. The E3 actually allowed Iran to pursue the nuclear energy for the sake of civilian purposes. By this time, the secret development of Iran nuclear development was slowed down because Iran has to obey the safeguards standard of IAEA (Clarion Project Research , 2014).

In 2005, when it almost reached the end of President Mohammad Khatami administration and starts the President Ahmadinejad administration (2005 – 2013), Iran was reported that they decided to restart the conversion of uranium in

Esfahan. Then it was changed by the new leader, President Mahmoud Ahmadinejad. However, the Supreme Leader of Iran was remained the Ayatollah Ali Khamenei. In the early of President Ahmadinejad administration, President Ahmadinejad was continue to enriched the uranium as it was the order of previous president which made this situation ruin the previous agreement with E3. The IAEA evaluate that the action of the President Ahmadinejad disobeyed the safeguard with IAEA which previously agreed by both parties.

In June 2006, the E3 was working together with China, Russia and United States or called E3 + 3 or P5 + 1 (five permanent members of United Nations of Security Council + Germany). The E3 + 3 or P5 + 1 was created regarding to contain the Iranian nuclear program through negotiation. The superpowers + 1 evaluated that the nuclear activity of Iran was a threat and it had possibility to increase their threat in the future. Therefore, through the meeting of the ministers of the foreign affairs of each member, the states were decided to create 'Elements of A Proposal to Iran'. The proposal contains the assurance of the Iranian nuclear development which is in line with NPT which covers the long term agreement of politic and economy. During the rejection from international community regarding the nuclear development of Iran, Iran was still continuing the activity (Clarion Project Research, 2014).

The international community deemed that the independent of Iran in developing nuclear energy from many reactors, engineers, and workers looked ready for anytime to convert to nuclear with military purposes. According to IAEA, the nuclear development of Iran produced 2 types of uranium, the Low-

Enriched Uranium (LEU) purposed for the electricity and medical and Highly-Enriched Uranium (HEU) intended for weaponry and bomb. The IAEA predicted that in the future there will be probability with the increase of the nuclear developing capability; Iran would be able to produce HEU considering their self-sufficiency and capability. The United States National Intelligence Estimate (NIE) in 2007 also predicted that Iran was competent enough to process HEU by 2010 - 2015. Therefore, the nuclear development of Iran has to be suspended as soon as possible (Möckli, 2008).

Later, the nuclear development was not significant due to the continuous sanction against Iran. In 2007, the IAEA reported that the suspect of non-transparency of the government regarding the questions of the new centrifuge of Iran was able to produce plutonium (another nuclear weapon material). In 2009, representative of Iran and UNSC met in Geneva to discuss further action of Iran did that not suspend their nuclear development. The meeting resulted a draft that Iran sent the 80% of LEU to Russia but it was aborted due to the internal problem. In the early of 2010, Iran was reported make an agreement with Brazil and Turkey regarding the transfer of 1200 kg of LEU and as the exchange Iran sent 120 kg of enriched uranium. Unfortunately, this agreement was considered as the experiment of Iran to increase their stockpile and United States and Europe halted this action. During this time, Iran was sanctioned not to have any trade relationship with other states in terms of nuclear energy (Nikou, 2016).

Since Iran faced the rejection and isolation from international community, the President Ahmadinejad bravely criticized the action and made a counterattack

against United States through his speech in United Nations in May 2010. President Ahmadinejad was believed that the preserve of a state security is a compulsory and Iran had been through all the sanctions against them successfully. The lameness of the main pillars of NPT enforcement was questionable, because the dominance from other party, the United States as the firsthand and its role in the distribution of nuclear weapons in World War II, the perception to deter by using nuclear weapons, the threat of Zionist to Middle East countries, the permission privileges of some states in enjoying nuclear development was not fair, the double standard, the equalization of nuclear energy and nuclear weapon and the different perception of NPT pillars and IAEA regulations (United Nations, 2010).

In 2011, Iranian still continued to develop their nuclear energy although series of the sanction were imposed. The significant number of LEU was found in midst of this year but the IAEA did not receive this operational information transparently. Therefore, the possibilities to weaponries the nuclear energy still is exist. The new centrifuges that capable to enrich the uranium threefold were announced in the early of 2012. This situation marked that Iran attempted to level up their capability and it affected the possibility for military purposes. In midst of the year, Iran increased their capacity of their reactor again. In 2012, the IAEA and Tehran attempted to create agreement again regarding the transparency of nuclear development but it failed. The tensions of the international community especially United States to Iran were increased really high. Later in 2013, the Supreme Leader Ayatollah Ali Khamenei rejected the direct talks with Vice

President of United States, Joe Biden. President Obama offered to restore the relationship with Iran if Iran willing to obey the international obligations to decrease the tension among them.

In the early of 2014, there was a changing of Iranian president through the election and President Hassan Rouhani was officially elected. President Hassan Rouhani was known as a moderate leader. Finally, the Joint Plan of Action (JPOA) entered into force. The JPOA contain the agreements and obligations of Iran. As it was promised, as an exchange, the sanction against Iran was loosen. Although the agreement did not cover all aspects, as the time goes by, the comprehensive agreement would be appear shortly. In 2015, there were many negotiations, meetings and talks that need to be done to have mutual benefit among the parties. Finally in July 15, the parties reached the final agreement regarding the nuclear program of Iran. By this agreement, Iran agreed to abolish their centrifuges from 20.000 to 5000 (Nikou, 2016).