

LIMITATIONS ON CONTAINMENT OF NUCLEAR PROGRAMS

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The efforts of the international community to curb nuclear nonproliferation have been with a few exceptions successful. Since 1940's more than 30 states considered seriously to protect their security with nuclear weapons. Seventeen of them went further and launched nuclear weapons development program, but only ten countries acquired nuclear weapons.

To stop nuclear races the international community used a number of tools to change the course of nuclear aspirants. Those means included of security guarantees, in some cases nuclear umbrellas, and economic incentives, which included provision of nuclear power plants and fuel supplies so that countries did not acquire sensitive nuclear technologies such as reprocessing to separate plutonium or uranium enrichment. To constrain proliferation nuclear technology holders created the Nuclear Suppliers Group, which in case of India and later Pakistan slowed down, but was not able to stop the acquisition of nuclear weapons. Pre-emptive strikes to derail nuclear developments have been used twice; in 1982 in Iraq and in 2007 in Syria to eliminate reactors capable to produce plutonium. However strikes and sabotage have mixed outcomes and do not in themselves end nuclear aspirations, but simply postpone the solution to the problem.

The international community has also used tools of diplomacy to find solutions to the nuclear problems. These include bilateral nuclear cooperation agreements, which sets conditions for the delivery of nuclear technology. Countries have been asked to forego uranium enrichment, or, if they pursue uranium enrichment or reprocessing, a prior consent of the provider is needed, for example, if uranium supplied is going to be reprocessed.

One of the tools of diplomacy has been to contain nuclear programs until negotiated solutions are found. Three such examples are the 1994 Agreed Framework (AF), the Leap Year Agreement in 2012 with North Korea, and the Joint Comprehensive Plan of Action (JCPOA) in 2015 with Iran. According to the terms of the JCPOA once the IAEA draws a Broader Conclusion declaring that the Iranian nuclear program is peaceful, it allows Iran to emerge with strengthened uranium enrichment capacities making it a nuclear weapon threshold state. North Korea was, in spite of the limitations set by the AF, able to develop uranium enrichment and perfect its nuclear weapon design, which in turn enabled it to conduct its first nuclear test fairly soon after the collapse of the AF. The idea of containment is to constrain a nuclear program while looking for a negotiated solution. The AF and JCPOA have their advantages, but also their shortcomings both in monitoring and verification as well as in the final foreseen outcome. This paper analyses experiences from the implementation of the AF and JCPOA and makes suggestions for steps forward for the denuclearization of North Korea.