## Operation Smiling Buddha: Notes for UPSC Exam

Operation Smiling Buddha was the codename assigned for India's first successful nuclear bomb test which was carried out on 18 May 1974. It was designated as Pokhran - I by the Ministry of External Affairs. Pokhran-I was also the first confirmed nuclear weapons test by a nation outside the five permanent members of the United Nations Security Council. (UNSC)

This article will give details of the operation within the context of the IAS Exams.

## **Origins of Operation Smiling Buddha**

The foundation for India's nuclear programme was laid in 1944 when Homi Jehangir Bhabha founded the Tata Institute of Fundamental Research.

After the independence of India, Prime Minister Jawaharlal Nehru sanctioned the development of a nuclear programme helmed by Homi Bhabha. The Atomic Energy Act of 1948 focused on peaceful development. India was heavily involved in the development of the Nuclear Non-Proliferation Treaty, but decided to opt out of it as it became abundantly clear that the nuclear powers of the time were only keen on preserving heir hegemony in world affairs.

In 1954, Homi Bhabha changed the nature of the programme with an emphasis for weapons design and production. Two important infrastructure projects were commissioned. The first being the establishment of Trombay Atomic Energy Establishment at Mumbai (Bombay). The other being the creation of a governmental agency on August 3, 1954 - the Department of Atomic Energy (DAE). Homi Bhabha became the first secretary of the DAE. From 1954 to 1959, the nuclear programme grew swiftly.

The nuclear programme was partially slowed down when Lal Bahadur Shastri (B: 2 October 1904. D: 11 January 1966) became the prime minister. Upon the outbreak of the 1965 war with Pakistan. Shastri appointed physicist Vikram Sarabhai as the head of the nuclear programme but due to his Gandhian beliefs, Sarabhai asserted that programme would be for peaceful purposes rather than military applications.

In 1967, when Indira Gandhi became the prime minister, the work on the nuclear programme resumed with renewed vigour. Homi Sethna, a chemical engineer, played a significant role in the development of weapon-grade plutonium.

The overall project was supervised by Homi Sethna. To preserve secrecy, the project employed no more than 75 scientists and engineers from 1967–74. Future president of India, APJ Abdul Kalam, also arrived at the test site as the representative of the DRDO.

## **Detonation of the Nuclear device**

The device was of the implosion-type design and had a close resemblance to the American nuclear bomb called the Fat Man, which had destroyed the Japanese city of Nagasaki decades earlier.

The fully assembled device had a hexagonal cross section, 1.25 metres in diameter, and weighed 1400 kg. The device was mounted on a hexagonal metal tripod, and was transported to the shaft on rails which the army kept covered with sand. The device was detonated when the firing button was pushed at 8.05 a.m.; it was in a shaft 107 m under the army Pokhran test range in the Thar Desert.

The nuclear yield of this test still remains controversial, with unclear data provided by Indian sources, although Indian politicians have given the country's press a range from 2 kt to 20 kt.

## Aftermath of Operation Smiling Buddha

Prime Minister Indira Gandhi had already gained much popularity and publicity after her successful military campaign against Pakistan in the 1971 war (which began on December 3, 1971 and ended on December 16, 1971). The test led to an immediate revival of her popularity, which had stagnated considerably from its height since the 1971 war. The overall popularity and image of the Congress Party was enhanced and the party was well received in the Parliament of India.

While India continued to state that the test was for peaceful purposes, it encountered opposition from many quarters. The Nuclear Suppliers Group (NSG) was formed in reaction to the Indian tests to check international nuclear proliferation. The NSG decided in 1992 to require full safeguards for any new nuclear export deals, which effectively ruled out nuclear exports to India, but in 2008 it waived this restriction on nuclear trade with India as part of the Indo-US civilian nuclear agreement.

Pakistan did not view the test as a "peaceful nuclear explosion", and cancelled talks scheduled for 10 June on normalisation of relations. Pakistan's Prime Minister Zulfikar Ali Bhutto vowed in June 1974 that he would never succumb to "nuclear blackmail" or accept "Indian hegemony or domination over the subcontinent". The chairman of the Pakistan Atomic Energy Commission, Munir Ahmed Khan, said that the test would force Pakistan to test its own nuclear bomb.

Regardless of the consequences, Operation Smiling Buddha remains one of the greatest events in modern Indian history.