



IAEA

Atoms for Peace: The First Half Century

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Identifying hazardous materials, Madagascar

The challenge...

In the 90s, a wheat flour consignment arrived at the port of Toamasina. It was suspected to be radioactive and the Institut National des Sciences et Techniques Nucléaires (Madagascar-INSTN) was requested by the Government to assess its radioactivity level. This was found to be far above international authorised levels. Therefore, the boat had to take the consignment back to its port of origin.

At this time, no laws regarding radiation protection existed in Madagascar. The experience with the wheat flour consignment highlighted the possibility of dangerously radioactive substances entering the country.

The project...

Following this episode, the Malagasy Government decided to promulgate a national law on radiation protection and radioactive waste in 1998. The implementation decrees were issued in 2002. The IAEA made a significant contribution in establishing the regulatory body, mainly through expertise and training. Madagascar has also been involved in a range of national and regional projects



The impact...

Madagascar's increased capacities in identifying dangerously radioactive substances have resulted in a major success: on July 2006, a consignment of gas lantern mantle containing thorium-232 was seized at the port of Toamasina, in Madagascar. The Malagasy government requested the technical body of the regulatory authority, Institut National des Sciences et Techniques Nucléaires, to carry out an inspection of the consignment. The radioactive dose measured was 12 μ Sv per hour, an exposure more than 20 times the dose limit. An exceptional meeting was organised by the Minister in charge of Trade, including the Ministry in charge of Finance, the Ministry in charge of Environment, the Ministry in charge of Health and Family Planning and the Institut National des Sciences et Techniques Nucléaires, to debate the measures to be taken. It was decided that the consignment was to be returned to its country of origin, to avoid the spread of goods containing radioactive material to the public and the environment.

Madagascar also holds an annual two-day "Journées Nucléaires" seminar open to Universities, ministries and to the public to raise awareness of nuclear issues in the country.

RAF9031: Reinforcement of the regulatory body for the control of ionizing radiation sources; RAF9034: Establishment of the national technical capabilities for preparation and intervention in case of radiological and nuclear emergency; RAF9037: regulatory monitoring of public exposure, waste safety and withdraw; RAF0015: Legislative assistance for the safe and peaceful use of nuclear energy; RAF6021: Reinforcement of nuclear safety; MAG8005: Establishment of a national quality control standard for foodstuffs.