Atoms for peace and development

Widely known as the world’s ‘Atoms for Peace and Development’ organization within the United Nations family, the IAEA is the international centre for cooperation in the nuclear field. The Agency works with its Member States and multiple partners worldwide to promote the safe, secure and peaceful use of nuclear technologies.

The IAEA’s technical cooperation (TC) programme helps countries to use nuclear science and technology to address key development priorities in areas including health, agriculture, water, the environment and industry. The programme also helps countries to identify and meet future energy needs. It supports greater radiation safety and nuclear security, and provides legislative assistance.

Key achievements in Myanmar

- 2019: Local foot-and-mouth disease free zones are identified using nuclear-derived immunological and molecular technologies.
- 2019: Non-destructive techniques are successfully used for quality control testing in public and private industrial sectors.
- 2014: Yangon General Hospital doubles its cancer care capacity.

Recent project successes

Animal health

Foot-and-mouth disease (FMD) is a severe and highly contagious viral disease which in the last two years has affected 15 million cattle, sheep and goats in Myanmar. With support from the IAEA, the Food and Agriculture Organization of the United Nations and the World Organisation for Animal Health, Myanmar enhanced its capacity to control and combat incidences of the disease. Rapid-diagnosis kits and veterinary laboratory equipment were provided together with expert advice, which enabled Myanmar to establish local FMD-free clusters. These measures are helping to ensure greater food safety and security, and have strengthened the country’s capacity to respond effectively to future outbreaks.

Management of water resources

The environmental conservation of Myanmar’s popular Inle Lake has been strengthened through improved monitoring and verification of water quality, and sustainable management of its watershed. The IAEA provided training and equipment to scientific staff. The staff can now collect and analyse water data, and therefore support evidence-based policy making for lake conservation and resource management.

Human health

Myanmar improved quality assurance and control practices in four of its public radiotherapy centres, with the IAEA providing preparatory training and expertise for brachytherapy services at the Yangon General and Mandalay Hospitals, and for radiotherapy services at the capital’s Nay Pyi Taw General Hospital.

Myanmar is improving the quality and management of the water at the famous Inle Lake, with IAEA supporting training and equipment. (Photo: J. Howlett/IAEA)
Active national projects

- Enhancing National Nuclear Analytical Laboratory Capacities (MYA0010)
- Building Capacity for Establishing a Commercial Irradiation Facility through the Experience of a Laboratory Scale Gamma Chamber (MYA0011)
- Building National Capacity in Radiotracer and Non-Destructive Evaluation Techniques in Industry (MYA1016)
- Establishing an Electron Beam Irradiation Facility - Phase II (MYA1017)
- Improving the Livelihoods of Smallholder Livestock Farmers by Developing Animal Feeding Strategies for Enhanced Food Security (MYA5026)
- Monitoring and Assessing Watershed Management Practices on Water Quality and Sedimentation Rates of the Inle Lake - Phase II (MYA5027)
- Reducing the Incidence and Impact of Transboundary Animal and Zoonotic Diseases (MYA5028)
- Strengthening Human Resource Capacity in Nuclear Medicine and Radiotherapy Services for Improving the Diagnosis and Treatment of Cancer Patients (MYA6032)
- Expanding Radiotherapy Services for the Treatment of Cancer Patients (MYA6034)
- Establishing a National Secondary Standard Dosimetry Laboratory — Phase III (MYA6035)
- Building Capacity in Marine Environmental Radiation Monitoring (MYA7007)
- Upgrading the Marine Environmental Radiation Monitoring Infrastructure (MYA7008)
- Establishing Infrastructure for Application of Isotope Hydrology in Water Resources Management — Phase II (MYA7009)

Myanmar also participates in 36 regional and 8 interregional projects, mostly in the area of health and nutrition.

Previous IAEA support to Myanmar

Previous IAEA support to Myanmar has focused on developing capacities for nuclear medicine and radiotherapy, promoting the use of radiotracer and non-destructive techniques in the medical and industrial sectors, and improving livestock breeding. The country also enhanced its capacity in marine environmental monitoring and national nuclear analytics.

IAEA support to Myanmar, 2009–2019

<table>
<thead>
<tr>
<th>Trained (including women)</th>
<th>Internationally experts provided</th>
<th>Attended specialist meetings (including women)</th>
</tr>
</thead>
<tbody>
<tr>
<td>584</td>
<td>71</td>
<td>140</td>
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</tbody>
</table>

Myanmar’s contribution to South-South and triangular cooperation, 2009–2019

- 7 training course participants provided by Myanmar
- 59 expert and lecturer assignments provided to Myanmar
- 2 fellows or scientific visitors hosted

Cancer control imPACT Review conducted: December 2015

Strategic documents supported

- Myanmar National Comprehensive Cancer Control Plan (2017–2021)

www.iaea.org/technicalcooperation

The IAEA collaborates with National Liaison Officers and Permanent Missions to deliver its TC programme