Summary of the IAEA technical cooperation conference
30 May – 1 June 2017

To mark the 60th anniversary of the IAEA technical cooperation (TC) programme, the International Conference on the IAEA Technical Cooperation Programme: Sixty Years and Beyond — Contributing to Development took place in Vienna from 30 May to 1 June 2017. The conference brought together high-level decision makers and policy formulators, technical experts at the senior management level, and partners from the United Nations system and other multilateral entities.

The conference aimed to highlight the role of the IAEA TC programme in helping Member States achieve their national development strategies or plans, and to outline its potential contribution to the attainment of the Sustainable Development Goals. It also aimed to strengthen partnerships with a wide range of TC stakeholders and partners, and to examine innovative approaches for the way forward for the TC programme.

The conference offered an opportunity for Member States, United Nations agencies and other partners to explore ways of working together to make the benefits of nuclear science and technology more widely accessible.
The three conference outcomes

1. Increased visibility of the TC programme:

Many detailed success stories were showcased, demonstrating how the TC programme, as the IAEA’s main mechanism for providing services to Member States, has transferred technology, supported capacity building and facilitated international cooperation. These stories greatly enhanced programme visibility, increasing awareness of the contribution made by the programme to socioeconomic development at the national and regional levels.

2. Improved partnerships:

Many partner organizations shared their experiences of working with the IAEA, and explored enhanced opportunities for future activities under the TC programme.

3. Discussions on contributing to SDGs:

The conference helped stakeholders in the TC programme, partner agencies and potential collaborators to develop a solid understanding of the contribution that the TC programme can make to Member States’ efforts to achieve the Sustainable Development Goals.
Several Member States also showcased their stories through exhibitions and side events. The fifth session brought together high-level speakers to examine appropriate approaches and measures to help countries to maximize their use of nuclear science and technology in pursuit of the Sustainable Development Goals.

The conference comprised a high-level opening session, five panel sessions and the closing session. In the first session, representatives of five Member States highlighted the impact of the technical cooperation programme on their national socioeconomic situation and the results they had achieved with its support, and reviewed the programme’s contribution to establishing national nuclear infrastructure and capabilities in support of development priorities.

This was followed by a deeper analysis of individual projects in the second session, where participants gave examples of the ways nuclear technology has contributed to development in health and nutrition, food security, clean water and environment and innovative solutions in industry in their countries. They also shared their experiences in the fields of energy planning and nuclear power infrastructure development and radiation and nuclear safety.

In the third session, speakers and panellists described how regional approaches and different modalities of regional cooperation have addressed common needs and resolved issues on a regional or global scale and how the sharing of experiences and knowledge has strengthened international cooperation.

Speakers in the fourth session examined global partnership opportunities across countries and development organizations. Panellists presented their experiences in leveraging the support of the IAEA technical cooperation programme.

The fifth session brought together high-level speakers to examine appropriate approaches and measures to help countries to maximize their use of nuclear science and technology in pursuit of the Sustainable Development Goals.

Following a high-level address by Her Royal Highness Princess Sumaya bint El Hassan, President of the Royal Scientific Society of the Hashemite Kingdom of Jordan, on ‘Science for peace: borderless innovation for creative change,’ the closing remarks were delivered, summarizing the discussions and presenting the conclusions of the conference.

On the sidelines of the conference, participants in the roundtable discussion ‘The Role of the Private Sector: Partnerships for Development,’ organized by the IAEA, explored ways in which collaboration with private-sector partners through the technical cooperation programme and other IAEA initiatives can be expanded to increase access to nuclear science and technology.

Several Member States also showcased their stories through exhibitions and side events.
Transferring nuclear technology to developing countries is core IAEA business

“The technical cooperation programme has improved the health and prosperity of millions of people [...] I have seen for myself in visits to developing countries all over the world that technical cooperation projects deliver huge benefits to individuals, families and entire communities.”

Mr Yukiya Amano, IAEA Director General

To put nuclear science and technology to the service of humanity’s progress, all citizens of the world need to work together

“Such a task is not easy, but it is not impossible either. As it also requires collective commitments and efforts, none of those present here can remain unaware of it.”

Mr Tabaré Vázquez, President of the Eastern Republic of Uruguay

Strengthening linkages between innovation and the private and public sectors

“Regional and local partnerships are a rich source of knowledge that can help build the scientific capabilities of African institutions [...] Only through scientific development will Africa be able to create a pool of human capital capable of achieving the United Nations Sustainable Development Goals.”

Ms Ameenah Gurib-Fakim, President of the Republic of Mauritius

The importance of science and technology for development

“Science, technology and innovation helped us bring development to the doorsteps of rural people in Bangladesh [...] The IAEA holds a special place in our country’s development. I call upon developing countries to draw maximum benefits from the peaceful uses of nuclear science.”

Sheikh Hasina, Honourable Prime Minister of the People's Republic of Bangladesh
Partnerships for development

“Technical cooperation is a manifestation of how we can collaborate in a mutually beneficial relationship.”

Mr Tebogo Joseph Seokolo, Permanent Representative of South Africa to the IAEA, Chairman of the IAEA Board of Governors

Ensuring effective partnerships

"Key elements of effective partnerships include a stronger recognition of the different assets that governments, the private sector and civil society bring to the table."

Mr Paul Ladd, Director, United Nations Research Institute for Social Development (UNRISD)

The peaceful applications of nuclear technology

“The variety of applications for the skills and expertise of the IAEA is truly inspiring. The breath of disciplines that you impact on is indeed impressive. You are an inspiration to all of your affiliates who share your commitment to building a society of equal partners in progress, where individuals, regardless of their backgrounds or occupations, may feel allied in some way to the potential and promise of science and innovation.”

HRH Princess Sumaya bint El Hassan, Hashemite Kingdom of Jordan

The IAEA technical cooperation programme

“The IAEA technical cooperation programme, as the major mechanism for the Agency to provide development services to its Member States, has transferred nuclear technology, supported human and institutional capacity building, shared knowledge and expertise, and facilitated regional and international cooperation. It has decades of experience in working in partnership to achieve a common goal, which will serve it well in the era of the Sustainable Development Goals”

Mr Dazhu Yang, Deputy Director General, Head of the Department of Technical Cooperation, IAEA
Concluding Remarks

The first-ever International Conference on the IAEA's Technical Cooperation Programme: Sixty Years and Beyond — Contributing to Development was held in Vienna, Austria from 30 May to 1 June 2017.

More than 1200 participants, including Heads of State and Government and other high-level officials from 160 countries and 27 organizations and entities, attended the Conference.

Mr Yukiya Amano, Director General of the IAEA, His Excellency Mr Tabaré Vázquez, President of the Eastern Republic of Uruguay, Her Excellency Ms Ameenah Gurib-Fakim, President of the Republic of Mauritius, Her Excellency Sheikh Hasina, Honourable Prime Minister of the People’s Republic of Bangladesh and His Excellency Mr Tebogo Joseph Seokolo, Chairman of the IAEA Board of Governors, delivered addresses to the Conference at its opening session.

During the course of the Conference, it was widely demonstrated how the IAEA’s technical cooperation programme, as the main mechanism for the Agency to provide development services to its Member States, has transferred nuclear technology, supported human and institutional capacity building, shared knowledge and expertise, and facilitated regional and international cooperation.

A significant contribution was made by the IAEA’s technical cooperation programme in supporting Member States for safe utilization of nuclear science and technology for peaceful purposes in many different areas. Concrete examples of achievements and impact were presented, which were made possible with the support and cooperation of the Agency through its technical cooperation programme over the past six decades.

In the area of human health, IAEA support has enabled many Member States to establish their cancer diagnosis and treatment facilities and to set up nuclear medicine centres, with competent, well-trained staff and the necessary equipment. In order to support Member States to address cancer in a comprehensive manner, the IAEA, through the Programme of Action for Cancer Therapy, supports Member States to integrate radiotherapy into comprehensive cancer control. Nutrition studies using stable isotopes have provided important information and data for the development of relevant national policy and interventions.

In the area of food and agriculture, many Member States have benefited from IAEA support to develop new crop varieties, using radiation-induced mutation breeding to improve the yield, quality and resilience of crops and build capacity in animal health
diagnosis and production, which thus contribute to food security. In the area of food safety, technical and human capacity for food monitoring has been created and enhanced. Member States have strengthened their capacities in insect pest control, using the sterile insect technique, and in soil and water resource management.

In the area of water and environment, isotopic investigations have focused on the evaluation and management of groundwater resources, contributing to the efficient management of water resources, improving drinking water quality, ensuring sustainable livelihoods and complementing efforts to enhance human health, food security and agriculture. The technical cooperation programme has focused on building capacities in environmental monitoring programmes, including the management of marine and air pollution.

In the area of industrial applications, non-destructive testing has provided a powerful tool for quality control and non-destructive examination of large structures, devices and machinery. Nuclear techniques are now used to examine and protect cultural artefacts, clean waste water, sterilize medical supplies and preserve food commodities.

In the area of energy, Member States have benefited from the assistance of the Agency in energy planning and nuclear power programme infrastructure development.

With the support of the technical cooperation programme, many Member States have promulgated nuclear laws or decrees and relevant regulations, and have established competent radiation and nuclear regulatory authorities, which are important for Member States to ensure radiation safety.

With technical cooperation programme assistance, tens of thousands of people have been trained; many have become high-level government officials, enterprise managers, senior experts and specialists in research institutes, university professors and senior staff in regional and international organizations.

The technical cooperation programme has facilitated increased access to nuclear science and technology, supported knowledge sharing, built and reinforced scientific networks and strengthened Member States’ capacities to base their policies and decisions on scientific evidence in a broad range of important areas, particularly environment and climate change.

13,000 Scientific Visits
provided since 1958
The technical cooperation programme has also facilitated regional and interregional cooperation, through regional/cooperative agreements and triangular, South-South and South-North cooperation.

The role of the national liaison officer has been noted for its important contribution to the success of the programme. The officer serves as the primary contact person between the IAEA and his or her country and acts as representative of the country. This role is crucial in ensuring that the Agency fully understands the needs and wishes of the country. The officer also makes sure that the government, and other important authorities such as nuclear regulators, doctors and scientists, are aware of the Agency support available to them.

It has been recognized that the country programme framework has been an instrumental tool for strategic planning where priorities to be addressed through the technical cooperation programme are identified. This framework will play a major role in the years to come to link, as appropriate and where relevant, national priorities with the Sustainable Development Goals.

The IAEA encourages countries to support the participation of women in Agency programmes. At present, around a third of participants in the technical cooperation programme are women, but the IAEA aims for a steady increase in the coming years. This helps to build a growing pool of qualified women for the future.

Looking to the future, Sustainable Development Goal 17 recognizes the role of science, technology and innovation as essential enablers for development, and emphasizes the importance of partnerships as a critical means of implementation. Achieving the Sustainable Development Goals requires multi-actor collaboration, and cannot be addressed in isolation. It was noted that the technical cooperation programme has established mutually beneficial strategic, technical and financial partnerships with United Nations sister organizations, including the Food and Agriculture Organization of the United Nations (through the FAO/IAEA Joint Division of Nuclear Techniques in Food and Agriculture) and the World Health Organization, and has cooperated with other United Nations organizations, such as the United Nations Environment Programme and the United Nations Industrial Development Organization, other regional and international organizations, development banks and other financial institutions. Such long-standing cooperation should be encouraged and reinforced so that, together with its partners, the Agency can build on common strengths and effectively utilize resources for an optimal delivery of their services to Member States. Fostering partnerships that promote integrated approaches to development will support a more effective technical cooperation programme, and will also ensure coordination and complementarity of activities. This will enable an efficient and cohesive response to current and upcoming development challenges in Member States. In addition, promoting triangular, South-North and South-South cooperation will promote sustainability and contribute to effective technical cooperation.
The Conference noted that the technical cooperation programme can strengthen delivery of services to Member States by continuing its efforts to increase focus on need-driven projects that are aligned with national development strategies particularly, where appropriate, to national Sustainable Development Goal targets.

The conference also recognized that the IAEA should continue to support Member States in their efforts to work together with relevant partners, including with the private sector, with the aim of bringing nuclear R&D results to the marketplace, upscaling successful technical cooperation projects and creating conditions for sustainability. The Conference observed that the nuclear institutions in Member States would benefit from closer association with development activities by aligning their work with national Sustainable Development Goal targets.

The conference underscored that the technical cooperation programme is cross-cutting and draws on the support of all the technical departments of the Agency. Application of a one-house approach and SMART management should be further strengthened to avoid duplication and maximize synergies.

The Conference acknowledged that, over the last six decades, Member States have provided generous support for technical cooperation activities, including through their contributions to the Technical Cooperation Fund. The Fund has been the main resource for the programme and is expected to remain so in the future. It is very important that all Member States pay their share to the Fund in full and on time. The technical cooperation programme has also benefited from government cost-sharing and extrabudgetary contributions, including through the IAEA Peaceful Uses Initiative, as well as various in-kind contributions such as the hosting of training events and fellows or the provision of expertise, and these contributions will remain important for the programme in future. Partnerships with financial institutions should be strengthened, and the IAEA should seek support from other non-traditional donors and through strengthened public-private partnerships. Efforts and cooperation of everyone will need to be employed to render the resources for the programme sufficient, assured and predictable.

These are the conclusions drawn from the statements, presentations and discussions made over the course of this conference. They underscore the importance of the IAEA technical cooperation programme for our Member States, and highlight the importance of strategic, well-considered partnerships in contributing to the achievement of global development objectives. In addition, they recognize the essential role of nuclear science and technology for development.
The proceedings of the International Conference on the IAEA Technical Cooperation Programme: Sixty Years and Beyond — Contributing to Development will be available at www.iaea.org/publications as of early 2018.