Building a sustainable future: atoms for peace and development

By Yukiya Amano, Director General, IAEA

Smart use of science and technology will be essential for the achievement of the 17 Sustainable Development Goals (SDGs), which were agreed by world leaders in 2015.

Nuclear technology, in particular, has many valuable applications in industry and in areas as diverse as human health, energy and environmental protection. The IAEA is uniquely equipped to help countries use nuclear science and technology to improve the health and prosperity of their people.

For 60 years, the IAEA has supported Member States in the effective use of peaceful nuclear science and technology for sustainable development. When it comes to technology transfer and capacity-building, the IAEA delivers. Its impact on the lives of millions of people around the world is remarkable and deserves to be better known.

This edition of the *IAEA Bulletin* highlights some of the ways in which the IAEA fulfils its "Atoms for Peace and Development" mandate and assists countries in achieving the SDGs. You can read about how nuclear and isotopic techniques help fight hunger (Goal 2) by improving child nutrition in Thailand (page 13) and saving the livelihoods of farmers and farm workers in South Africa (page 10).

Nuclear science also helps to increase food production by helping farmers to make better use of water, soil and crop resources (Goals 6, 14 and 15, respectively). With IAEA support, an irrigation method optimized with nuclear technology is helping women farmers save water and grow crops to feed their families and earn a living in Sudan (page 19). In Bolivia, isotopic techniques help scientists protect water resources (page 22).

Promoting good health and well-being is an important element of the SDGs (Goal 3). The IAEA assists countries such as Tanzania and Tunisia in improving access to radiation medicine (page 8) and comprehensive cancer care (page 6). Helping to reduce premature deaths from diseases such as cancer by a third by 2030 is a priority for the IAEA and for me personally.

As countries develop, demand for energy increases. Many countries believe nuclear power can contribute to achieving affordable and clean energy for all (Goal 7), while also playing a significant role in mitigating climate change (Goal 13). A number of countries are considering new nuclear power programmes. The IAEA will help them develop the necessary infrastructure and technical capacity to operate nuclear power plants safely and securely (page 26). We also support technological research and innovation (Goal 9).

We work with key partners (Goal 17) to help make nuclear science and technology widely available for sustainable development. You can read about our collaboration with governments, international organizations and leading NGOs (page 24) and how these partnerships support scientific research and policymaking (page 26).

The IAEA Scientific Forum this year showcases the contribution of nuclear science and technology to the achievement of the SDGs. Leading experts will discuss the ways in which nuclear technology can further contribute to the well-being of humanity, boost prosperity and help to protect the planet. I invite you to follow the proceedings online: www.iaea.org/scientific-forum.

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