EDITORIAL

SCIENCE FOR ALL PEOPLE

▲ Romain Murenzi

This editorial is an abridged version of the presentation by TWAS Executive Director Romain Murenzi at the 17th Session of the United Nations Commission on Science and Technology for Development in Geneva, Switzerland.

Fifteen years ago, as the Millennium Development Goals (MDGs) were coming into focus, few could have imagined how they would help to change the world. Brazil, China, India and other nations were only beginning to emerge as centres of research and innovation. My own country of birth, Rwanda, was struggling to overcome the devastation of genocide. After making historic progress, these nations and others have emerged as models of possibility and hope for other developing countries.

With the MDGs expiring next year, the world is joining in a process to give shape to the post-2015 Sustainable Development Goals (SDGs). The draft list of goals touches on every major challenge confronting humanity: Food production and clean water. Health. Building stronger, more sustainable cities. Climate change and a range of environmental threats.

TWAS has joined in this process, and yet, we are aware that international organizations alone cannot solve these problems. If, for example, agricultural production is our goal, we are talking about a challenge that differs across continents, from region to region, sometimes village to village. Therefore, we should see the Sustainable Development Goals as a *global* framework for action that can be adapted by policymakers, educators, businesses, scientists and others at *local* levels.

As an overarching priority, the SDGs should advocate development of an effective and efficient innovation ecosystem that can support sustainable development far into the future. That involves policy and law, technology transfer, communication and partner networks. It will require science diplomacy.

Perhaps most important, building an innovation ecosystem requires education, from early childhood through PhD study. The MDGs have had a strong focus on primary education, and that's important. But when children advance through primary school and high school, are there excellent universities with strong professors awaiting them? Do these universities have modern laboratories and the latest information and communications technology (ICT)?

A nation with a weak corps of PhD scientists, ill-equipped laboratories and limited ICT will struggle to address its challenges. At TWAS, these issues are central to our mission. With our partners, we provide more than 300 fellowships every year to early-career scientists who want to obtain their PhDs. We provide about USD1.5 million each year in small research grants. These lessons can be applied to the post-2015 development agenda.

We must also consider the importance of science literacy in the wider society. If people do not understand the basic science of germs, they will be less likely to wash their hands. If a community does not understand the cause and impact of climate change, its people will be less likely to take remedial action.

The question, then, is how to enable communities and nations to build a culture of science that imparts strength and resilience. This question is at the heart of a debate now underway about the role of science in the SDG process.

Science is crucial in addressing the great challenges of our time and for developing the innovation ecosystem, and the SDGs will influence donor and funding decisions in the years ahead. Therefore, shouldn't the goals expressly support science literacy for every nation and every community? Shouldn't they advocate "Science for All People"?

Romain Murenzi, *TWAS executive director*