



Global Young Academy

The voice of young scientists around the world

The GYA Sandton Declaration on Sustainability

Twenty years ago, the 1992 Rio Conference on Environment and Development inspired a generation of young people to take up the global challenge of forging pathways to sustainability. Many of those who did are now emerging scientific leaders whose research programs are dedicated to understanding and discovering solutions to this challenge. These leaders are represented in the Global Young Academy.

On the cusp of Rio+20, we stand in a unique position as inheritors of the world that was promised in 1992. Having come of age in the lead-up to Rio+20, we, the Global Young Academy, now add our voice to that of the established stakeholders from the scientific community. We are moved to do so by the deep-seated belief of the necessity to chart a vastly different course of action for our global society over the next twenty years.

The Global Young Academy recognizes the vital role that scientific and technological innovation will continue to play as we advance toward sustainability. It is now, and must continue to be, a central component of a sustainable future. Yet, lack of scientific knowledge is not the immediate impediment to progress. Though we have much to learn, we have learnt enough in the last twenty years to take action.

The aspirations that emerged from Rio have not been matched by commensurate actions, with the dangerous consequence that sustainability is now more distant than ever. We acknowledge the complexity of the situation in a multi-stakeholder world with different, sometimes opposing, interests. Nonetheless, current trajectories must be reversed immediately. Here, we offer three means for scientists to accelerate progress towards a sustainable future.

First, all scientists, whether academic, government, or industry-based, must actively engage with civil society and decision-makers to convey the urgency of the global challenges that lay before us. The GYA will support efforts to bring scientific evidence to bear directly on the policy and decision-making processes. By mobilizing scientific knowledge we will also help communities understand how their choices may hinder or accelerate progress toward sustainable development goals.

Second, obstacles to initiating this dialogue must be overcome within the scientific community itself. The Global Young Academy recognizes scientific excellence as a prerequisite to having a credible voice in such discussion. Yet, we are concerned that metrics of success for scientists typically discourage public engagement and outreach. This must change. Public engagement must be valued, and not seen as something best left to others.

GYA General Assembly held in Sandton, Johannesburg, South Africa, 20-23 May 2012

Third, we must foster scientific literacy in the broadest sense. The goal here is to ensure that citizens have the tools to engage in societal debate and make informed choices regarding the future of their communities. The Global Young Academy will work to transform scientific education from rote-learning to inquiry-based problem solving, at all levels from kindergarten through post-secondary education. An inquiry-based approach will illustrate how scientific discoveries are made and how past evidence catalyzes them. More transparency will build both public trust in scientific information and capacity to weigh evidence supporting competing positions in the transition to sustainable development.

The world cannot spend another twenty years in further discussions about the path toward sustainability. Progress toward a sustainable future must accelerate, and it must be both inclusive and enduring. The time for action, commensurate with the immediacy and diversity of sustainability challenges, is right now. The Global Young Academy believes that scientists, and science, are fundamental to realizing the goals of sustainability. Rio+40 must be a celebration of progress.