How can the global science community meet the challenge of the Sustainable Development Goals?

Professor Jacqueline McGlade
University College London, UK & Maasai Mara University, Kenya
jacquie.mcgglade@ucl.ac.uk  j.mcglade@mmarauc.ke

Anthropology of Sustainability
Convergence and Contradiction

SDGs aim to reach a convergence between economic development, social equity and environmental protection.

The goals have been reformulated as a series of measurable and verifiable indicators, some of which are in contradiction with each other.

For instance, the goal of ‘eliminating poverty’ (SDG 1) is in tension with the dominant approaches towards ‘protecting terrestrial ecosystems’ (SDG 15).

This tension often produces contradictions between conservation and development aims.

Multiple Transformational Pathways

Transforming the planet and human societies

Transforming the relationship between development and resilience.

Transforming aid to get more means into the hands of people in need and improve the effectiveness and efficiency of humanitarian action.

Transforming government action on corruption through greater citizen engagement, transparency & access to information.
Anthropocene and Plantation ecologies

Our modern world is a combination of plantation ecologies, industrial technologies, state governance projects, and capitalist modes of accumulation.

These have moved more soil than the glaciers did and changed the earth’s climate. Extinction rates have rocketed.

This has been achieved through large-scale engineered projects across long distances that convert places into the monotony of the plantation – a green desert – which effaces the relations maintained through highly biodiverse, resilient worlds.

Anthropocene is an epoch in which multispecies livability has become endangered. (Tsing 2019)

Drivers of Innovation and Transformation

Global Innovation Index 2018 average by region, with top scoring countries for each region.
Multispecies Liveable Future Earth

The intrinsic value of diversity – whether cultural or biological – emerges as the foundation for a liveable future earth.

The scientific revelation is that the human body is not a singular organism, but can only exist in symbiosis with complex bacterial and other communities.

Dietary and political-economic factors such as class, fashion or income shape the development of human microbiomes, so our bodies reflect our daily activities and cultural traditions, and are key to our health.

This now requires dominant societies to learn from those most removed from industrial-capitalist modernity.

A liveable future requires collectors not selectors, reflecting local strategies and ways of living.

Liveable Future Earth - Food security and diversity
Liveable Future Earth – Air Pollution and Health

“Air pollution is a major and manageable threat to the health and well-being of the human population. An estimated 7 million premature deaths each year across the world. All countries are affected, but the poor and the powerless are affected most severely. Nobody remains untouched by dirty air.”

“The scientific evidence is unequivocal: Air pollution shortens life expectancy, drives unhealthy ageing and causes early death. It damages lungs, hearts, brains, skin and other organs and increases risk for disease and disability in virtually every organ of the human body. It harms health across the lifespan from earliest infancy to extreme old age.”

“Combustion is the most important source of air pollution. The costs of air pollution to society and to the economics of developing countries are enormous. These economic losses are so great that they can undercut sustainable development.”

“Economic growth that accepts air pollution, ignores the public health and environmental impacts, is unsustainable, unethical, and represents an affront to human dignity.”

Academies of Germany, Brazil, South Africa and USA

Mapping science advice in the UN SDGs process
Recommendations for Academies UN SDGs process

Take the lead in bringing together the diverse fields of knowledge that will be needed to create the multiple pathways of a liveable future.

Develop a greater appreciation of the geostories and idonistic pathways which communities have traditionally adopted to avoid extinction and ensure these are not destroyed.

Ensure that knowledge about the processes which endanger the human biome and species diversity is gathered and identified and used advise on policies to restrict them e.g. the global compact on air pollution.

Take a lead in discovering the dietary, cultural and political-economic factors that can help ensure the resilience of our biome and those of other species as these are key to our health.

A liveable future requires academies to help locate strategies and ways of living which ensure prosperity and well-being.