

Means of Implementation and Global Partnerships for Sustainable Development – 21-24 April 2015, New York

Key messages proposed by the Science and Technology community for the Post-2015 Outcome Document

The Post-2015 Development Agenda is a unique opportunity to set an ambitious, integrated and transformational global agenda for sustainable development that is supported by a strong scientific evidence base. Scientific communities worldwide are mobilising to support the definition, implementation and monitoring of this agenda from local to global levels.

The Rio+20 Future We Want document articulated the role of science in support of the Post-2015 Development Agenda. Since then, the scientific community is fully engaged and actively building the infrastructure to support the Agenda, building on decades of international research coordination. In 2012, two major new international initiatives – Future Earth¹ and the Sustainable Development Solutions Network (SDSN) – were specifically designed to mobilise the scientific community in support of the SDGs. Combined with existing organisations, this provides a new international framework for policy support and engagement. In this framework:

- The International Council for Science (ICSU)² and International Social Science Council (ISSC)³ provide international coordination and representation of science as part of the Scientific and Technological Community Major Group
- Future Earth coordinates and directs the research required to support the SDGs agenda
- The Sustainable Development Solutions Network (SDSN) synthesises and delivers solutions from science relevant to the SDG agenda
- The Scientific Advisory Board advises the Secretary General

Governments and other stakeholders have started discussing the declaration for a shared vision towards 2030. As a group of international scientific organisations and networks we – ICSU, ISSC and Future Earth – propose to include in the Preamble of the Declaration:

1. Explicit recognition that the new responsibility for global sustainability must confront the state of the planet and the imperative of safeguarding the long-term stability of Earth's key life-support systems in a socially equitable manner.
2. Explicit recognition of the essential role of science and technology for realizing Sustainable Development Goals (SDGs) at all levels.

¹ Future Earth is the global research platform providing the knowledge and support to accelerate our transformations to a sustainable world. Bringing together and in partnership with existing programmes on global environmental change, Future Earth will be an international hub to coordinate new, interdisciplinary approaches to research on three themes: Dynamic Planet, Global Sustainable Development and Transformations towards Sustainability. For more information, go to www.futureearth.org.

² The International Council for Science (ICSU) is a non-governmental organisation with a global membership of national scientific bodies (121 Members, representing 141 countries) and International Scientific Unions (32 Members). Its mission is to strengthen international science for the benefit of society. For more information, go to www.icsu.org.

³ The International Social Science Council (ISSC) is an independent non-government organisation established in 1952. It is the primary body representing the social, economic and behavioural sciences at an international level. Its mission is to increase the production and use of social science knowledge for the well-being of societies throughout the world. For more information, go to www.worldsocialscience.org.

In the chapter on **Means of Implementation**, we propose to include explicit reference to the above international scientific organisations and networks as an **alliance** that can support the new science-policy-practice interface needed for the Post-2015 agenda. Specifically, this alliance of ICSU, ISSC and Future Earth:

- should be recognised as the agencies to engage with the **High Level Political Forum** and coordinate input from the scientific community in order to ensure an informed and objective perspective on progress against the achievement of the SDGs.
- should play a role in coordinating research input for the UN **Global Sustainable Development Report**.

Furthermore, the international research programme Future Earth, in collaboration with its extensive networks of partners, should be recognised as a platform for the coordination of international research and scientific input in support of delivery of the SDGs at all levels.

Science in the Post-2015 Outcome Document

To ensure that the UN develops a fit-for-purpose science-policy-practice interface for implementing the SDGs, we recommend the following inclusions in the three relevant chapters of the Post-2015 Outcome Document.

Chapter 1 – Preamble

The post-2015 development agenda defines a new global development paradigm. We strongly support a vision for 2030 that puts people and the planet at the centre, recognising that human development and well-being and environmental stewardship are inextricably linked.

In the last decade, science has generated new knowledge about the scale and speed at which human societies are affecting Earth. This improved understanding makes it clear that all countries have a new responsibility for the future of our common global resources. Nations must acknowledge this new scientific knowledge and adopt a precautionary approach to Earth-system change. This approach is essential if we are to secure a safe operating space for human development and reduce the risk of unexpected, destabilising events with regional or global consequences. Frameworks, such as planetary boundaries, provide an operational architecture for a precautionary approach to equitable and long-term human well-being and planetary stewardship. Resilient people and societies are essential for a resilient planet. We urge nations to recognise this new knowledge in the preamble.

Therefore, we propose the inclusion of a statement that supports the value of scientific and technological research in delivering the Post-2015 agenda in the preamble, for example:

We recognize the critical need for much enhanced harnessing of both science and technology for sustainable development. We therefore urge Member States to scale up national science and technology activities and capacity targeted on sustainable development, and encourage stronger collaboration across scientific and policy communities. We also resolve to enhance support for international cooperation in relevant scientific research, scientific and technological capacity building, knowledge sharing and innovation.

Chapter 3 – Means of implementation (MOI)

As part of the means of implementation and enabling conditions for achieving the Post-2015 Development Agenda, an enhanced partnership between policy-makers, practitioners, scientists and other sectors of civil society is key to jointly identify critical questions that need to be addressed; co-produce knowledge that effectively supports decision-making at different scales; and co-deliver solutions supported by scientific evidence.

The UN Secretary General's Synthesis Report on the Post-2015 Development Agenda highlights some key areas through which the role of science can be enhanced in relation to the delivery of sustainable development in general and for the implementation of the SDGs specifically. This must be further developed for the final Post-2015 agreement and include:

- Increasing public expenditure of research and development, including avoiding subsidies for innovations that promote unsustainable products, production and consumption.
- Increasing the support for research on sustainable practices by people and societies in specific contexts.
- Improving the level of participation of women and girls in science, technology (including ICTs), engineering, and mathematics.
- Enhancing support for developing countries, and LDCs in particular, to allow them to benefit from enhanced access to technologies for sustainable development.
- Developing technology partnerships based on multi-stakeholder, solution-driven initiatives.
- Ensuring access to the benefits of knowledge and technology for all, including the poorest, and creating the right incentives for sustainable practices, and for technological innovation needed for sustainable development.

These suggestions now need to be spelt out in greater detail and turned into specific – and concrete – commitments from Member States about how they will be achieved as part of the enabling environment for the successful implementation of the SDGs.

More specifically, the Secretary General proposes to establish a “global platform building on and complementing existing initiatives, and with the participation of all relevant stakeholders” in relation to science and technology, in order to:

- enhance international cooperation and coordination
- address fragmentation and facilitate synergies
- facilitate knowledge transfer and information sharing.

The alliance of organisations would be well-placed to collaborate in providing exactly such a platform.

Below we outline in more detail how such an alliance can and must now serve as a key delivery agent for the use of science in the implementation and achievement of the SDGs:

- **Research coordination:** Future Earth provides an international platform to coordinate research for global sustainability. It is recommended that governments should increase their activities in support of Future Earth for improved monitoring and synthesis of knowledge and data relating to the Earth system, its future state and necessary societal transformations to sustainability. It is also recommended that nations encourage the development of national

Future Earth networks and that the international community supports efforts by developing countries to participate in Future Earth. (Text based on UN Resolution 44/207, 22 December 1989: Protection of global climate for present and future generations of mankind. See footnote for original text)⁴

- **Indicators:** Science must be part of the multi-stakeholder process to identify indicators, assess their viability and develop the potential for integration. The alliance can provide essential research and synthesis in support of indicator development and monitoring. They can complement national monitoring with coordination and provision of data relating to global monitoring of common resources, for example, relating to Earth's biosphere, more specifically for instance for the oceans, land use, ice sheets and the atmosphere.

Chapter 4 – Monitoring and Review

Effective monitoring and review will be essential for the success of the Post-2015 Development Agenda. The ability to accurately report on progress is key to mobilising action, promoting shared learning, and enabling positive changes in course. We strongly support the need for **targets and indicators that integrate economic, social and environmental dimensions and reflect their interdependencies**. Science can provide guidance on integrated indicators. This will require filling information and data gaps, as well as developing new metrics that can support a more integrated understanding of sustainable development. Initiatives such as Future Earth are emerging to support the monitoring and review of progress towards sustainable development.

A step change in data collection, monitoring and synthesis is urgently needed for a quantified planet. The next decade promises a transformation in sensor technology and data access, sharing analysis and visualisation which will connect personal health to the health of societies and to the health of the planet. Data usability would be improved with a global consensus on principles and standards. Such a consensus will allow greater integration, analysis and synthesis of data.

Open data will expand usage and improved statistical literacy and data literacy will accelerate responses to new information.

Below we outline how the alliance should support the High Level Political Forum and the Global Sustainable Development Report and act as a key delivery agent for the use of science in the implementation and achievement of the SDGs:

- **High Level Political Forum (HLPF):** As one of the nine Major Groups, the scientific and technological community has been granted comprehensive participatory opportunities in the HLPF through UN General Assembly Resolution A/RES/67/290. The Major Group should be recognised as the specific consortium in charge of coordinating inputs by the scientific community in HLPF.

⁴ UNGA resolution 44/207, 22 December 1989

Protection of global climate for present and future generations of mankind

2. Recommends that Governments, with due consideration for the need for increased scientific knowledge of the sources, causes and impact of climate change and of global, regional and local climates, continue and, wherever possible, increase their activities in support of the World Climate Programme and the International Geosphere-Biosphere Programme, including the monitoring of atmospheric composition and climate conditions, and also recommends that the international community support efforts by developing countries to participate in these scientific activities.

- **Global Sustainable Development Report:** The Global Sustainable Development Report (GSDR) is a United Nations publication to “strengthen the science-policy interface at the High Level Political Forum (HLPF)”. The four-year cycle of the report will coincide with the cycle of the HLPF. As outlined in the Rio+20 outcome document, the HLPF will "strengthen the science-policy interface through review of documentation bringing together dispersed information and assessments, including in the form of a global sustainable development report, building on existing assessments" (§85k). The GSDR will adopt an assessment-of-assessments approach, documenting and describing the landscape of information on specific issues that are policy-relevant in field of sustainable development. The alliance can provide an effective interface between GSDR and scientific/research communities from across the world, coordinate input from those communities, and drive the research needs for sustainable development.

Among the common principles underpinning the Post-2015 Development Agenda is the need for an **evidence-based approach for realizing sustainable development**, particularly as advances in research may identify new risks and opportunities for sustainable development. Partnerships working across policy, scientific communities and other sectors of society will be key in this regard.