

Input from the Science and Technology Major Group

Provided by David Griggs on behalf of ICSU

The S&T Major Group congratulates the OWG on the Proposed Goals and Targets. Recognising the difficulty of making further major changes at this late stage of the process we will limit our intervention to a small number of important points and we will recommend amended text to facilitate their being taken into account.

The S&T Major Group would like to make the following three important points:

- 1) The degree of integration within the draft goals and targets requires improvement. We recognize that the goals and targets should be taken in their totality but a lack of integration within some goals threatens perverse outcomes as implementation of one goal takes place at the expense of another goal. To the extent possible all goals should take the most important interlinkages between goals into account that have the potential to have serious adverse effects on another goal or goals.
- 2) The goals and targets do not fully recognize the food, energy, water nexus.
- 3) The draft goals and targets need to recognize more explicitly the role that science and technology plays in driving innovation and providing sustainable development solutions. The goals and targets also need to recognize more explicitly the requirement for capacity building in S&T and the role of Future Earth as a co-ordination mechanism for S&T in sustainable development.

The S&T Major Group therefore recommends the following amendments to the draft goals and targets:

- Goal 1.7. Pursue **socially and environmentally sustainable** and inclusive economic growth as a key enabler for achieving poverty eradication
- Goal 2. Add new targets on water use efficiency, land extensification and soil health as follows:
“Eliminate agricultural extensification and maintain arable lands.”

“Improve soil health, including erosion, soil acidification, soil carbon stores, and soil salinity grades.”

“Increase the water use efficiency of agricultural systems and establish targets for water use per unit of agriculture produced.”

- Goal 3.5. A fixed percentage target for healthy life expectancy increases is scientifically unsound and should be expressed as a function of current life expectancy.
- Goal 3. Introduce target on non-communicable diseases “Reduce the rate of non-communicable diseases by x%.”
- Goal 4. Introduce a target on Education for Sustainable Development as follows:
“All students are able to demonstrate the capabilities, competencies and capacities to contribute to the current and future needs of the skill-based economy and a sustainable future through the development and implementation of a national Education for Sustainable Development (ESD) strategy”

Goal 6. Introduce a target on the resilience of water systems to extreme events such as floods and droughts.

“Ensure water systems have the capacity to cope with extreme events, in particular climate change impacts and rapid population growth in urban areas.”

Goal 7. Introduce targets on reduction of carbon intensity and increase in energy intensity of energy production in order to link energy and climate goals.

Goals 8 and 9. Comprehensively introduce targets to embed environmental and social sustainability into economic growth and industrialization targets

Goal 11. Insert “productive” into Goal 11 to read:

“Build inclusive, safe, productive and sustainable cities....”

Goal 11 Include a target on culturally diverse and vibrant cities including the level of engagement by different communities in local decision making, recognition of Indigenous heritage and local communities, range of cultural activities, festivals, funding support for cultural activities.

Goal 15: Include the requirement for maintaining ecosystem services

while protecting those ecosystems

Goal 17: Introduce a target to recognize more explicitly the role that science and technology plays in driving innovation and providing sustainable development solutions. The goals and targets also need to recognize more explicitly the requirement for capacity building in S&T and the role of Future Earth as a co-ordination mechanism for S&T in sustainable development.