Keeping Science involved in SDG implementation: How can the HLPF most effectively engage with scientists in guiding its work? How can science contribute to the implementation and follow up and review of the post 2015 agenda?

Investments in science, technology and innovation (STI) are vital to achieving poverty eradication and sustainable development as well as to identifying and addressing pressing global societal challenges. There has been considerable progress over the last decades on strengthening the global knowledge base, including data and indicators for monitoring progress against poverty eradication and sustainable development objectives. However, as acknowledged by the UN Environment Assembly, there are still significant gaps in knowledge and we need to take further steps to maintain and strengthen this knowledge and evidence base while the pace of change is fast. So we need to invest further in data collection and research, to improve the science-policy interface and to establish and share a credible knowledge base to support monitoring and review of the SDGs. This will be particularly important at the level of the HLPF, and therefore we are grateful to have the opportunity to discuss this.

The HLPF can effectively engage with the scientific community in several ways, notably through the information supplied to prepare for the review sessions and during its meetings. We welcome for example, the engagement of scientists and experts in the Inter Agency and Expert Group on SDG indicators to develop an indicator framework to support monitoring and assessing progress against the post 2015 agenda.

The EU supports selecting global indicators that can be used to track progress simultaneously towards different targets, making an integrated framework that embeds interlinkages and balances the three dimensions of sustainable development - and limiting the number of indicators. This may require the development of new indicators or types of indicators, and it will also require consideration of new types of data and information and their collection. To achieve the objectives of reducing inequality and leaving no one behind, relevant quantitative and qualitative indicators should be gender and age sensitive, include a human rights dimension and, where possible, be disaggregated by income, gender, age and other factors. Opportunities from research and technological progress in particular ICT technologies to exploit large volume of heterogeneous data ('big data') should be harnessed. Global efforts should be further encouraged to the integration of socio-economic data with in situ and remote sensing geospatial data such as those produced by the EU Copernicus programme and those made universally accessible via the Global Earth Observation System of Systems (GEOSS). The EU should support efforts to improve the coverage and quality of data for developing countries.

The Global Sustainable Development Report will be a key input to the HLPF supporting decision making and we will make more detailed comments in the next session.

However we do not see this report as the only scientific knowledge input that will be important for the HLPF. The HLPF should also consider evidence-based reports that illustrate global trends, as well as the latest scientific evidence of new issues or emerging trends that have a bearing on the achievement of the SDGs. Links with relevant initiatives like the Science and Technology Alliance for Global Sustainability and its flagship initiative Future Earth are also relevant. It will be particularly important for the experts to be able to articulate to policy makers the relevance of their findings to the achievement of the SDGs, in order not to overload the HLPF with too much data and information.

Integrated assessment reports will also be important inputs to the HLPF, such as reports by the International Resource Panel, and the World Resources Reports, which already provide analysis of progress across different aspects of the post 2015 agenda and which also identify drivers of change, as well as actions that could be taken to overcome challenges or address negative trends. These will assist the HLPF in assessing progress in an integrated manner across all components of the agenda.

Presentation of assessments of scientific findings and other evidence during the sessions could also be considered as a contribution by the scientific community to support implementation. Presenting new information in ways that are visually interesting (such as multiple layers of spatial information) could inform and inspire participants.

We also recognise that there is a significant contribution to be made by science and the scientific community to the implementation of the new agenda, in addition to monitoring and review beyond the input to the HLPF. In particular, the co-design, co-development and co-delivery of new technologies, solutions and approaches to implementation, new advances in information and communication technology, new measuring and monitoring techniques, and ways of analysing complex data, as well as, importantly, providing evidence of what works, so that good practices can be shared widely between countries to help them maximise their progress.