

Stockholm Resilience Centre's (SRC) contribution to the 2016 Swedish 2030 Agenda HLPF report *Stockholm, February 2017*

Challenges and opportunities with the 2030 Agenda

While sustainability science increasingly demonstrates the connections between the social, economic and ecological dimensions of sustainability, development practice still largely treats them as separable. The consequence is that socio-economic development is maximised while environmental impacts are overlooked. In order to implement the 2030 Agenda on Sustainable Development, there is a need to move beyond this reductionist understanding, and account better for the close interplay between humans and nature.

The pervasive imprint and the speed, magnitude and connectivity of human actions are now so great that critical planetary boundaries are being compromised. If crossed, this would severely challenge future development for humanity, and possibly the stability of the Earth system as a whole. Social conditions, justice, equality, health, culture, democracy, power, matters of security, and even survival are all interwoven with the biosphere, the thin layer at the Earth's surface where all life is found. This includes the life-supporting ecosystems that provide us with a hospitable climate, clean water, food, fibres and numerous other goods and services. The connections between these ecosystems and our dependence on them is evident on local, regional and worldwide scales. Understanding and recognising these global connections and dependencies is paramount for development projects delivering long-lasting impacts.

A shift in thinking offers exciting opportunities for development. To achieve long term sustainability and a world where no one is left behind, the SDGs must be treated as truly intertwined and in tune with improved stewardship of the biosphere. This approach is at the core of SRC's scientific vision.

How SRC contributes to the 2030 Agenda

The SRC is an internationally renowned research centre on sustainability science. It builds on the realisation that, in our globalised society, there are virtually no ecosystems that are not shaped by people, and no-one can survive without ecosystems and the services they provide. Based on this, the SRC has led the ground-breaking work of identifying nine planetary boundaries within which humanity can continue to develop for

generations to come. It has also developed seven principles for building social-ecological resilience. The Centre is a joint initiative between Stockholm University and the Beijer Institute of Ecological Economics.

SwedBio

The Sida-funded SwedBio program at SRC, is a knowledge interface contributing to poverty alleviation, equity, sustainable livelihoods and social-ecological systems rich in biodiversity that persist, adapt and transform under global change such as climate change. SwedBio enables knowledge generation, dialogue and exchange between practitioners, policy makers and scientists for the development and implementation of appropriate policies and methods at multiple scales.

GRAID

The SRC also hosts GRAID (Guidance for Resilience in the Anthropocene: Investments for development), another Sida-funded programme. GRAID's mission is to increase awareness and use of resilience as an integral part of sustainable development for achieving poverty alleviation, long term human wellbeing and the maintenance of planetary life-support systems. By promoting an approach to sustainable development that considers the complexity, turbulence and speed of today's world, GRAID brings resilience research and development practice together.

The history of SRC's 2030 Agenda contributions

The SRC co-hosted a Nobel Laureate symposium on global sustainability in 2011. This clearly influenced the UN Secretary General's High-level Panel on Global Sustainability, whose final report '*Resilient people, Resilient planet: A future worth choosing*' was strongly in line with the centre's research, particularly on the planetary boundaries framework.

The SRC has also been prominent in the Sustainable Development Solutions Network (SDSN) and has published several influential articles on the need for a more integrated approach for the SDGs. SwedBio has also been arranging dialogues and supported collaborating partner organisations in developing countries in informing the 2030 Agenda negotiations.

Examples of SRC's relevant 2030 Agenda contributions from 2016

SRC gathered the world's most powerful seafood companies in seeking to make the industry more sustainable.

SRC organised and convened a high-level dialogue with some of the world's most powerful actors in the seafood industry. The result was a commitment to improve transparency, traceability and reducing illegal fishing in their supply chains.

The dialogue, which was based on SRC's ground-breaking work on identifying keystone actors, discussed the role business leaders have in addressing some of today's most urgent sustainability issues. **Goal: 14, 12, 2, 17**

SRC researchers published 150 scientific articles in 2016 on sustainability science for biosphere stewardship, e.g.:

*Integration: The key to implementing the Sustainable Development Goals. Seven recommendations on how to improve interlinkages between the SDG's (Stafford-Smith, M. et al. 2016) **Goal: all***

*Global networks and global change-induced tipping points. What responses to ocean acidification, fisheries collapse and infectious disease outbreaks have in common (Galaz, V. et al. 2016) **Goal: 17, 16***

*Revealing invisible water: Moisture recycling as an ecosystem service. Why landscapes that regulate downwind rainfall are key producers of ecosystem services (Keys, P.W. et al. 2016) **Goal: 15, 14, 1***

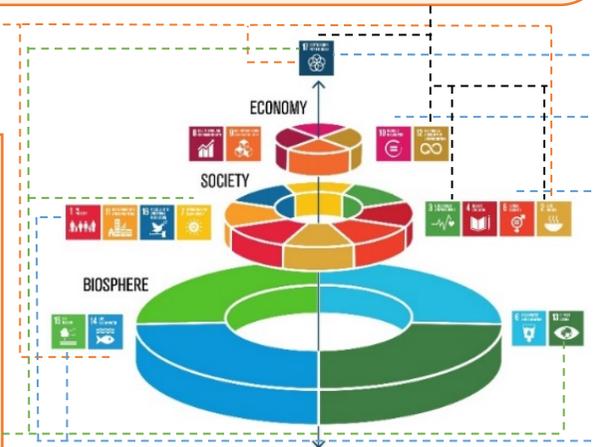
Bringing, science, policy and business together, **EAT Stockholm Food Forum** uses food as a lens to tackle health and sustainability challenges. SRC coordinates the scientific activities. A new EAT-Lancet Commission will, for the first time, assess pathways to deliver healthy diets from sustainable food systems to a growing world population, and whether this is possible while staying within planetary boundaries. It can help policy makers by providing a roadmap for how transformation of the food system can support the SDGs. **Goal: 2, 3, 17, 12**

SRC co-hosted a **IPCC scientific workshop**, including IPCC Chair Hoesung Lee, to discuss research gaps from previous report and how science can fill these gaps. **Goal: 13, 7, 17**

Based on research from SRC, the **Arctic Resilience Report** identified 19 tipping points in Arctic marine, freshwater and terrestrial ecosystems, threatening sustainability. It also examined factors supporting resilience. The findings were presented at the first ever White House ministerial meeting on the Arctic. **Goal: 13, 14, 15**

SRC and SwedBio staff were part of the Swedish delegation to the **13th meeting of the Conference of the Parties to CBD**, being co-chair of capacity building item, spokesperson for EU on biodiversity and traditional knowledge, and arranged 15 side events.

SwedBio presented a discussion paper, demonstrating how the Aichi Biodiversity Targets and the SDGs can be mutually supportive for effective implementation. **Goal: all**



Economies and societies are embedded parts of the biosphere. SRC's view of the SDGs within the safe operating space of the planet. *Rockström and Sukhdev, 2016 and Folke et al, 2016; J. Lokrantz/Azote*

- Through the *Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES)*, SRC researchers show how the Centres approach to social-ecological systems can support UN biodiversity assessments. An example is a methodological assessment report on scenarios and models. **Goal: 15, 14**
- SRC co-leads *The World In 2050*, an international assessment of how to reap the most benefits from achieving all 17 SDGs together, within planetary boundaries. **Goal: all**
- SRC's GRAID brought the *Global Resilience Partnership* together e.g. for a three-day workshop building collaboration and bringing the worlds of resilience research and development practice together. **Goal: 17, 1, 3, 15**
- SRC's SwedBio further developed the *Multiple Evidence Base* to connect across knowledge systems, based on communities own identified needs, priorities and methods. **Goal: 10, 1**
- SRC was deeply engaged in *UN Habitat III*, including promoting five steps to break out of status quo on urban research informing global policy. **Goal: 11, 9**
- SRC was part of a consortium commissioned by the *European Environment Agency*, which contributed to an evaluation of how the planetary boundary concept can inform EU policies, in particular on the 2030 Agenda. **Goal: 15, 14**
- SRC took part in a UN expert consultation by the *UN Special Rapporteur on human rights and environment* on safeguarding human rights whilst maintaining healthy ecosystems and biodiversity. **Goal: 10, 15**
- SRC is part of the *Global Economic Dynamics and the Biosphere programme (GEDB)* addressing economic dynamics of global change and the implications for a sustainable future. **Goal: 8, 15, 14**
- SRC was a key scientific contributor to *WWF's Living planet report 2016*. **Goal: 15, 14**
- SRC is part of *Live Baltic Campus* on how campuses, including SU's forthcoming Albano, can be leaders in the transformation to sustainable urban development. **Goal: 11, 9**
- SRC contributed with a report to the Swedish Environmental Protection Agency investigating how biosphere reserves can contribute to the 2030 Agenda. **Goal: 14, 15**
- SRC researchers contributed to the *Baltic Health Index*, the first Baltic Sea assessment that includes humans as a part of the marine ecosystem. **Goal: 14, 3**