Science Diplomacy for the Sustainable Development Goals

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Science Diplomacy Online Course

This one-hour course, hosted by Dr. Marga Gual Soler and Dr. Tom Wang of the AAAS Center for Science Diplomacy, is the first ever online course fully dedicated to science diplomacy. It includes the basic definitions and frameworks of science diplomacy, its evolution in history, and several case studies with interviews with top practitioners in the field. Join us and learn all about the connections between science and diplomacy throughout the ages.

https://www.aaas.org/scidip-online-course

The 17 Sustainable Development Goals (SDGs) of the 2030 Agenda for Sustainable Development were adopted by world leaders in September 2015 at an historic UN Summit and officially came into force on January 1, 2016

17 SDGs, 169 TARGETS, 232 INDICATORS*

UNIVERSAL AGENDA: Apply to both developed and developing countries

INTEGRATED: 3 pillars of sustainable development (economic, social, environmental); 3 pillars of the UN (development, human rights, peace and security)

MEASURABLE TARGETS: 17 For all nations to achieve by 2030.
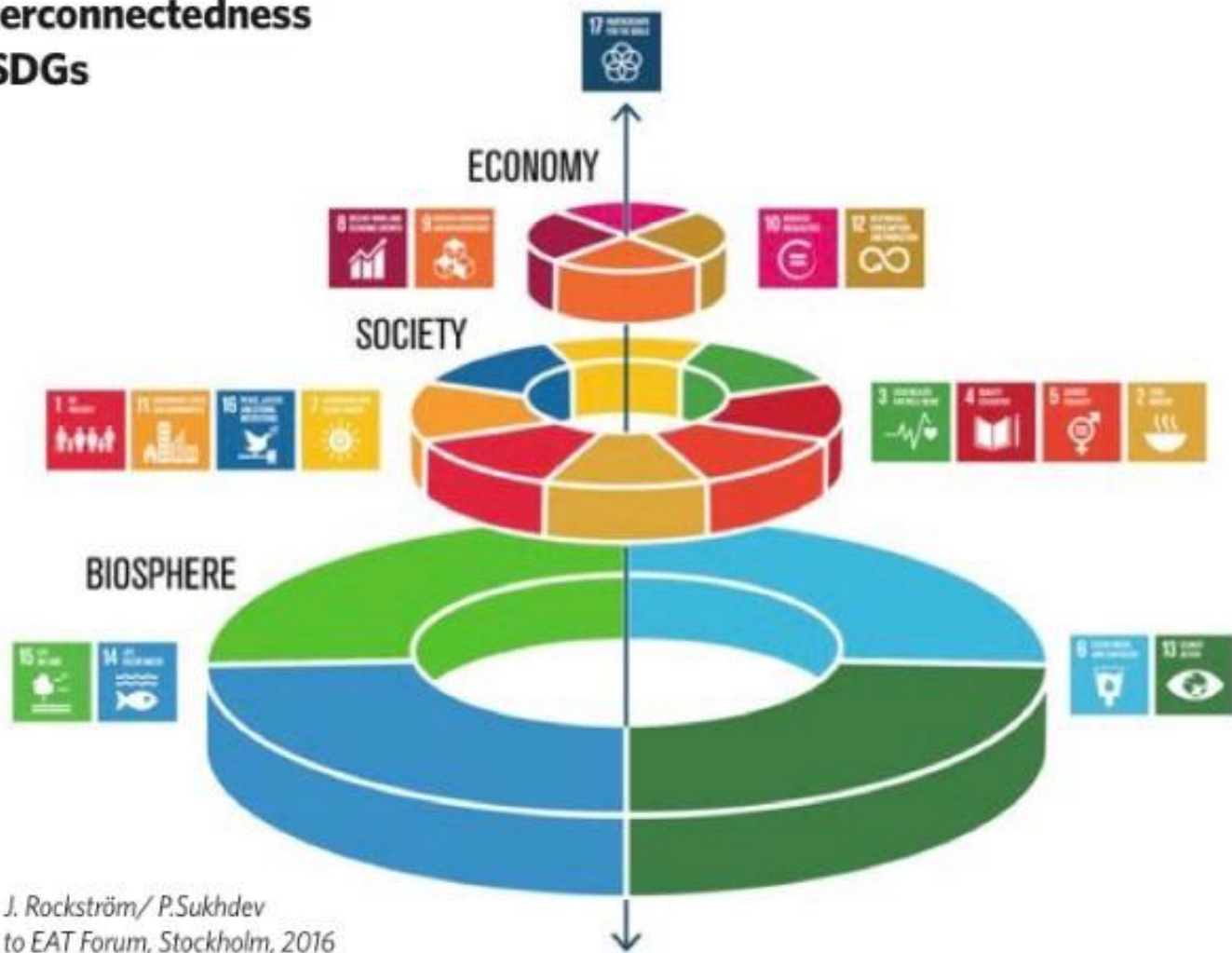
INTERLINKED: "All or nothing agenda"

SCIENCE IS CROSS-CUTTING: No specific science goals, but all evidence-based

NON-BINDING: Provides framework for all countries to align their national policies: Voluntary National Reports (VNR) and National Action Plans

**MULTILATERAL ORGANIZATIONS:** EU, AU, GEF, GCF, OECD, WB, OAS, CITES...

http://sdg.iisd.org/

https://unstats.un.org/sdgs/indicators/Official%20Revised%20List%20of%20global%20SDG%20indicators.pdf

The interconnectedness of the SDGs

ECONOMY

SOCIETY

BIOSPHERE

Harnessing the contribution of science for the sdgs

- Advising on challenges
- Providing indicators for monitoring progress
- Advising on policies & actions with periodic feedback on what is working and not working
- Searching for innovative solutions
- Building a robust science-policy interface in every country and internationally
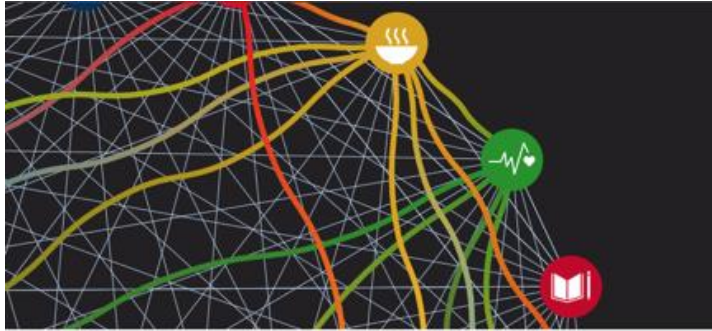
A GUIDE TO
SDG INTERACTIONS:
**FROM SCIENCE
TO IMPLEMENTATION**

INTERNATIONAL
COUNCIL
FOR SCIENCE

www.icsu.org
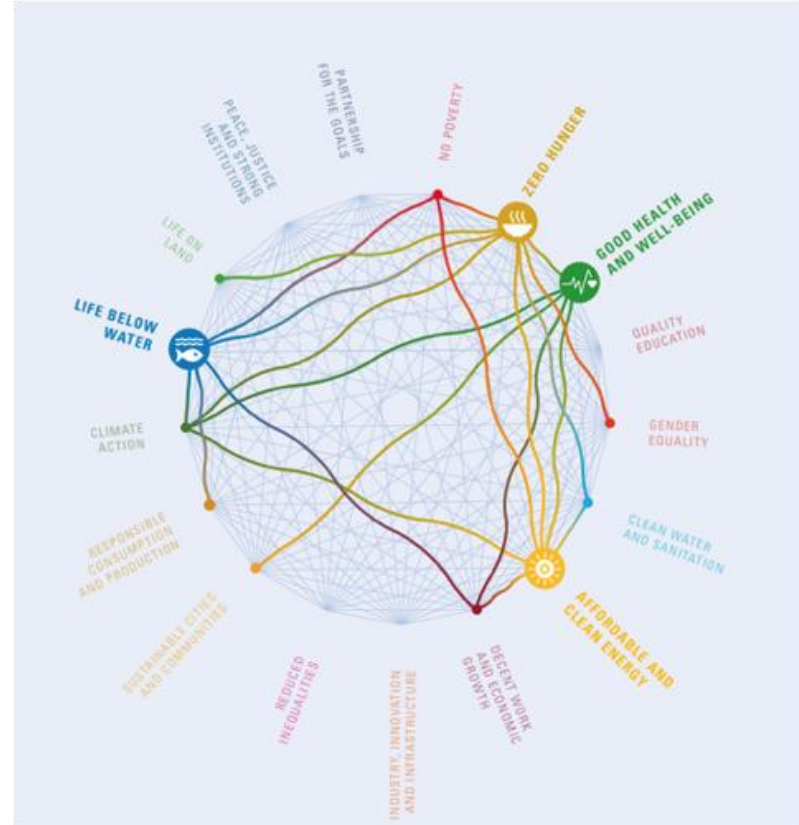
"Research, Innovation, and Science Policy Experts" (RISE)
Open to the World: science diplomacy to enhance the external dimension of science and research policies, share EU values, visions and priorities, and achieve the SDGs.


European Commission

Europe's Future:
Open Innovation
Open Science
Open to the World

Reflections of the RISE Group

Research and Innovation

Connecting Scientists to Policy Around the World:

Landscape Analysis of Mechanisms Around the World Engaging Scientists and Engineers in Policy

www.aaas.org/globalsciencepolicy

Connecting Scientists to Policy Around the World

Landscape Analysis of Mechanisms Around the World Engaging Scientists and Engineers in Policy
Executive Summary • February 2017

AAAS

SDGs for K-12 Education
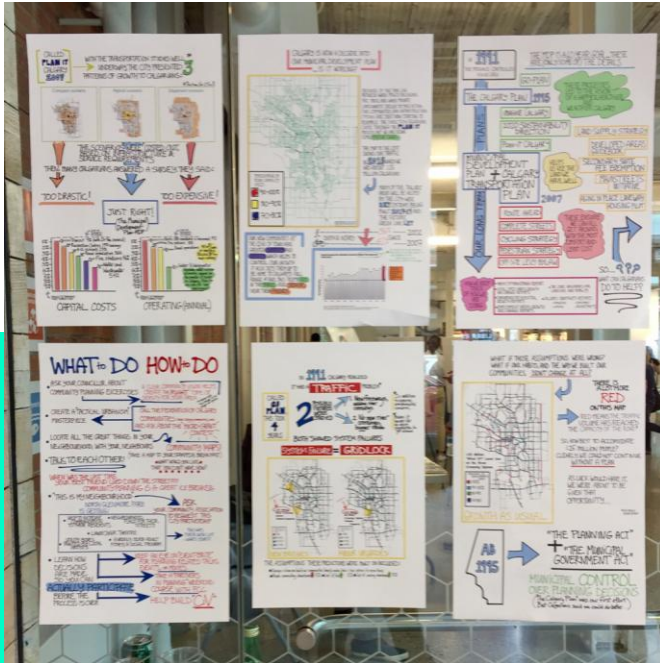
40%

Global population of children + youth

Why SDGs? Why Kids?

#globalgoals

Ambitious
Better tomorrow
Participation
Involvement
Commitment
World a better place

Translating SDGs into Kid-Friendly Words...

Translating SDGs into Kid-Friendly Words...

Current Initiatives: #TeachSDGs

#TeachSDGs @TeachSDGs · Sep 29
There is no higher curriculum than @TheGlobalGoals. Working on real-world problems is beyond engaging - it is a moral imperative. #TeachSDGs

manuelavalentim @fatela1971 · Oct 1
"I just joined the movement to bring @TheGlobalGoals to education!Learn about #TeachSDGs at teachSDGs.org or @TeachSDGs on twitter

Jodie Deinhammer @jdeinhammer · Oct 2
Share how you #TeachSDGs with @SirKenRobinson and listen to ideas from other teachers flipgrid.com/46ec23 #CISDGlobal #CISDOurStory

Welcome to the Global Goals!
To flourish on earth we have to take care of it & each other. The Global Goals are a great plan but they depend on schools, teachers & communi...
flipgrid.com

Current Initiatives: The World's Largest Lesson

UN Geneva ✓ @UNGeneva · Oct 2
"Are you part of @TheWorldsLesson? Join us in educating children & youth on @TheGlobalGoals. See how to #teachSDGs > bit.ly/WorldsLesson

WHAT WORLD DO WE WANT TO SEE IN 2030?

#TeachSDGs with the World's Largest Lesson 2017 and make it happen!

WORLD'S LARGEST LESSON

WORLD'S LARGEST LESSON 2017
STARTS 18 SEPTEMBER

END EXTREME POVERTY.
FIGHT INEQUALITY AND INJUSTICE.
TACKLE CLIMATE CHANGE.

World's Largest Lesson introduces the Sustainable Development Goals to children and young people everywhere and unites them in action.

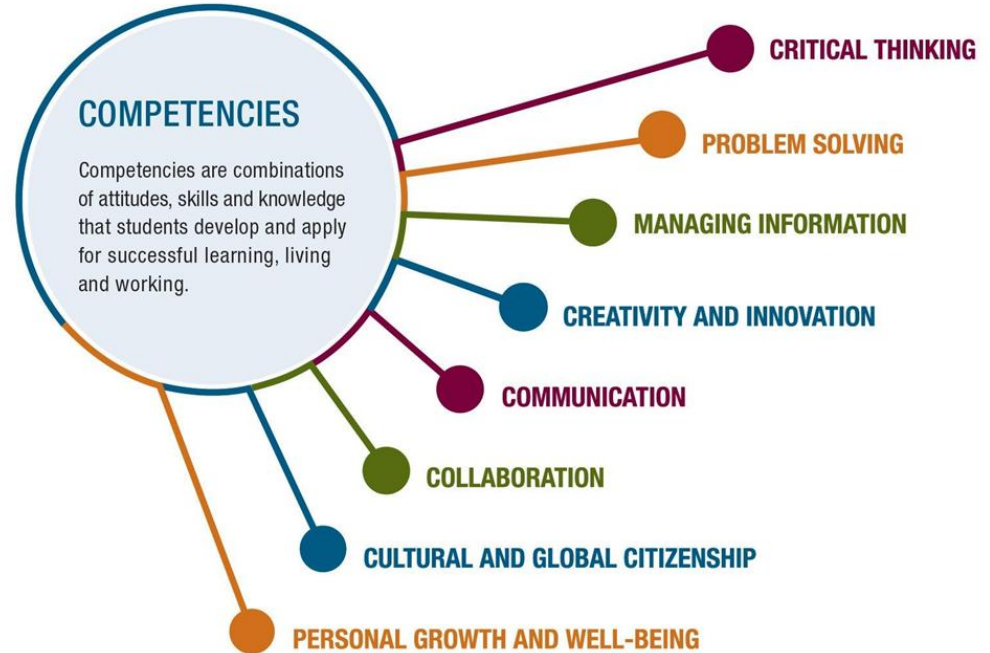17 Global Goals to achieve these 3 extraordinary things by 2030.

Current Initiatives: #CANYouth4SDGs

Education & Science Diplomacy...together?!

- Where do SDGs reside in global curricula?

- Science for policy vs. policy for science

- Stakeholder engagement

COMPETENCIES

Competencies are combinations of attitudes, skills and knowledge that students develop and apply for successful learning, living and working.

- CRITICAL THINKING
- PROBLEM SOLVING
- MANAGING INFORMATION
- CREATIVITY AND INNOVATION
- COMMUNICATION
- COLLABORATION
- CULTURAL AND GLOBAL CITIZENSHIP
- PERSONAL GROWTH AND WELL-BEING

Opportunities...Why should you Care?

SDG'S: Implications for research

Emerging approaches

Jessica Duchicela

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UNESCO framework*

Science IN the SDGs and Agenda 2030

Science FOR the SDGs and Agenda 2030

Agenda 2030 and SDGs FOR Science

Science: Sciences, Social Sciences and Humanities, STI

Knowledge: Scientific knowledge, Local and

Indigenous Knowledge Systems, other sources of

Knowledge

* via Ernesto Fernandez-Polcuch, UNESCO

Advancing SDGs progress with science

Universities have have a critical role to play in achieving the SDGs by:

- Equipping the next generation of leaders, innovators and decision makers with the knowledge and skills to address the SDGs.

- Providing research and technical expertise for developing practical solutions to meet the SDGs.

- Demonstrating leadership by promoting the SDGs through their own operations, governance and community engagement.

Advancing Science with SDGs as a framework

Universities potentially benefit from engaging with the SDGs:

- A new way to communicate the university contribution to local and global issues.
- Transformation experience:

  a. From monodisciplinary to transdisciplinary research approaches.
     SKOS: UNESCO nomenclature for fields of science and technology

  a. It will foster synergistic partnerships: between academia, development organisations, governments, private companies, civil society.

From vision to action….

Emerging approaches:

Mapping university contributions to the Sustainable Development Goals (SDGs)

Integrating SDG's into the research agenda

Mapping university contributions to the Sustainable Development Goals (SDGs)

How universities already contribute to SDGs?

Learning from the experience of **Sustainable Development Solution Network Autralia/Pacific and the Australasian Campuses Towards Sustainability (ACTS)**
Institute for Sustainable Futures, University of   Technology, Sydney
Collaborative approach

Targets and Indicators

Objetivo	Objetivo 1: Poner fin a la pobreza en todas sus formas en todo el mundo						
				1.4 Para 2030, garantizar que todos los hombres y mujeres, en particular los pobres y los vulnerables, tengan los mismos derechos a los recursos económicos, así como acceso a los servicios básicos, la propiedad y el control de las tierras y otros bienes, la herencia, los recursos naturales, las nuevas tecnologías apropiadas y los servicios financieros, incluida la microfinanciación	1.5 Para 2030, fomentar la resiliencia de los pobres y las personas que se encuentran en situaciones vulnerables y reducir su exposición y vulnerabilidad a los fenómenos extremos relacionados con el clima y otras crisis y desastres económicos, sociales y ambientales	1.a Garantizar una movilización importante de recursos procedentes de diversas fuentes, incluso mediante la mejora de la cooperación para el desarrollo, a fin de proporcionar medios suficientes y previsibles a los países en desarrollo, en particular los países menos adelantados, para poner en práctica programas y políticas encaminados a poner fin a la pobreza en todas sus dimensiones	1.b Crear marcos normativos sólidos en los planos nacional, regional e internacional, sobre la base de estrategias de desarrollo en favor de los pobres que tengan en cuenta las cuestiones de género, a fin de apoyar la inversión acelerada en medidas para erradicar la pobreza
Metas	1.1 Para 2030, erradicar la pobreza extrema para todas las personas en el mundo, actualmente medida por un ingreso por persona inferior a 1,25 dólares de los Estados Unidos al día	1.2 Para 2030, reducir al menos a la mitad la proporción de hombres, mujeres y niños de todas las edades que viven en la pobreza en todas sus dimensiones con arreglo a las definiciones nacionales	1.3 Poner en práctica a nivel nacional sistemas y medidas apropiadas de protección social para todos, incluidos niveles mínimos, y, para 2030, lograr una amplia cobertura de los pobres y los vulnerables				
Proyecto							

Mapping the institutional contributions

Benefits:

Alignment with global standards.

Identifying strengths, gaps and opportunities.

Communication and promotion of the university = local and global impact

Rise the dialogue between researchers from different disciplines, and with stakeholders.

Information base for policy and actions plans:
- Promote collaboration between researchers and stakeholders.
- Understanding of Integration of different academic activities: teaching, research, etc.
- Engagement of capacity building with staff, students and stakeholders.
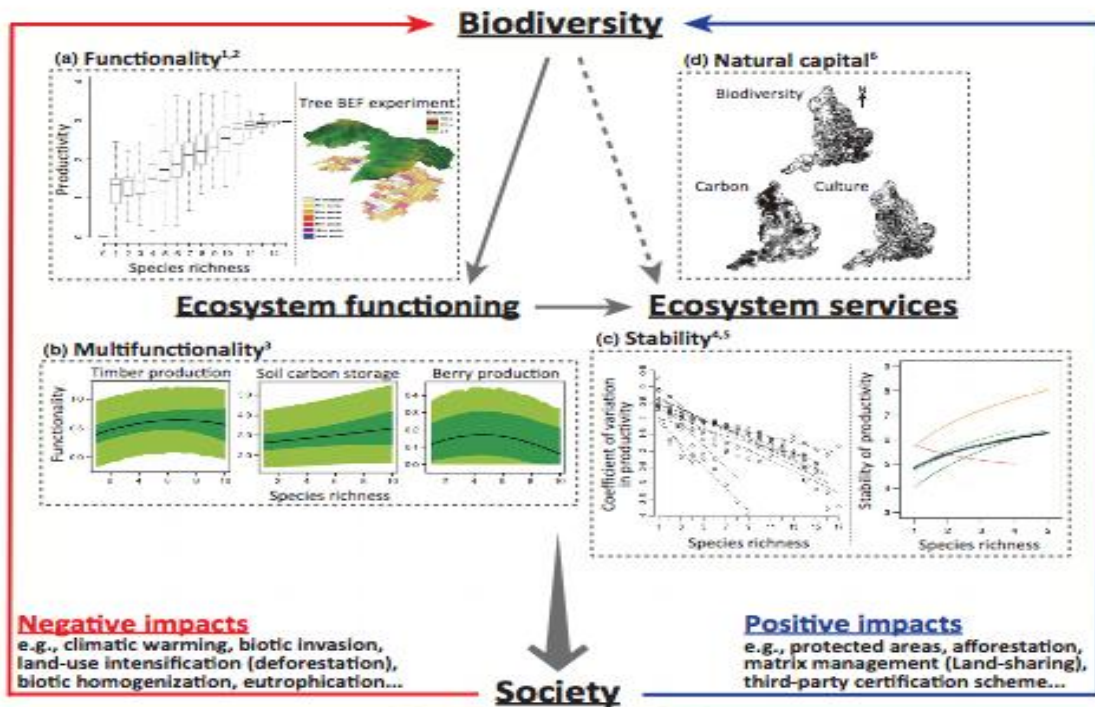- Potential benchmark to monitoring progress

Integrating SDG's into the research agenda

A research agenda Identifies gaps of knowledge, research priorities and leads action plans.

Biodiversity and ecosystem services in forest ecosystems: a research agenda for applied forest ecology
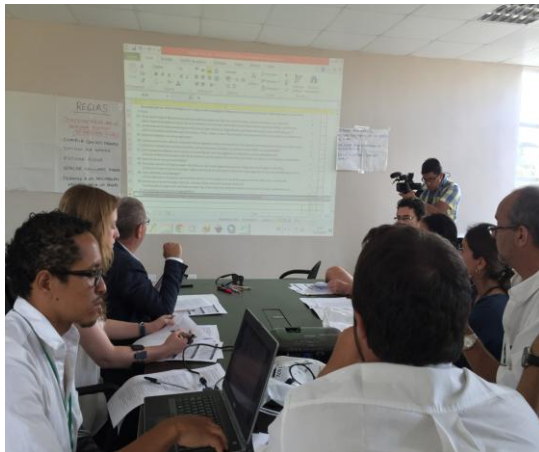
Akira S. Mori[1,2*], Kenneth P. Lertzman[2] and Lena Gustafsson[3]
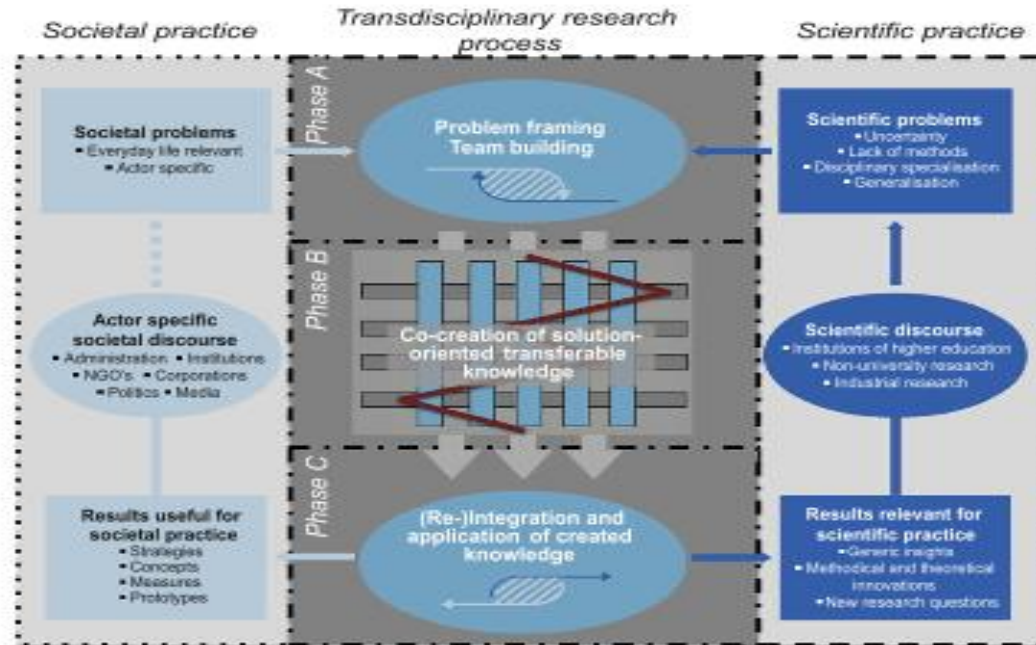
Research Priorities Agenda for the Galapagos Archipelago

Methods for collaboratively identifying research priorities and emerging issues in science and policy

Shuterland et al. 2011

Challenge: Building the research agenda by applying the transdisciplinary principles and SDGs

Conceptual framework of transdisciplinary science (Lang et al 2011)

How: using SGDs as a framework

Map the institution contributions.
Using SDGs goals to establish working groups.
Developing an action plan.

Challenges and opportunities

- Transdisciplinary research approach
- Institutional changes to support transdisciplinary research
- Create regional plataforms and networks. Eg.: IAI
- Diplomacy for science