

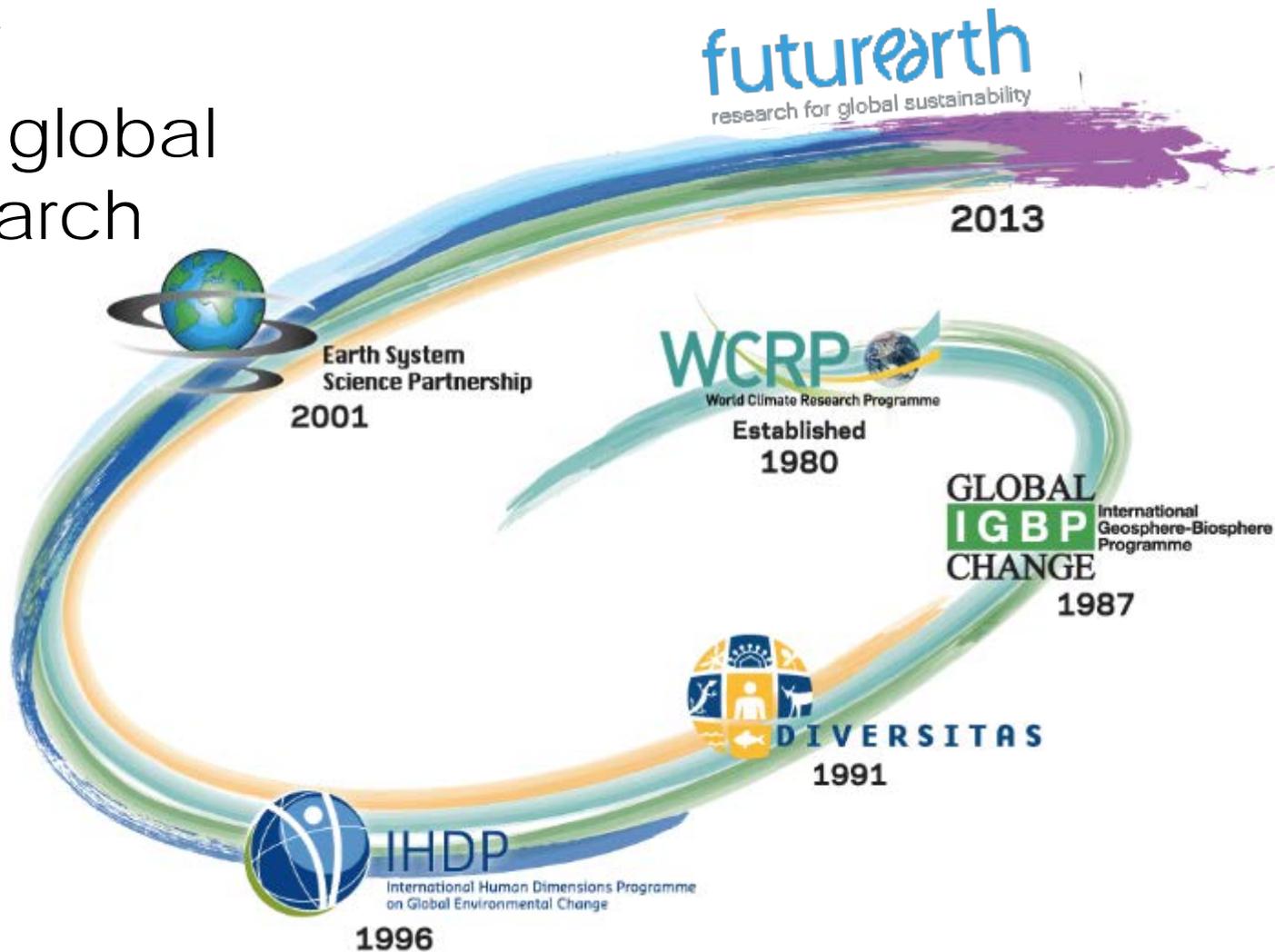
A photograph of the Earth from space, showing the curvature of the planet and the sun's rays shining down on the surface. The sun is positioned at the top center, creating a lens flare effect. The Earth's surface is a mix of blue oceans and white clouds, with a bright yellow and orange glow where the sun is hitting the horizon.

futureearth

research for global sustainability

Joshua Tewksbury
Colorado Global Hub Director
Future Earth

The history of international global change research programs



an ambitious
mandate for a
time of change

Future Earth

We will generate high-quality global sustainability science that is relevant to societies, connect research communities across disciplines and geographies, and drive a step change in how international science engages with societal partners and stakeholders

futureearth
research for global sustainability



Co-produced, actionable science

A USGCRP Interagency Priority

Science to inform policy making and management, with an emphasis on enhanced joint-production of actionable science between science producer and science user/decision-maker communities and expanding the utilization of USGCRP science findings, tools, or resources

Central to Future Earth

Bring together the multi-disciplinary expertise, stakeholders and resources needed to co-design and conduct global change research

Make knowledge, models, tools, and capacities accessible and actionable for decision makers, businesses and society.

Science and Technology Alliance for Global Sustainability





50,000+

Our networks reach 50,000 global sustainability researchers and people interested in this research



>20

National networks established, and many more in progress



8

Knowledge-Action Networks



>20

Major international research projects



-  Global hub
-  Regional centre
-  Project office
-  Project
-  Country with national committee or national network

5
Global hubs



7

Regional centres



50,000+

Our networks reach 50,000 global sustainability researchers and people interested in this research



>20

National networks established, and many more in progress



8

Knowledge-Action Networks

Secretariat Functions

- Research Enabling
- Capacity Building
- Communication and Engagement
- Synthesis and Foresight
- Coordination



>20

Major international research projects

- Global hub
- Regional centre
- Project office
- Project
- Country with national committee or national network

5
Global hubs



7

Regional centres



50,000+

Our networks reach 50,000 global sustainability researchers and people interested in this research



>20

National networks established, and many more in progress



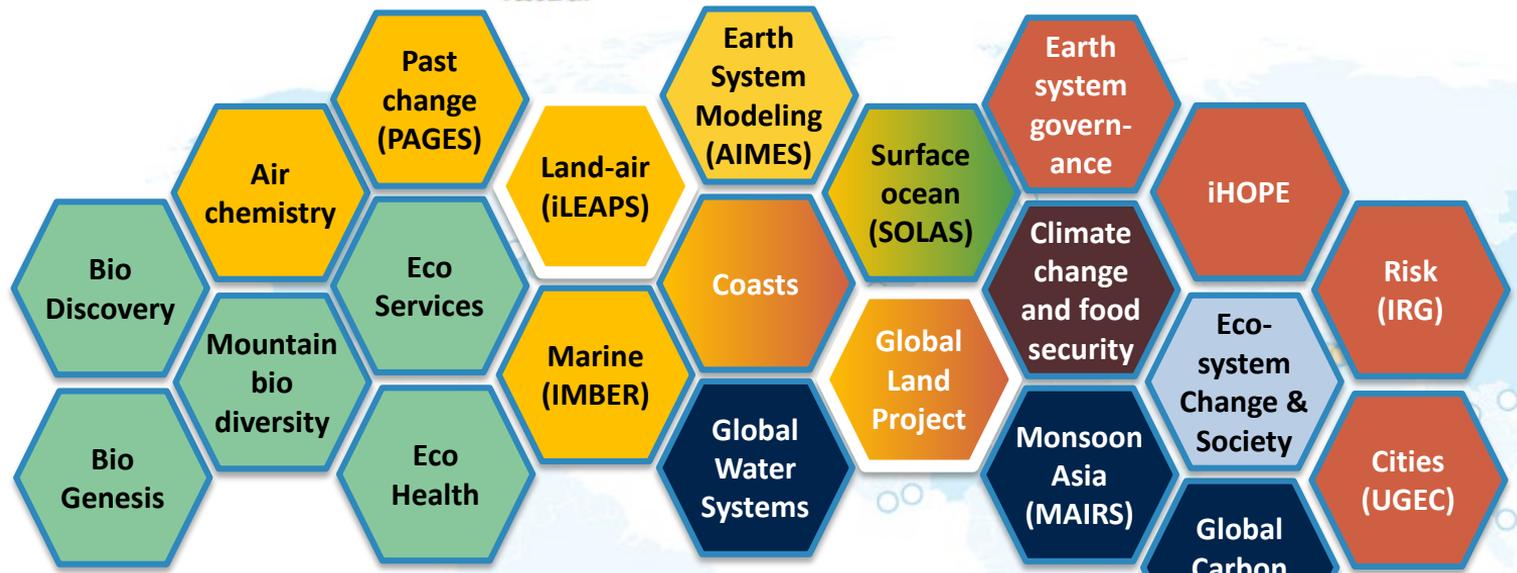
8

Knowledge-Action Networks



>20

Major international research projects



5
Global hubs



7

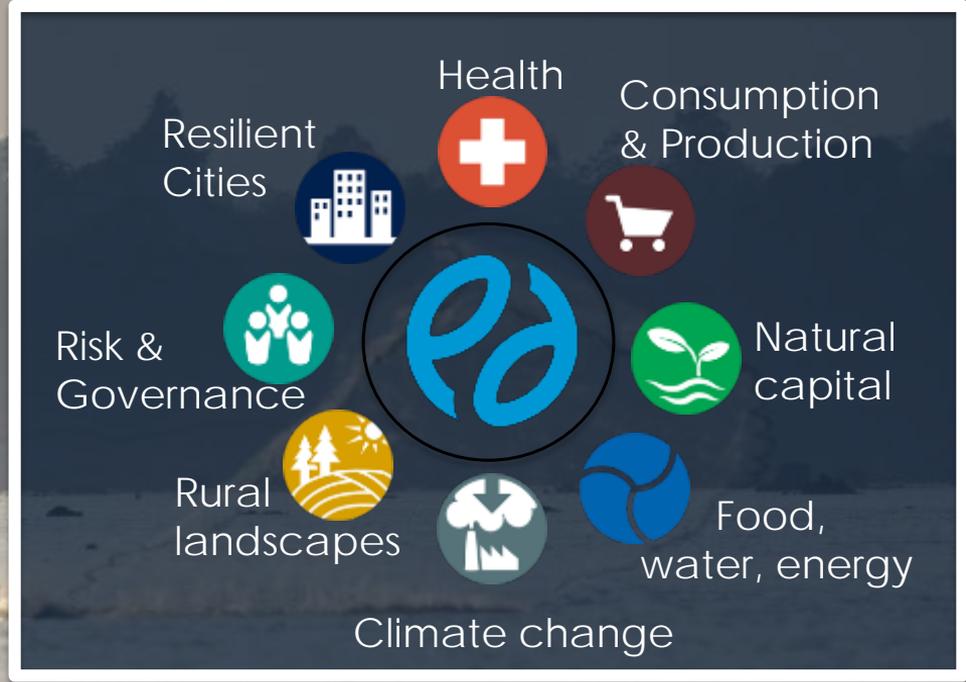
Regional centres



Sustainability challenges

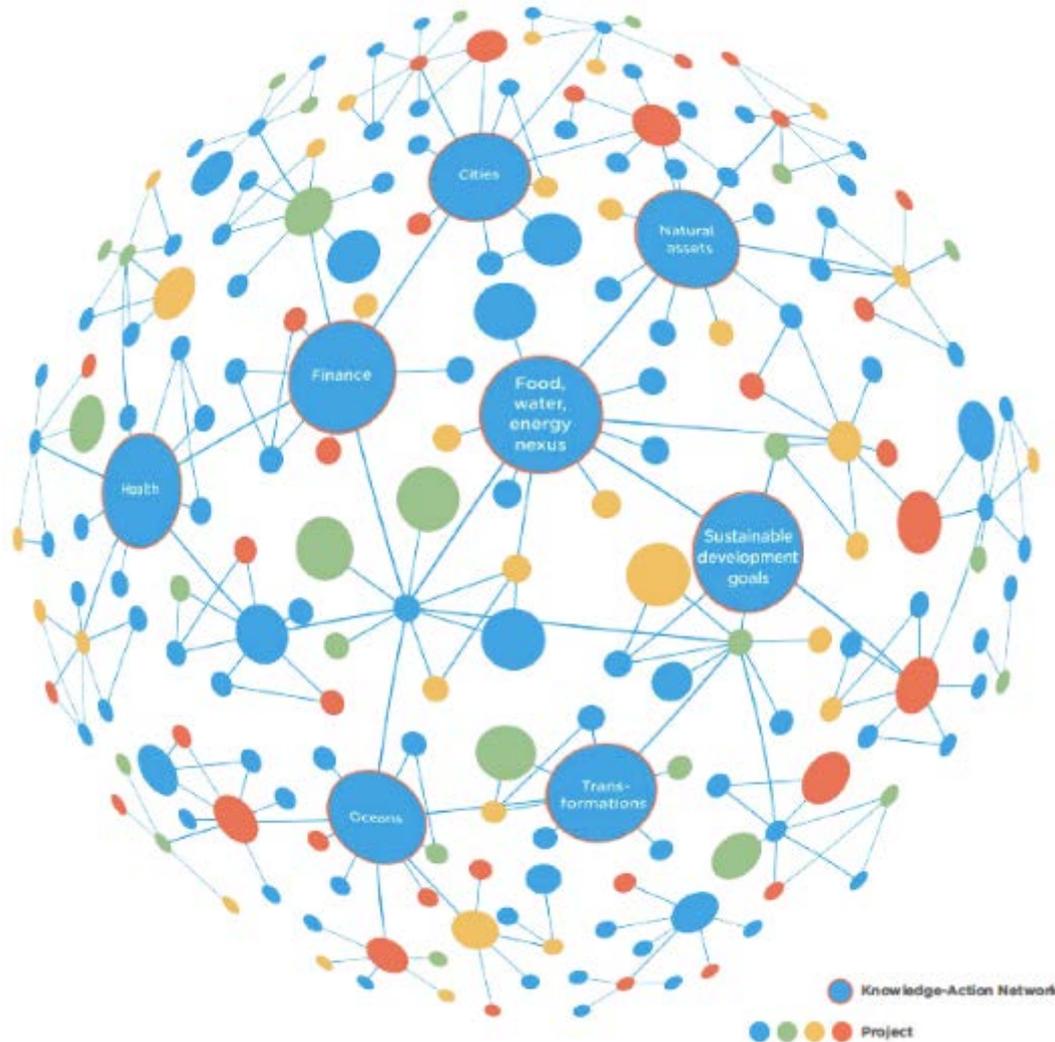
- Variability
- Forcing
- Responses and Impacts
- Predictions and Feedbacks

LCLUC



Sources:

Photo: Fishing in the Mekong © Tan Someth Bunwath / WWF-Cambodia



KNOWLEDGE-ACTION NETWORKS

structured communities of practice catalyzing new research and deep engagement with society

Challenge Focused

-  Future Earth Nexus
-  Future Earth Health
-  Future Earth Cities
-  Future Earth Assets

Crosscutting

-  Future Earth Goals
-  Future Earth Oceans
-  Future Earth Transformations
-  Future Earth Finance and Economics



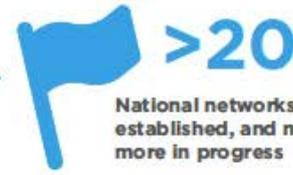
KNOWLEDGE- ACTION NETWORKS

structured
communities of
practice catalyzing
new research and
deep engagement
with society



50,000+

Our networks reach 50,000 global sustainability researchers and people interested in this research



>20

National networks established, and many more in progress

A Boundary Organization

- Science / Research communities
- Funding communities
- Societal partners (private sector, public sector, civil society)

Value Add

- Research and funding coordination (Knowledge-Action Networks)
- Synthesis support and increased research visibility
- Training and capacity building in co-design, co-production, and transdisciplinary science
- Global platform for interaction, engagement, community building (Future Earth open network)



8

Knowledge-Action Networks



>20

Major international research projects



7

Regional centres

supporting global sustainability science, connecting research communities, and supporting a step change in science engagement with societal partners



futurearth

www.futureearth.org





Research and Collaboration



USGCRP Goal 1. Advance Science:
Advance scientific knowledge of
the integrated natural and human
components of the Earth system.

Photo: Kampechi Farms Aquapod
© Jeff Milisen, Kampachi Farms, LLC

Research and Collaboration



- Building funding coalitions to support co-created science for sustainability
 - Shaping the International Transdisciplinary Ocean Sustainability Research Agenda
 - Launching the Ocean Knowledge Action Network

USGCRP Goal 1. Advance Science:

Advance scientific knowledge of the integrated natural and human components of the Earth system.

Building Capacity

Photo: The NYC Big U, a proposed string of parks designed to protect the city from storm surge
©BIG-Bjarke Ingels Group

USGCRP Goal 4. Communicate and Educate: Advance communications and education to broaden public understanding of global change and develop the scientific workforce of the future.



Building Capacity

USGCRP Goal 4. Communicate and Educate: Advance communications and education to broaden public understanding of global change and develop the scientific workforce of the future.



- Trans-disciplinary training
 - With ISSC in Africa
 - for Food Water Energy in Urban Systems
- IIASA / Future Earth fellows program
- Global bottom-up needs assessment for science capacity building
- Africa Regional Program Development (Rwanda and South Africa Regional Offices)

Communication

USGCRP Goal 4. Communicate and Educate: Advance communications and education to broaden public understanding of global change and develop the scientific workforce of the future.



Photo: Fruit Bat in Melbourne
© Monica Johansen

Communication

International Media and Policy Support



USGCRP Goal 4. Communicate and Educate: Advance communications and education to broaden public understanding of global change and develop the scientific workforce of the future.

Photo: Fruit Bat in Melbourne
© Monica Johansen

future^{earth}
research for global sustainability

