# CO-DESIGNING KNOWLEDGE ACROSS SCIENTIFIC FIELDS, NATIONAL BORDERS AND USER GROUPS

Integrated Global Change Research

## CO-DESIGNING KNOWLEDGE:

A common understanding of integrated global change research

**"Future Earth"** is a new 10 year research for global sustainability initiative currently being designed under the auspices of a global Alliance of partners including ICSU and the ISSC. This initiative seeks to bring together researchers, scientific organizations, decision makers, practitioners and other research users to co-design research and co-produce new knowledge.

An international workshop on **"Integrated global change research: co-designing knowledge across scientific fields, national borders and user groups"** was held in Berlin, Germany, from 7 to 9 March 2012. The objective of this event was to debate the notion of integration, and identify upcoming challenges and opportunities for scientists and science policy makers involved in the co-production of knowledge.

The focus of this workshop, in which over 50 senior and mid-career scientists and stakeholders from all over the world participated, was to **discuss and** evaluate current examples of integrated research, to elucidate the dimensions of integration, and to identify the key components of efforts to take forward the successful co-design and coproduction of knowledge.









# **KEY MESSAGE FROM THE WORKSHOP**

Doing "Future Earth" research means committing to processes of co-designing research agendas and co-producing knowledge that addresses issues of global sustainability. These processes lie at the heart of the concept of integration.

Integrated science works **across** scientific disciplines, across regions, and across societal

groups. It is problem-oriented, driven by contexts of application, and starts with the joint framing of research topics and questions. It requires the **involvement** of **researchers and stakeholders** during the entire research process, from co-design to co-production, and thus demands clarity about the roles and responsibilities of those involved.

Integration upholds scientific integrity in reflexive learning processes that bring together different actors and knowledge practices. It builds on and **supplements traditional processes of disciplinary-based research**.

Co-production of knowledge changes the way research is done and needs the generation of new methods and concepte It requires appropriate communication tools, institutional arrangements, as well as tailored funding possibilities.

#### Key challenges of integrated processes of co-design and coproduction of knowledge include

- the design and implementation of appropriate support and management structures,
- the development of a diversity of skills for managing integration processes, including the necessary reward structures, and
- adjustments to funding mechanisms, including selection and evaluation procedures.

#### Successful integration calls for

critical reflection at all levels – amongst researchers, funders, and science policy makers – on the role of science in global sustainability and on the necessary practices of research and research management that will make this new type of science come to life.



### **Organisers:**

Gernot Klepper, Kiel Institute for the World Economy / NKGCF, Germany • Wolfram Mauser, Ludwig Maximilians University Munich, Germany • Heide Hackmann, International Social Science Council, France • Rik Leemans, Wageningen University / ESSP, Netherlands • Martin Rice, Earth System Science Partnership, France • Ada Ignaciuk, Earth System Science Partnership, France • Bettina Schmalzbauer, German National Committee on Global Change Research, Germany • Carthage Smith, International Council for Science, France

#### www.nkgcf.org/integrated-research.php

#### For more information please contact:

**Dr. Bettina Schmalzbauer** German National Committee on Global Change Research nkgcf@ifw-kiel.de

**Prof. Dr. Gernot Klepper** Kiel Institute for the World Economy gernot.klepper@ifw-kiel.de





Earth System Science Partnership





