

Integrative Approaches in Global Change Research – The Experience with Different Integration Methods

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NKGCF

German National Committee
on Global Change Research



GLOWA: an example for interdisciplinary, integrative research of Germany

GLOWA: Global Change and the Hydrological Cycle

Challenge: Managing water resources in a sustainable way on a regional and local scale in the context of climate change, land use changes and socio-economic development.



Project start: 2000

Funding: core funding by BMBF (plus different other organizations)

Initiated by: WBGU and NKGCF

GLOWA

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Objective:

Development of methods for integrating different scientific disciplines and their application in regional case studies.

Organization:

→ 3 project phases:

(1) on site set up, data collection and evaluation, alignment of models to specific research regions

(2) developing of scenarios

(3) Transfer of project outputs, infrastructure and scientific tools to the local community (current project phase)

→ Multidisciplinary research teams are working together (up to eleven sub projects) with local (multi-level) stakeholders (planner, local scientists, managers, etc).

GLOWA in brief

GLOWA Danube

Integrative techniques, scenarios and strategies of global change in the water cycle using the river Danube as example.

www.glowa-danube.de

Start: October 1st 2000

GLOWA Elbe

Global change impact on the environment and society in the Elbe region.

www.glowa-elbe.de

Start: May 1st 2000

GLOWA Jordan River

Global change and integrated water management in the Jordan River catchment.

www.glowa-jordan-river.de

Start: June 1st 2001



GLOWA IMPETUS

An integrated approach to the efficient management of scarce water resources in West Africa.

www.impetus.uni-koeln.de

Start: May 1st 2000

GLOWA Volta

Sustainable water use under changing land use, rainfall reliability, and water demands in the Volta basin.

www.glowa-volta.de

Start: May 1st 2000