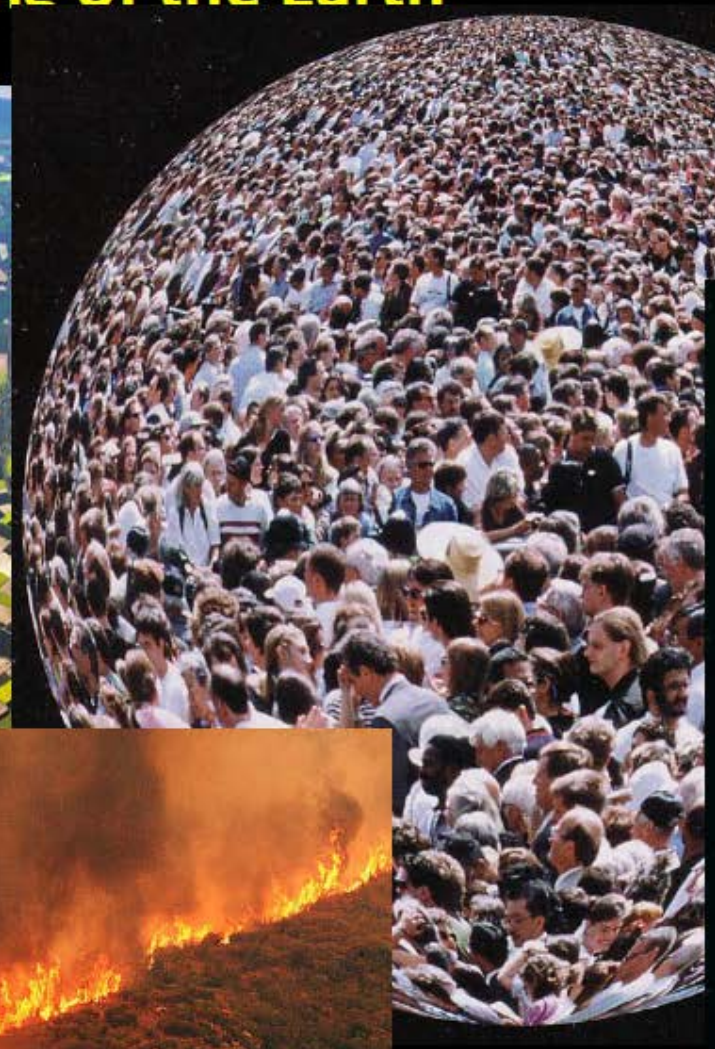
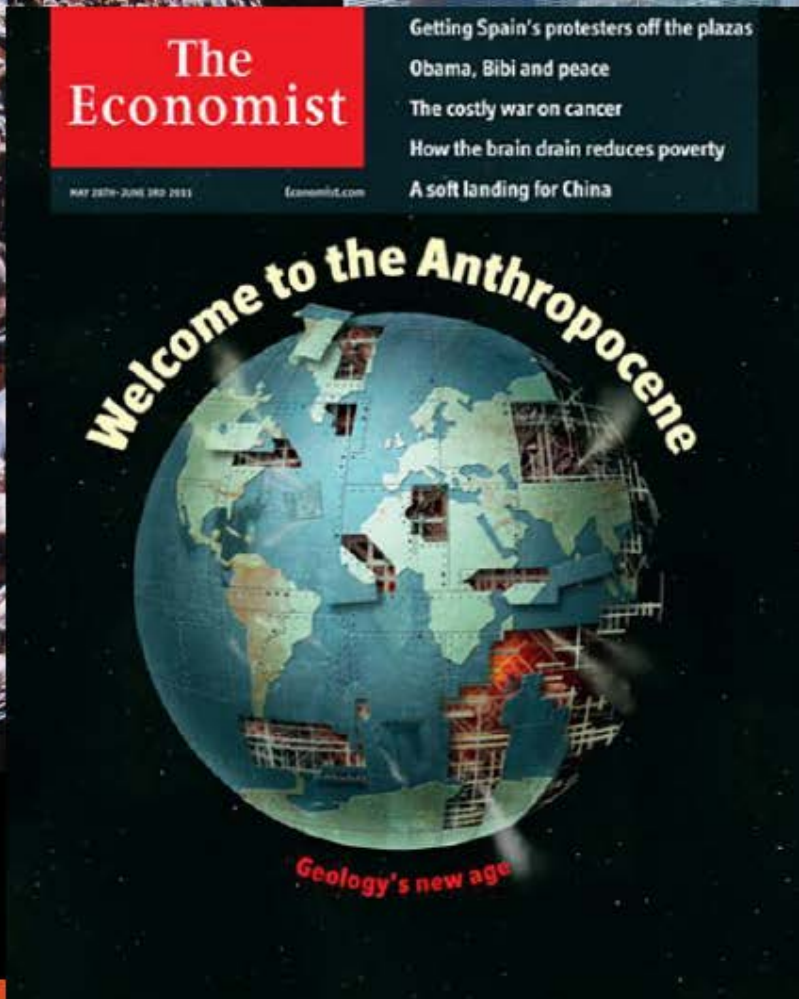
Cross-sectoral Cooperation in Transboundary Basins

Astrid Hillers
Global Environment Facility
International Waters
UNECE Nexus Workshop
December, 2016

Antrophocene – humans influence the functioning of the Earth

Welcome to the Anthropocene





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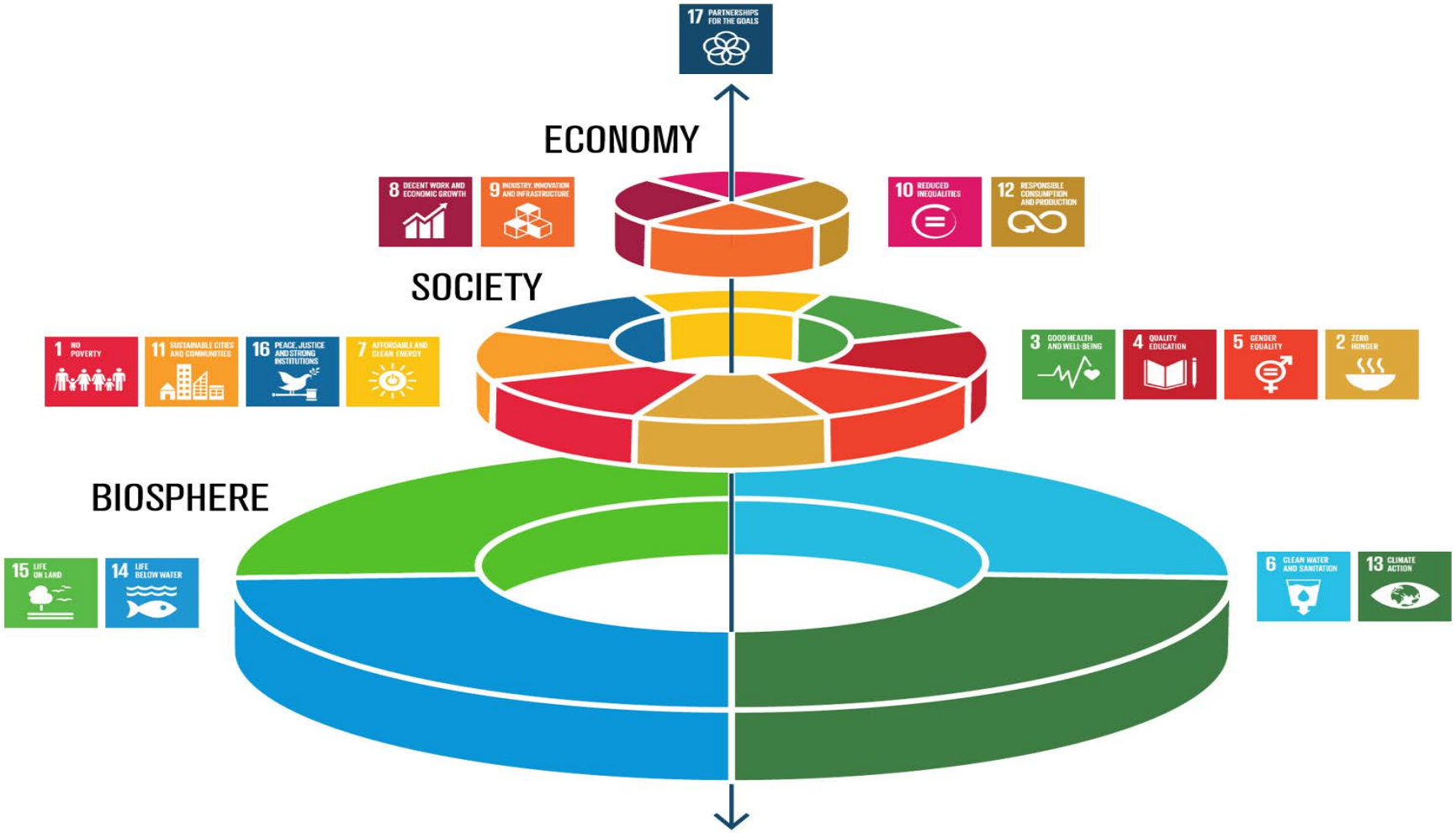

Nakicenovic, Rockstrom, Gaffney & Zimm, 2016

Water security…. key to achieving the SDGs

Drought-Stricken Southern Madaga
Teeters On The Edge Of Famine

December 5, 2016 · 10:31 AM ET

RHITU CHATERJEE

RESS RELEASE

Climate-Driven Water Scarcity Could Hit
Economic Growth by Up to 6 Percent in Some
Regions, Says World Bank

NEWS > GENERAL

Floods cover most of the South

6 Dec 2016 at 17:50 4,741 viewed 1 comments

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stralia's 'great green boom' of 2010-11 has been undone by droug

er 6, 2016 by Xuanlong Ma, Alfredo Huete, Ben Poulter, Derek Eamus And James Cleverly, The Conversation

the kathmandupost

MPs against unchecked groundwater extraction

- Rastriya Samachar Samiti, Kathmandu

Latest report

Global Water Report 2016

Much of the r

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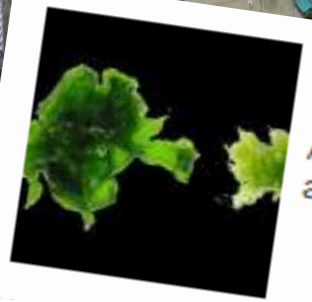


Reef degradation on Maui linked to quality of coastal **groundwater**

Science Daily - Nov 17, 2016

A new study used a combination of field experiments and chemical analysis of water and algae to show that the quality of coastal **groundwater** ...

$14B Water-related impacts cost business US$14 billion, a five-fold increase from last year.

24% of GHG reduction activities depend on a stable supply of good quality water.

Benefits beyond the River as driver for cooperation

Table 1
Types of cooperation and benefits on international rivers

Type	The challenge	The opportunities
Type 1: increasing benefits *to the river*	Degraded water quality, watersheds, wetlands, and biodiversity	Improved water quality, river flow characteristics, soil conservation, biodiversity and overall sustainability
Type 2: increasing benefits *from the river*	Increasing demands for water, sub-optimal water resources management and development	Improved water resources management for hydropower and agricultural production, flood-drought management, navigation, environmental conservation, water quality and recreation
Type 3: reducing costs *because of the river*	Tense regional relations and political economy impacts	Policy shift to cooperation and development, away from dispute/conflict; from food (and energy) self-sufficiency to food (and energy) security; reduced dispute/conflict risk and military expenditure
Type 4: increasing benefits *beyond the river*	Regional fragmentation	Integration of regional infrastructure, markets and trade

Sadoff and Grey, 2002

GEF support in Transboundary Basins

- **Goal: Addressing competing uses of water**

Support to a structured process:

- **Transboundary Diagnostic Analysis (TDA) – from perception to facts Basin Vision**
- **Strategic Action Program (SAP) – TDA is base for agreed actions and may lead to further analysis of cross-sectoral opportunities – often including decision support systems, strategic basin assessments across sectors at basin and sub-basin level within SAP**
- **Support to legal/institutional framework for cooperation to underpin sustainable development**
- **SAP implementation – investment program**

GEF support to governance and management of transboundary basins

- **Process:** Structured process to engage in transboundary basins and address X-sector trade-offs
- **Time scale:** Long terms processes and series of interventions
- **Finance:** Designated funding window for SAP implementation (if signed); GEF 6: key programs to address X-sectoral issues
- **Connectivity:** Sectors; Up-downstream; surface water & groundwater; coastal marine
- **Exchange of experience:** Funding for learning and exchange of experiences & lessons

INTEGRATED MANAGEMENT of LA PLATA BASIN and TRANSBOUNDARY AQUIFERS

Approaches and Tools

Strategic Environmental Assessment (SEA)

UNU Flores Nexus assessment approach

Analytical Toolbox (UN-DESA)

Place based WEF Nexus

X-Sectoral Financing Tools

Integrated Solutions for Water, Food and Land

Water

Nexus Dialogues

THIRSTY ENERGY

Diego J. Rodriguez, Anna Delgado, Pat DeLaquil, Antonia Sohns

UNECE Nexus Assessment Approach

Interactive Simulation Models

Food

Multi-Sector Investment Opportunities Analysis (MSIOA)

Environmental Flow Assessment

Climate, Land, Energy, Water Strategy Framework

Nexus Mainstreaming

Nexus Dimensions and Assessments
Recall the 'early days' of defining the SEA process

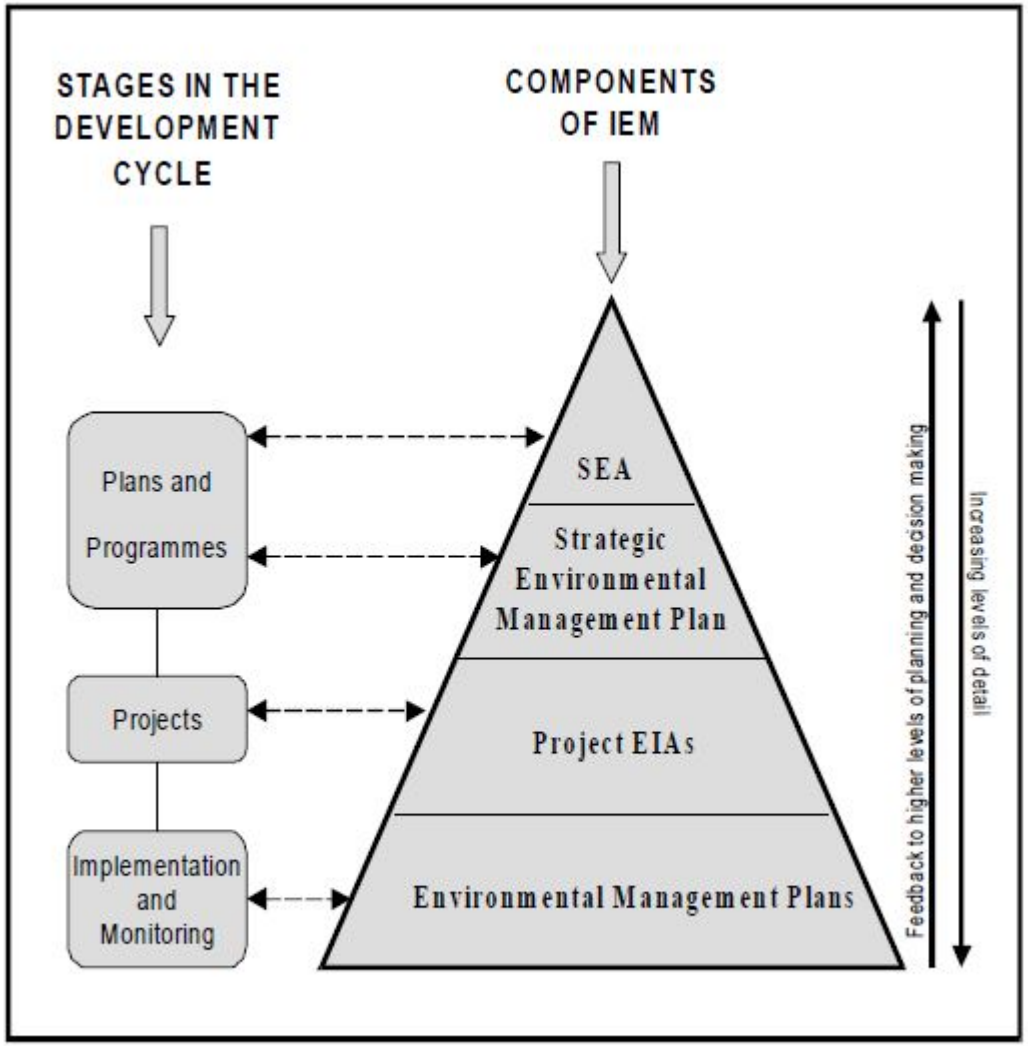
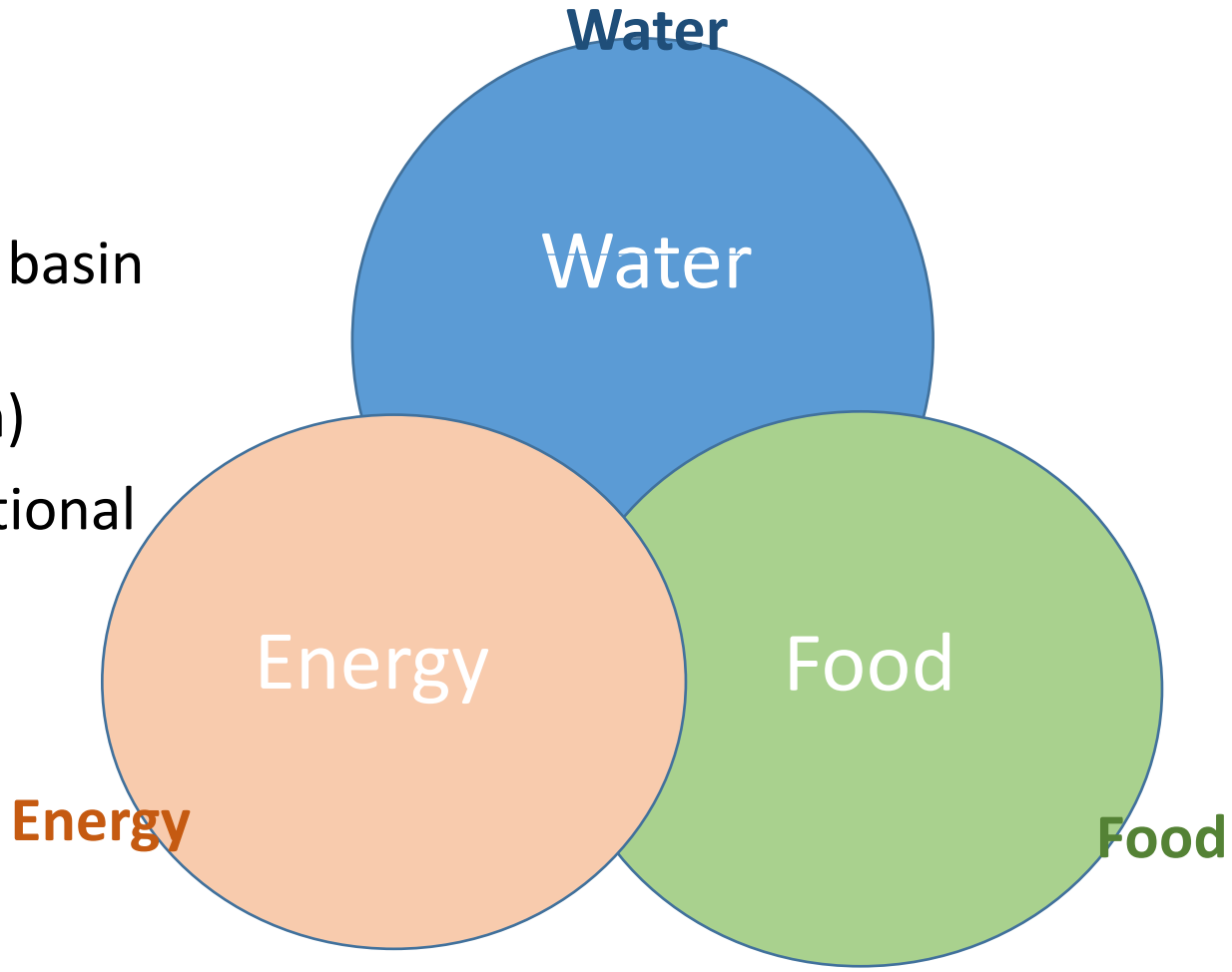


FIGURE 2: EXAMPLE OF A TIERED APPROACH TO SEA AND PROJECT-LEVEL EIA IN SOUTH AFRICA

Nexus Framework

Spatial Scale:

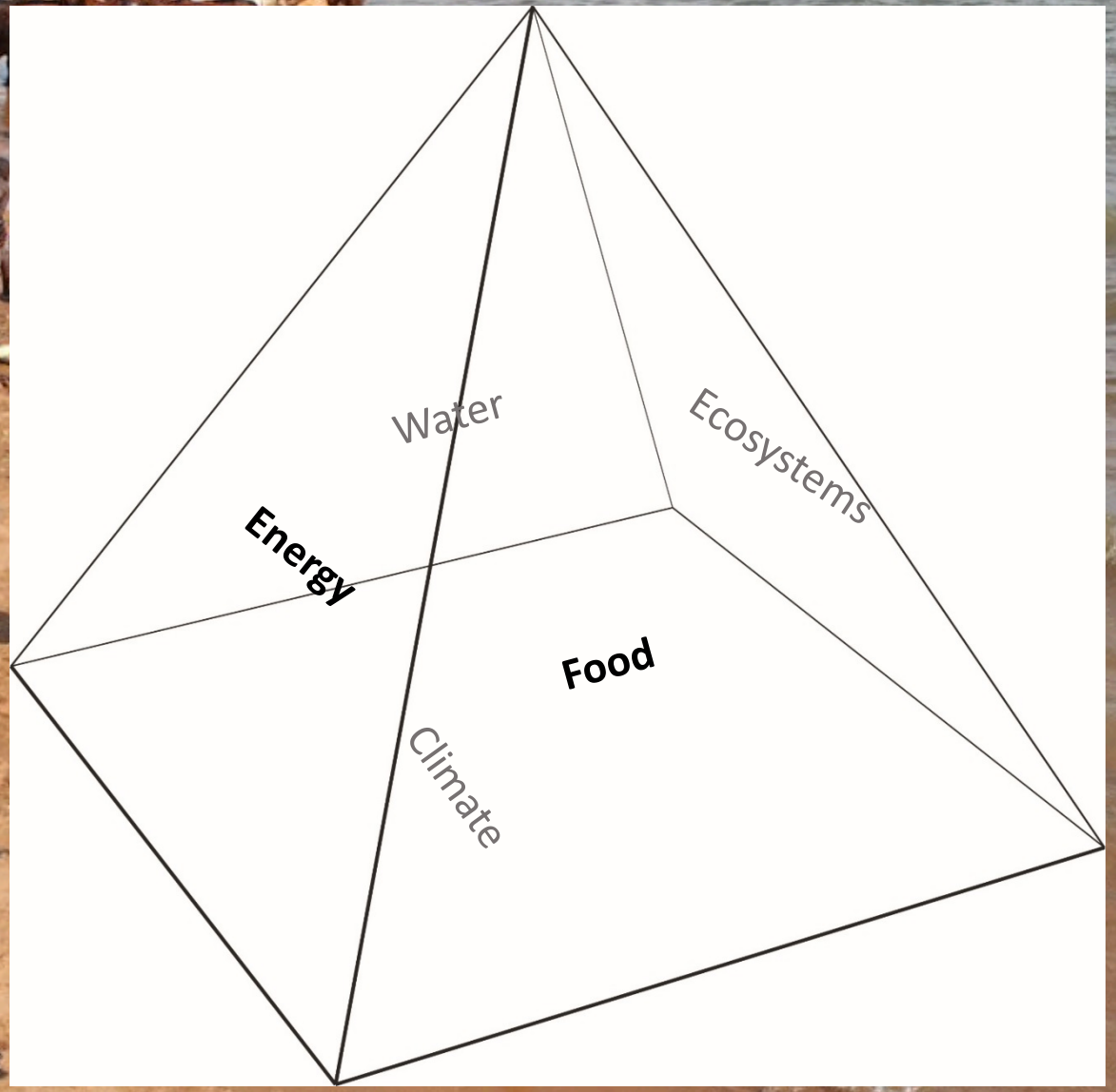
- Global
- Regional/TB basin (up-stream-downstream)
- National/national sub-basins
- Local



Dimensions:

- Governance (institutional/legal/policy frameworks)
- Cross-sectoral Basin/program investment
- Site specific/Project level nexus assessment, opportunities and trade-offs and benefit sharing (e.g. HP -watershed management – flow regulation)

Nexus Framework – what nexus …



Move to greater integration in GEF 6

GEF International Waters

Thank you !