



UNITED NATIONS
UNIVERSITY

UNU-FLORES

Institute for Integrated Management
of Material Fluxes and of Resources



TECHNISCHE
UNIVERSITÄT
DRESDEN

ADVANCING A **NEXUS APPROACH**
TO THE SUSTAINABLE MANAGEMENT
OF **WATER, SOIL AND WASTE**



INTERNATIONAL
KICK-OFF WORKSHOP

11-12 NOVEMBER 2013
DRESDEN, GERMANY



ADVANCING A **NEXUS APPROACH**
TO THE SUSTAINABLE MANAGEMENT
OF **WATER, SOIL AND WASTE**

Rethinking Institutional and Governance Frameworks for Effective Water, Soil and Waste Nexus

Elias T. Ayuk

Director

UNU-INRA



Outline

- Introduction: Why an integrative approach?
- Retooling institutional frameworks
- Rethinking governance structures
- Conclusion

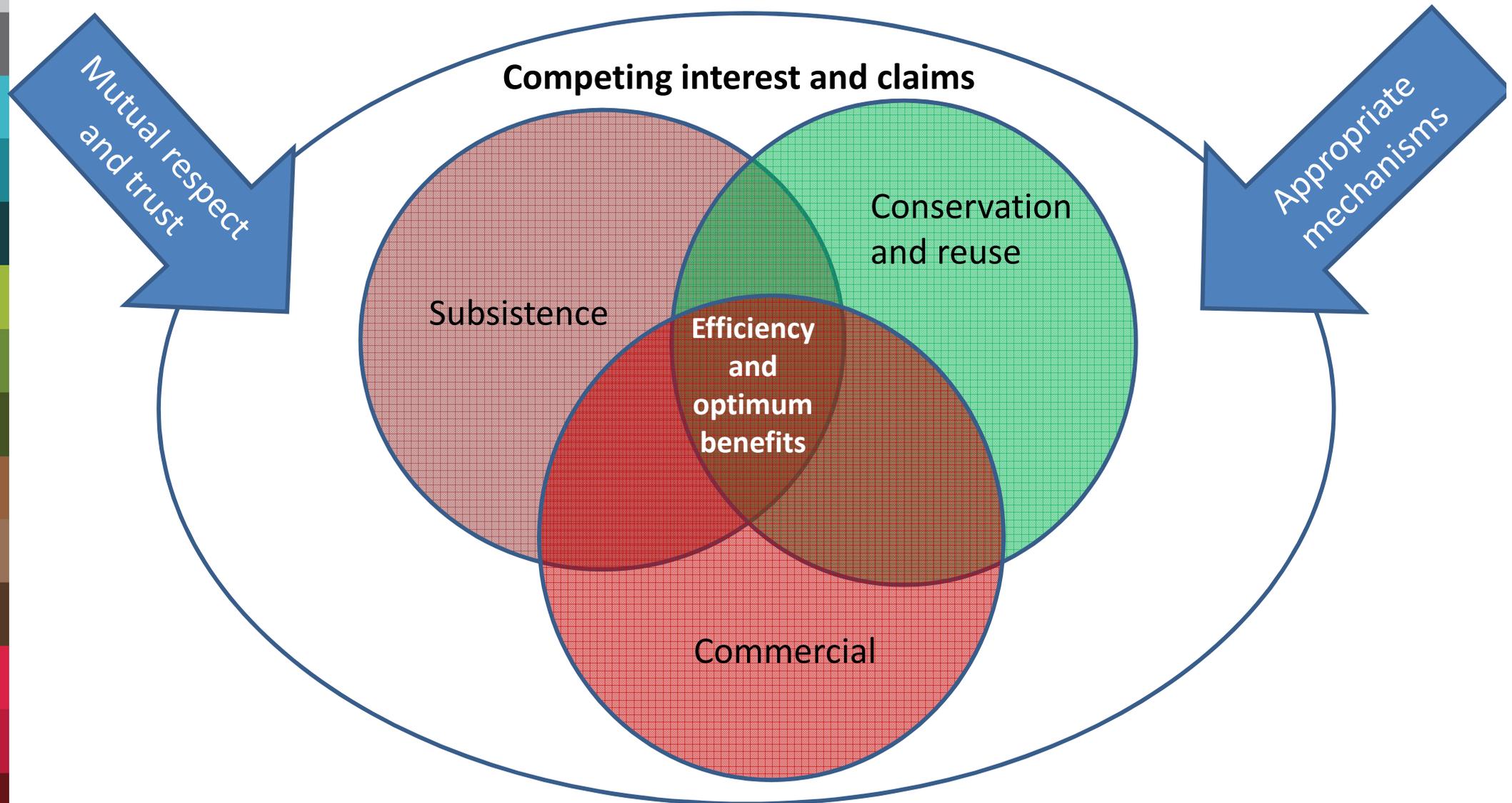


Introduction (1)

- Why an integrated approach?
 - Implications of the WSW nexus: inextricable linkages => *actions in one area have impacts on one or both others.*
 - The WSW nexus involves multidimensional and complex interactions
 - Cuts across scales, sectors and disciplines
 - Existence of significant interdependencies and linkages



Integrated Approach





Introduction (3) – some examples

- Recognition in recent years of the need for integrated approaches
 - Integrated water resource management
 - Integrated soil fertility management
 - Integrated natural resource management
 - Environmental planning and management
 - Trans-boundary river basins management
 - National Councils for Sustainable Development (NCSD)



Retooling institutional frameworks (1)

- Inter-institutional/ministerial/organizational mechanisms are effective in:
 - Coordinating and integrating policies;
 - Resolving conflicting signals
 - Enhancing coherence in interventions
 - Facilitating cross sectoral dialogues, information exchange and planning;
 - Creating shared vision and enabling environment;
 - Establishing legal and institutional framework for cooperation, benefit sharing and cross-sector collaboration.



Retooling institutional frameworks (2)

- Effectiveness much higher at the lower level (evidence from IWRM)
- Establishing mechanisms for dialogue increases effectiveness.



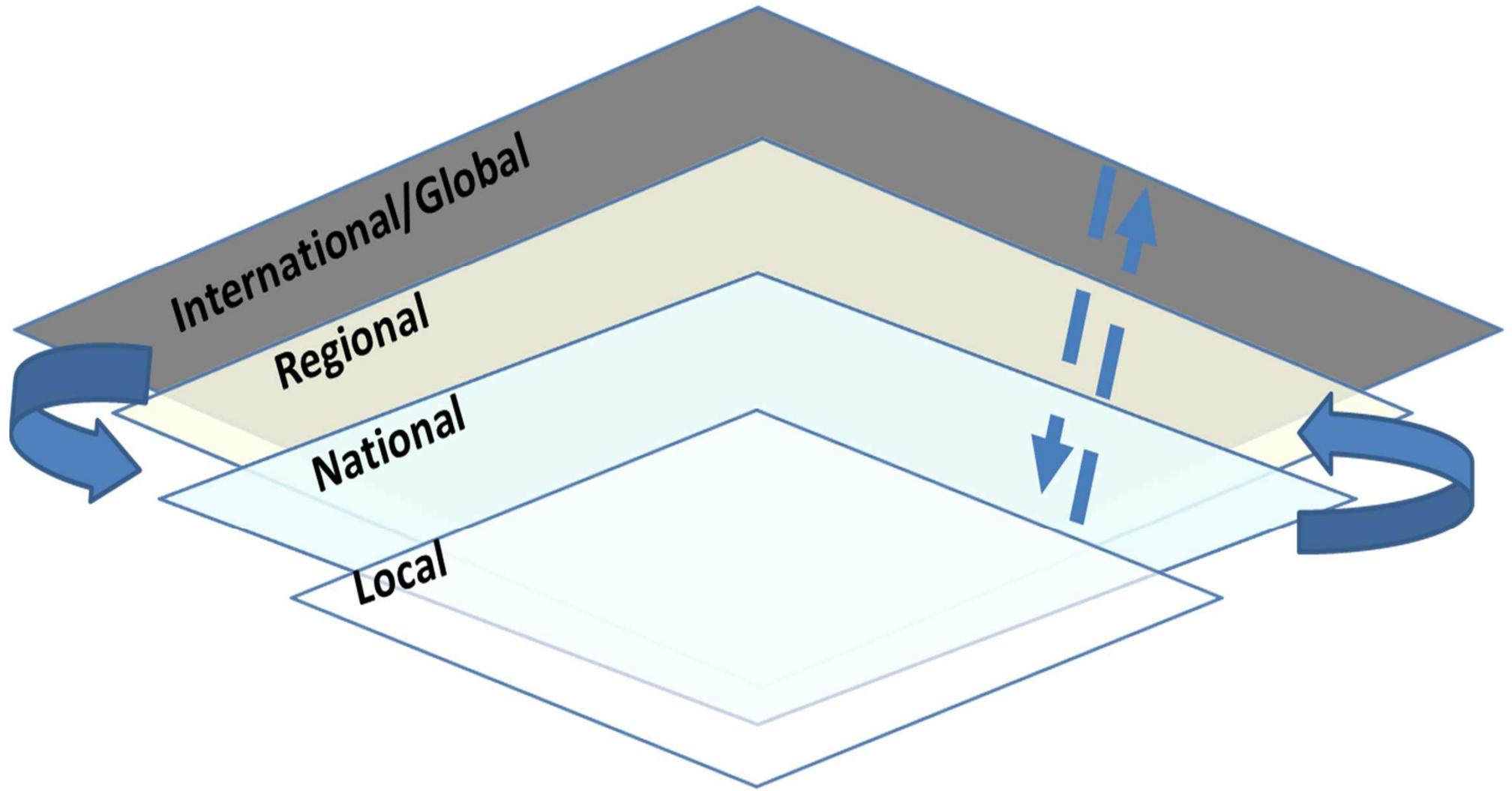
Rethinking governance structures (1)

- Coordination across scales and level is important
 - Perceptions and objectives differ.
- Institutional scale vs geographical scale.
 - An institution's reach may not correspond with the geographical scale of an issue (case of hazardous wastes).
- Shared responsibilities create positive incentives for better management.
- In the WSW nexus, national levels authorities could create formal rules and local level authorities should be able to adjust them.
- Governance structures should facilitate the participation of a wide range of stakeholders.



Rethinking governance structures (2)

Governance structure





Rethinking governance structures (3)

- Multi-level governance structure ensures participation at different levels – inclusiveness
- **BUT**, it is important to address coordination problems
- Governance structure should give high priority to access to information and information sharing
- Address capacity building needs at different levels



Conclusion (1)

- Need to address the nexus across all scales and levels
 - Multi-level governance
- Nexus institutions should be independent of line ministries (case of water-carbon nexus in Australia)
- Need for regular review of the efficacy of measures
- Nexus approach must explicitly address and manage costs, benefits and tradeoffs.



Conclusion (2)

- Enabling conditions for a nexus approach
 - Creation of platforms for social innovation and management
 - Political will
 - Change agents
 - Capacity building
 - Awareness creation
- Institutional and governance frameworks should be established with these in mind