2017 World Water Week in Stockholm

Water & Green Growth : Just a Concept or Reality?

Date/Time: Aug 27th , 2017 / 16:00 ~ 17:30 , NL353

* *Please choose your place in the room among 'WGG Support', 'Neutrality' or 'No' places !*

WELCOMING ADDRESS

Mr. Seong Han Kim

Vice President & CRO, K-water Convergence Institute

Prof. Dogan Altinbilek

Vice President, World Water Council

PRESENTATION I

Ms. Ju Hee Jeung

WGG: Finding the Next Step

Aug. 27th, 2017

Ju Hee JEUNG
K-water Convergence Institute
Water Policy Center

INDEX

1. Background
2. The Objective of the Showcase
3. Research Project & Then?
4. Major Topics of Discussion & Ideas

01 The Background of the Showcase

- Water Agenda : **Things to be done** in the Water Sector

  - Cannot be a Fast Fashion, “Green” is powerful.
  - Becoming Political, Losing its Own Meaning.
  - Each Water Agenda has its Own Meaning & Value.’

- WGG & SDGs

WGGis Substituted by SDGs ?

SDGs is covering all aspects of water.

WGG has its value.

01 The Background of the Showcase

- What is **Next** Step ?

None  Challenge

- Sense of Responsibility & Partnership

- If you want to go fact, go alone.
  If you want to go far, **go together**.

02 The Objective of the Showcase

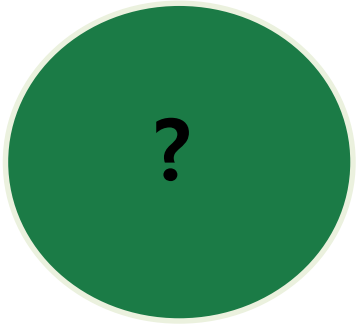
02 The Objective of the Showcase

- Identity: What WGG is ?
- Accomplishment: What WGG has done ?
- Ability or Capacity: What WGG can do ?
- Shortcoming: What WGG should have done ? Or What is necessary?
- Challenge: What WGG should do?
- Next Step: Where WGG should go & How?

03 Research Project & Then?

2010-2015

2016-2018.3



Only Research Project by One or a few Organizaion for Myriad Years?

What can be done for the **Green Transition** of the Water Sector?

04 Major Topics

- What is WGG to me?

  - Growth with No Asset(Environment) Impairment & the enhancement of Social Equity

    : Unique Characteristics of Water

    * Water : Life, Economy, Hygiene, Health, Food, Energy, Politics, Peace, Conflict, Tension, Diplomacy, Welfare, Education, Beauty, Land Management, Disaster, ect.

  - Good Opportunity for Developping Countries not to follow Failures of Developped Countries

  - An opportunity for Koera(K-water) to contribute to the future of our water with other organizations

04 Major Topics

- What are WGG's strong points and weak points

Strength	Weakness
• Clear & Concerete Goal ⇒ Growth • SDGs(2015) : WGG = A Good Strategy • The Necessity of Green Transition to Developed and Developing Countries - Grey or Brown Growth(X) • Various Areas in the Water Sector can be touched	• The Shortage of the Expand ability & Alliance - Project Based Case Studies - The Lack of connecting other Water Agendas or Themes - The Lack of Network • SDGs(2015) : WGG ⇒ Subset

04 Major Topics

- The future of WGG ; Wher it Should Go?

- Green Remedy can be Realized in All Areas about Water.

- What to do?

  - SDGs
  - Cooperation with Other Related Wat er Agendas
  - Beyond Project-Based Case Studies
  - Territory Extension, Various Approach
    - Law & Regulation, Water History
    - Technology, Finanicng, etc.

Tacka Hjärtligt

감사합니다

Thank you

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Reactions to the Presentation to the Panelist

Moderator. Ms.Danielle Gaillard-Picher

- **Dr.Zaini bin Ujang**
- **Dr.Karin Krchnak**
- **Prof.Glen Daigger**
- **Prof.Nick Schofield**

PRESENTATION II

Mr. Callum Clench

Policy for Water & Green Growth

Aug. 27th, 2017

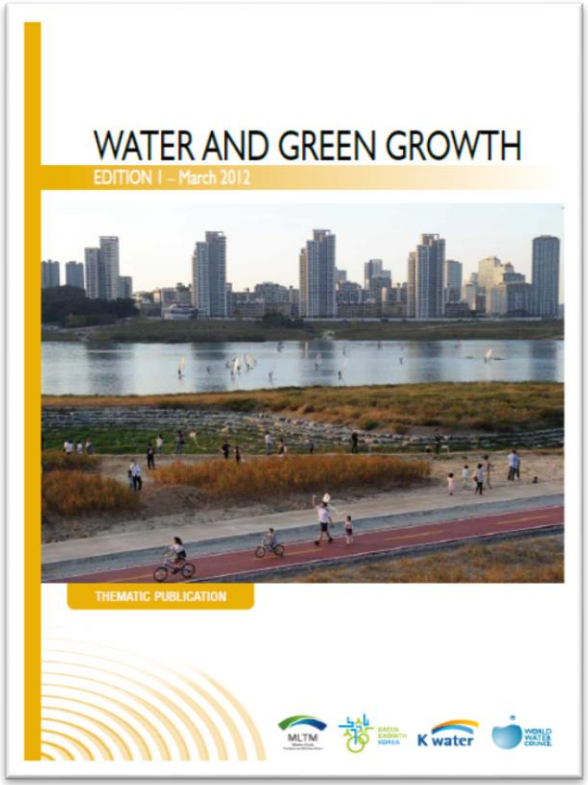
Callum Clench
Executive Director
IWRA

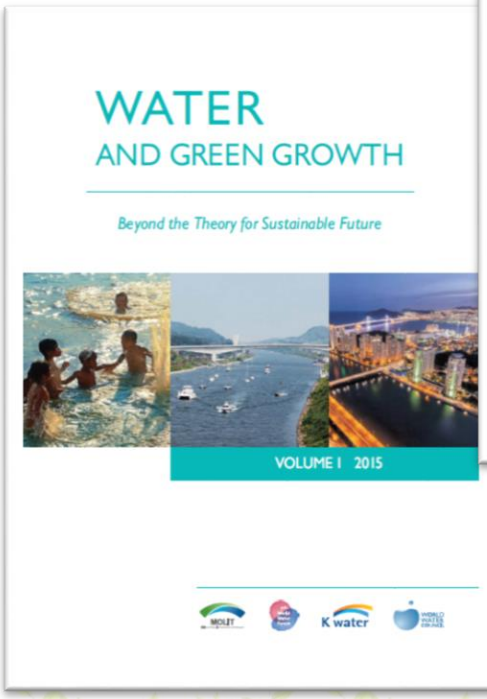
Water & Green Growth: Just a Concept or Reality?

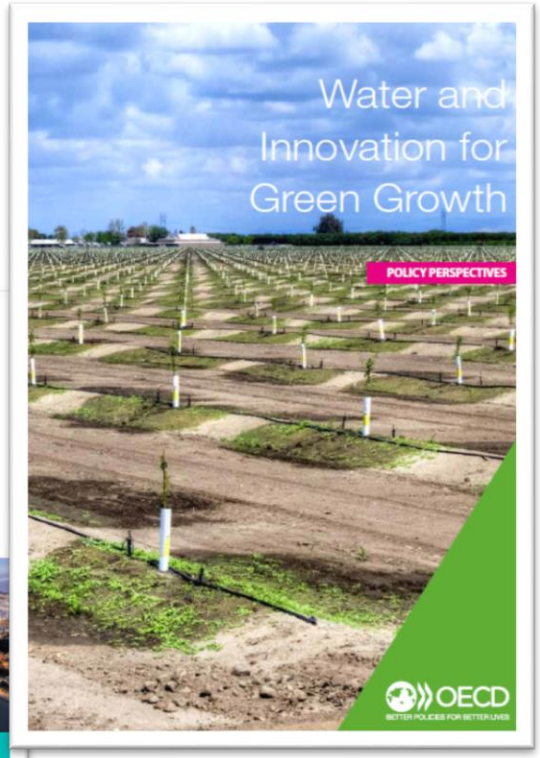
OVERVIEW

1. Introduction
2. Why is WGG important?
3. Key findings of WGG reports
4. Conclusions

01 My connection to WGG





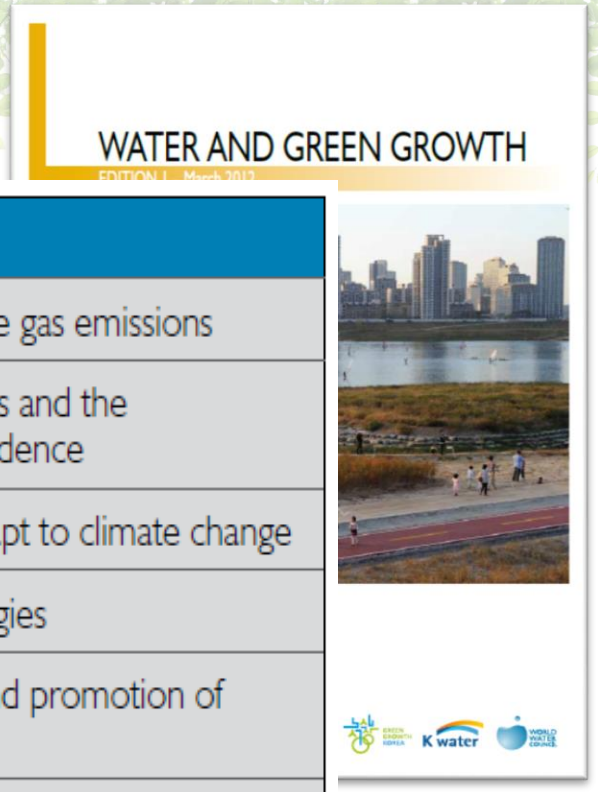


www.waterandgreengrowth.org

02 Why is WGG Important?

- Green growth means fostering economic growth and development, while ensuring that natural assets continue to provide the resources and environmental services on which human well-being relies.
- Green growth policies can unlock opportunities for economic growth and better welfare for all.
- WGG is an extension of SD, but is engaging with finance ministers
- Growth meaning in this paradigm – developing vs developed countries
- Water – important but taken for granted

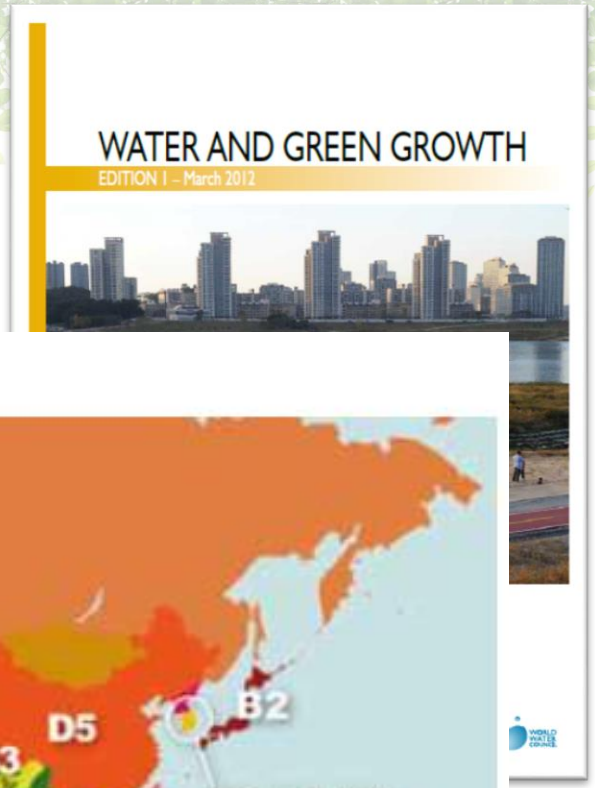
03 1st Report Findings



Strategies	Policy direction
1. Mitigation of climate change and energy independence	1. Effective mitigation of greenhouse gas emissions
	2. Reduction in the use of fossil fuels and the enhancement of energy independence
	3. Strengthening the capacity to adapt to climate change
2. Creation of new growth engine	4. Development of green technologies
	5. Greening of existing industries and promotion of green industries
	6. Advancement of industrial structure
	7. Engineering a structural basis for the green economy
3. Improvement in quality of life and enhanced international standing	8. Greening the land, water and building the green transportation infrastructure
	9. Bringing green revolution into our daily lives
	10. Becoming a role-model for the international community as a green growth leader

Source: Presidential Committee on Green Growth, 2009.

04 1st Report Findings



WATER & GREEN GROWTH CASE STUDIES

05 1st Report Findings

Strategies	Policy direction
1. Protection and conservation of water resources	1. Adopt river basin management plans using integrated water resources management (IWRM) principles
	2. Value ecosystem services to ensure their conservation (e.g. Payment for Ecosystem Services)
	3. Strengthen the capacity to adapt to climate change
	4. Ensure environmental integrity of the ecosystem and protect biodiversity
2. Water as an engine for growth	5. Promote technology transfer and invest in innovative tools to improve water and energy efficiency
	6. Revitalize and better use urban waterways and waterfront areas
	7. Adopt a package of economic instruments, including demand management and incentives for recycling and reuse of water
	8. Balance green and grey infrastructure among the competing uses – e.g., energy, industry, municipal, domestic, agriculture
3. Water for an improved quality of life	9. Empower people, especially women, to better manage their own water resources
	10. Promote access to clean drinking water and sanitation as a key to poverty alleviation, public health and quality of life
	11. Facilitate adoption of water and green growth through education and capacity development policies
	12. Build resilience among watershed communities to cope with water-related disasters

06 2nd Report Findings

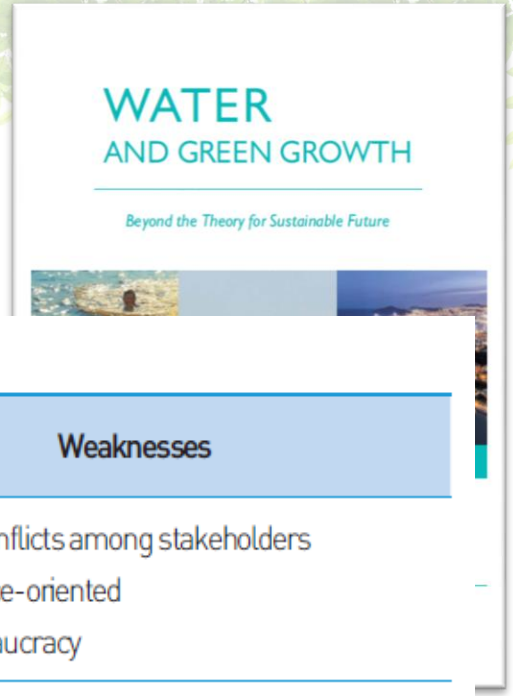
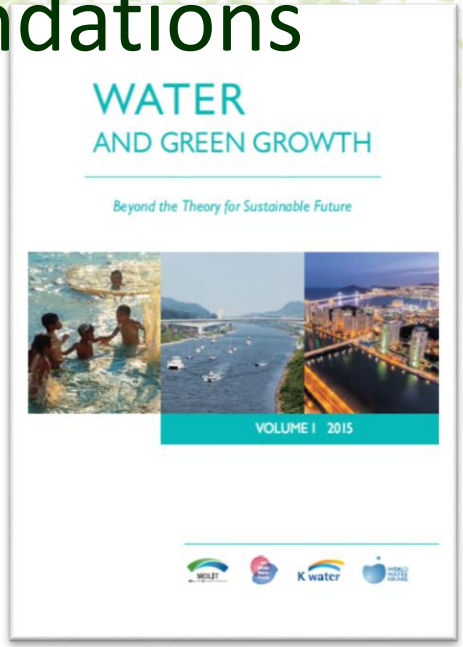


Table 5-1. Institutional Tracks, Strengths, and Weaknesses

Types of institutional tracks	Characteristics	Strengths	Weaknesses
State-driven	· Strong role of government · Often top-down approach	· Strong enforcement · Easier budget planning and execution	· Potential conflicts among stakeholders · Performance-oriented · Heavy bureaucracy
Market-oriented	· Market mechanism · Economic instruments · Private sector participation	· Demand side management · Efficient operation and management · Procurement of investments and funds	· Environmental concerns secondary to economic benefits · Social exclusion and unequal distribution of benefits
Community-centered	· Stakeholder participation · Bottom-up approach	· Opportunity to resolve conflicts. · Collective support	· Lack of financing · Time consuming to coordinate

07 2nd Report - List of key recommendations



- Water is a vector through which green growth can occur.
- There is no one-size-fits-all strategy.
- A holistic approach to encompass three pillars of sustainable development.
- Strong political leadership and commitment are essential.
- Indicative planning tools.
- A clear legal framework.
- Better coordination, with clearly defined responsibilities.
- Policies that support innovation & foster R&D investment.
- Increased investment dedicated to developing sustainable water services & infrastructure.
- Economic instruments.
- Well-defined water rights for both surface and groundwater.
- Stakeholder participation.
- Educational programs and capacity building.
- Enhanced water & data information can provide essential decision support.

08 3rd Report Findings

- Proposes its own policy framework

- An explicit GG strategy at national/regional level
- Water allocation regimes
- The capacity to design and finance infrastructure
- Investment in water supply & sanitation services
- Institutions & policies
- A robust data set

Thank you

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IWRA

Reactions to the Presentation to the Panelist

Moderator. Ms.Danielle Gaillard-Picher

- **Dr.Zaini bin Ujang**
- **Dr.Karin Krchnak**
- **Prof.Glen Daigger**
- **Prof.Nick Schofield**

PRESENTATION III

Dr. Mara Tignino

Green Growth and International Water Law

Aug. 27th, 2017

Dr Mara Tignino
Geneva Water Hub /
University of Geneva

Water & Green Growth: Just a Concept or Reality?

INDEX

1. What are the meaning and contours of the concept of green growth?
2. How international water law is related to water Green Growth ?
3. How the greening of international water law may inform the concept of green growth in the water sector?
4. Is the concept of benefit sharing related to water green growth?

01 What are the meaning and contours of the concept of green growth?

"Fostering economic growth and development while ensuring that natural assets continue to provide the resources and environmental services on which our well-being relies" (Rintaro Tamaki, OECD Deputy Secretary-General)

Water and green growth can go hand in hand through the protection of water resources

Adopting a water and green growth approach may result in economic growth that is both environmentally and socially sound (K-Water)

01 Similarity with the concept of sustainable development?

Economic, environmental and social pillars

“The right to development must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations” (Principle 3 of the Rio Declaration on Environment and Development, 1992)

“In order to achieve sustainable development, environmental protection shall constitute an integral part of the development process and cannot be considered in isolation from it” (Principle 4 of the Rio Declaration on Environment and Development, 1992)

01

Social pillar of sustainable development

”Environmental issues are best handled with the participation of all concerned citizens, at the relevant level. At the national level, each individual shall have appropriate access to information concerning the environment that is held by public authorities, including information on hazardous materials and activities in their communities, and the opportunity to participate in decision-making processes. States shall facilitate and encourage public awareness and participation by making information widely available. Effective access to judicial and administrative proceedings, including redress and remedy, shall be provided ”
(Principle 10 of the Rio Declaration on Environment and Development, 1992)

02 How International Water Law is related to water green growth?

International law provides the legal framework for Water Green Growth

- Multilateral environmental agreements (MEAs)
  (i.e. UN Framework Convention on Climate Change)

- Freshwater agreements (greening of international water law)

- Human rights

03 How he greening of international water law may inform the concept of green growth in the water sector?

Principle of equitable and reasonable use

"Watercourse States shall in their respective territories utilize an international watercourse in an equitable and reasonable manner. In particular, an international watercourse shall be used and developed by watercourse States with a view to attaining optimal and sustainable utilization…taking into account the interests of the watercourse States concerned, consistent with adequate protection of the watercourse." (Art. 5 of the Convention on the Law of the Non-Navigational Uses of International Watercourses (UN Watercourses Convention)

- The application of this principle can serve as a tool in the pursuit of sustainable 'green growth'

03

Obligation not to cause a significant harm

"Watercourse States shall, in utilizing an international watercourse in their territories, take all appropriate measures to prevent the causing of significant harm to other watercourse States" (Art. 7 of the UN Watercourses Convention)

- This principle can be a useful tool in preventing the risk of environmental harm by economic activities

- From this principle, other obligations derivate: 1) Prevention of water pollution; 2) The obligation to undertake an environmental impact assessment (EIA); 3) The obligation to protect ecosystems

03

Pollution prevention

Watercourse States have “to prevent, reduce and control the pollution of an international watercourse that may cause significant harm to other watercourse States or to their environment, including harm to human health or safety, to the use of the waters for any beneficial purpose or to the living conditions of the watercourse” (Art. 21 of the UN Watercourses Convention)

- Water and Green Growth should take into account of the principle of pollution prevention and abatement
- Water quality standards are of particular importance to ensure sustainable growth

The obligation to undertake an EIA

In order to prevent an environmental harm, a State proposing an economic project must carry out an EIA to prevent potential transboundary harm before the project is undertaken (Art. 3.1 (h) of the UNECE Convention on the Protection and Use of Transboundary Watercourses and International Lakes (UNECE Water Convention)

- A number of treaties and the international jurisprudence have recognized this principle
- The principle has the potential to further the goal of economic growth while ensuring the prevention of environmental harm

Protection of ecosystems

- "Protection and preservation of the ecosystems of international watercourses" (Art. 20 of the UN Watercourses Convention)
- Preventing "the introduction of species, alien or new, into an international watercourse" (Art. 22 of the UN Watercourses Convention)
- Protection and preservation of the marine environment (Art.23 of the UN Watercourses Convention)

- Non water law instruments which directly relate to the protection of international watercourses are the Ramsar Convention on Wetlands of International Importance especially as Waterfowl Habitats and the Convention on Biodiversity

04 Is the concept of benefit sharing related to water green growth?

- Economic, social and environmental costs and benefits are shared between riparian countries
- Water green growth may be a tool to share these costs and benefits
- Joint water infrastructures may promote green growth

  - Diama and Manantali joint dams on the Senegal River

  - Niger River: “common facilities” and “facilities of common interest”

- Can green growth be an element of the community of interests and rights between riparian countries?

Thank you

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Reactions to the Presentation to the Panelist

Moderator. Ms.Danielle Gaillard-Picher

- **Dr.Zaini bin Ujang**
- **Dr.Karin Krchnak**
- **Prof.Glen Daigger**
- **Prof.Nick Schofield**

PRESENTATION IV

Dr.Mark Smith

Water & Green Growth: Policy to Practice

Dr Mark Smith
Director
IUCN Global Water Programme
Gland, Switzerland

Green Growth – Statement of Principles

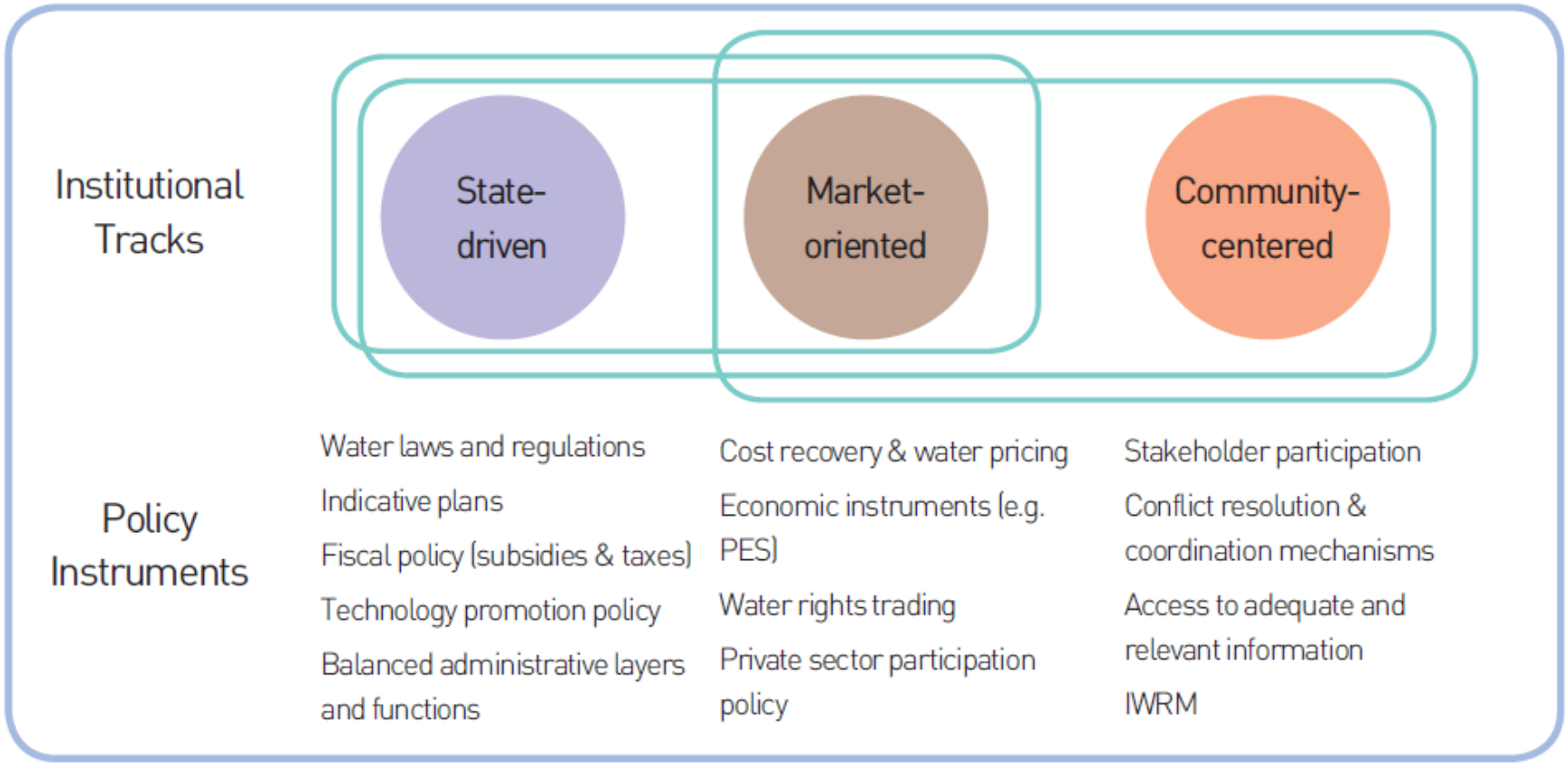
Green Growth:

Investment for a resource-efficient, low-carbon economy that reduces poverty and increases social equity while sustaining ecosystems & preventing biodiversity loss

WATER

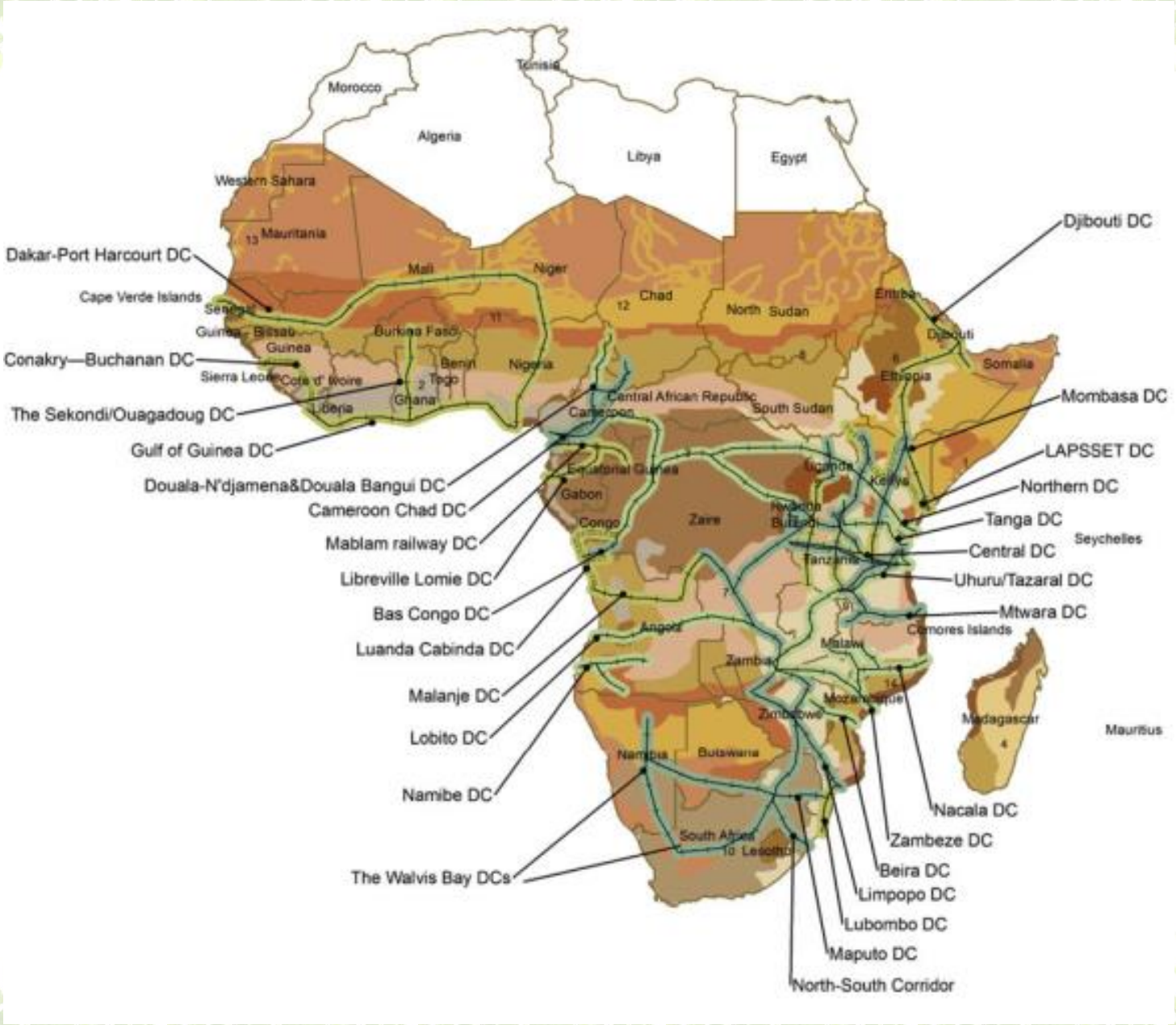
Case	Problem Focus
Lake Sihwa, Korea	Water quality improvement
Murray-Darling, Australia	Sustaining irrigation & ecosystems
Northeast Brazil	Erosion control for water supply
Shanghai, China	Water pollution & urban growth
Golden Horn, Istanbul, Turkey	Restoring a liveable urban environment

The Policy Mix



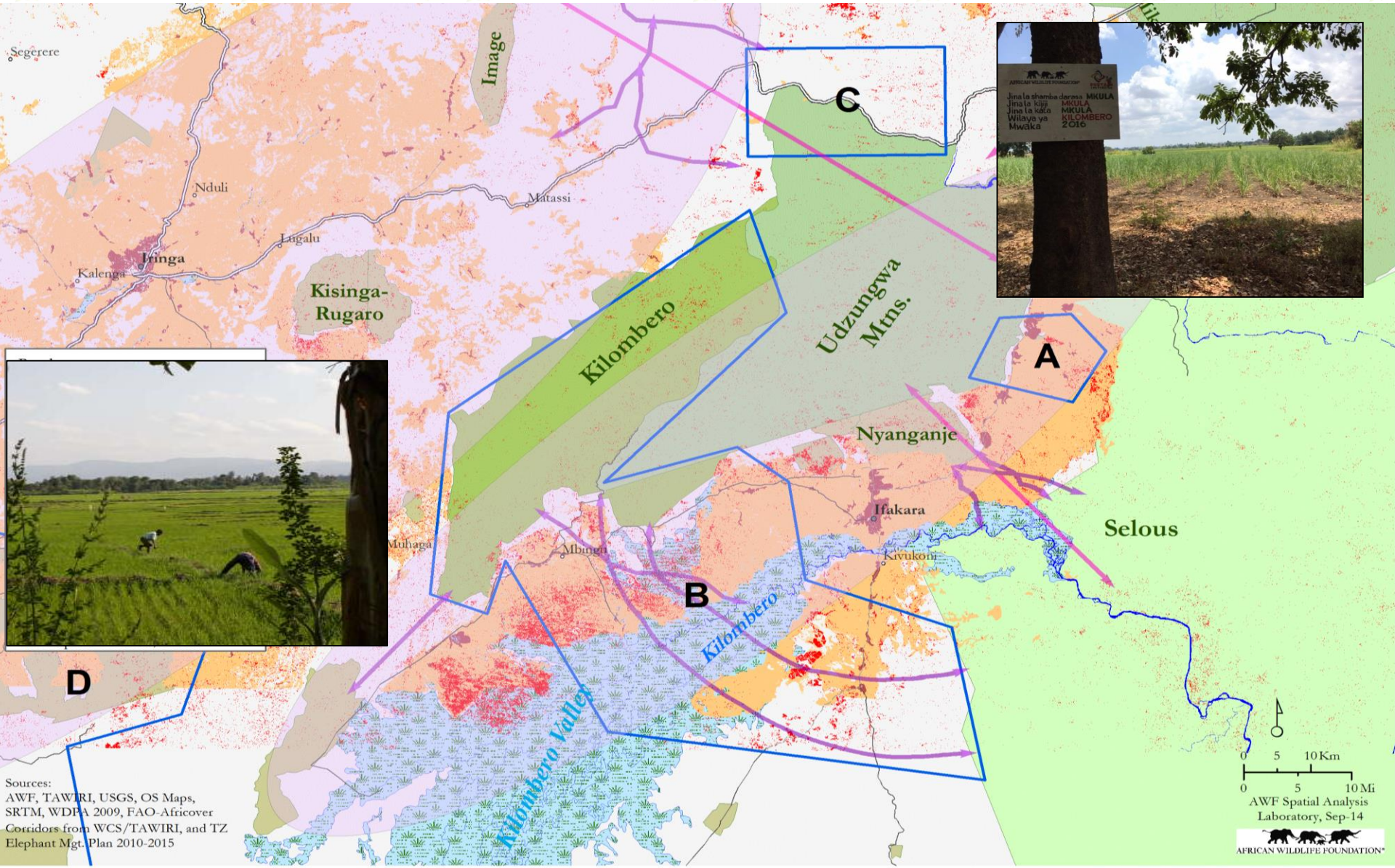
SUSTAIN-Africa

Sustainability and Inclusion Strategy for Growth Corridors in Africa

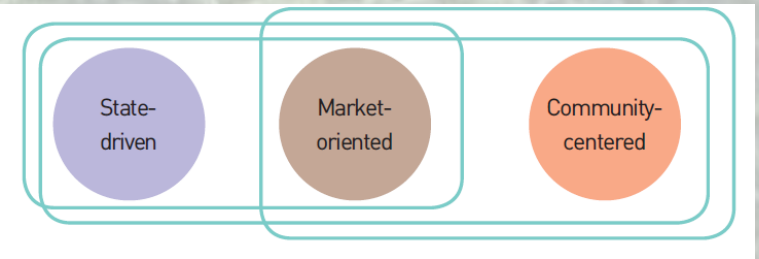


Source: Weng et al., 2013

Kilombero Valley



Conclusions



- Partnership > missing
  - "interest-based landscape partnerships"
- Facilitators & brokers
- New investment partnership models

Reactions to the Presentation to the Panelist

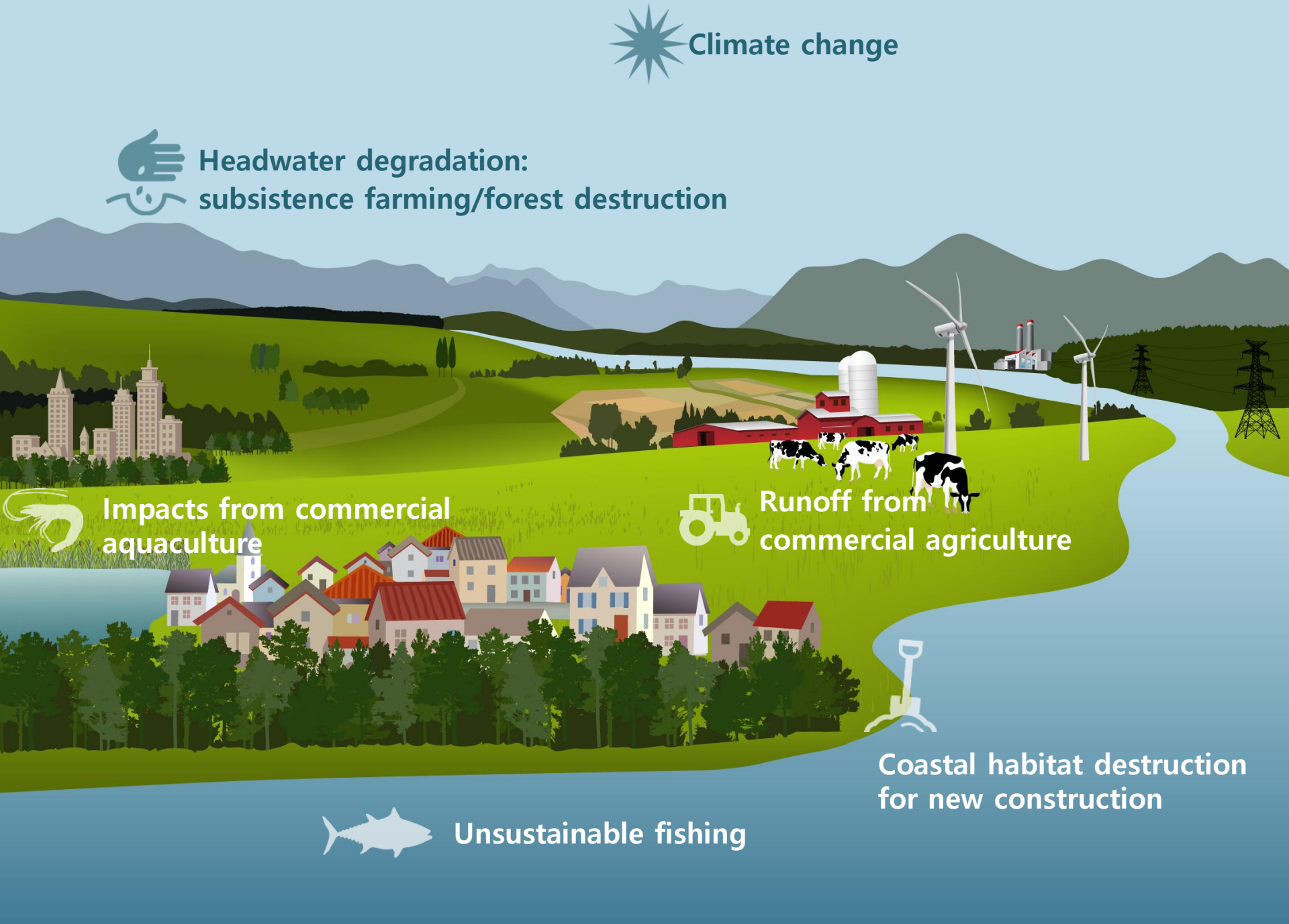
Moderator. Ms.Danielle Gaillard-Picher

- **Dr.Zaini bin Ujang**
- **Dr.Karin Krchnak**
- **Prof.Glen Daigger**
- **Prof.Nick Schofield**

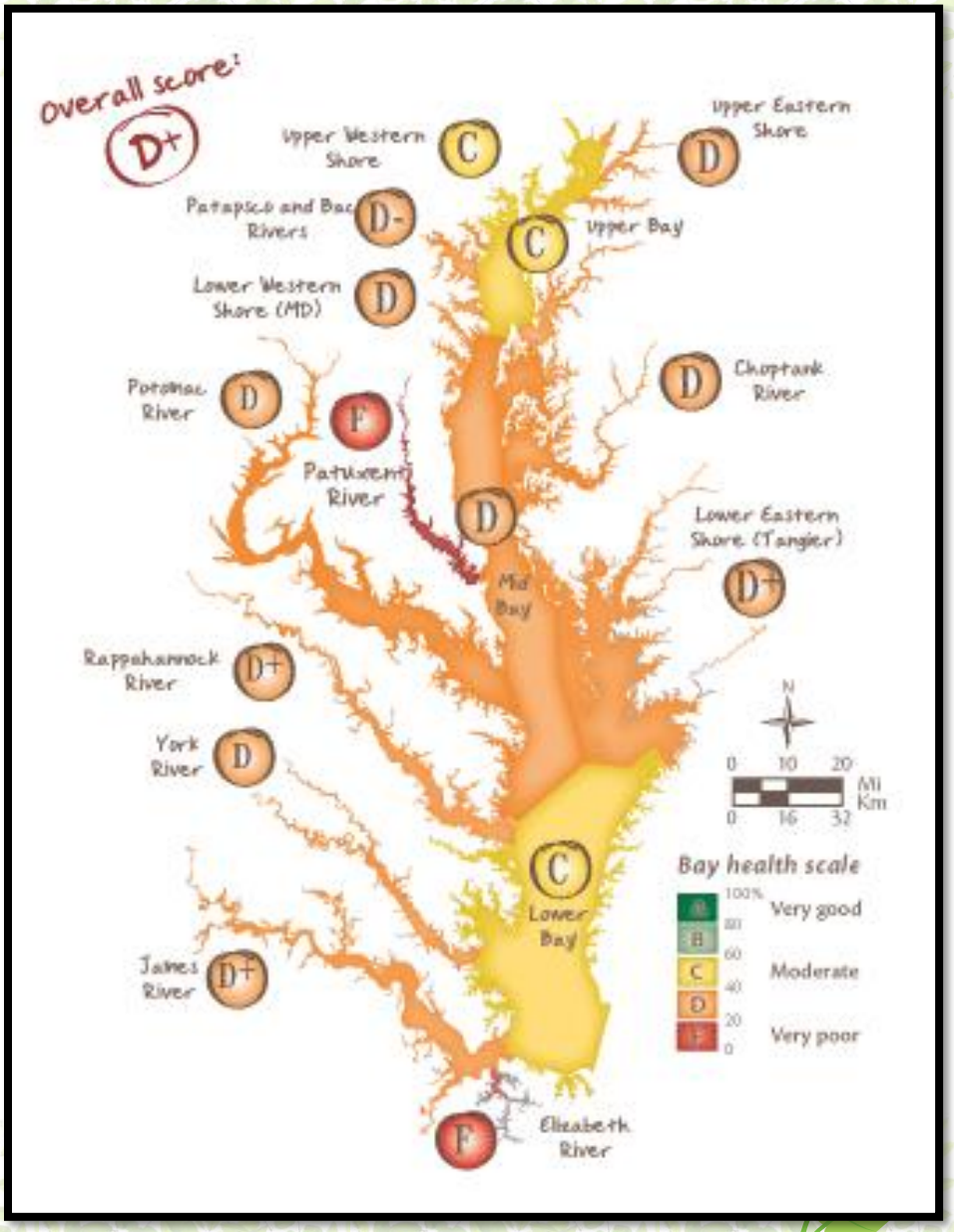
How Do We Motivate Collective Action for Water & Green Growth?

Aug. 27th, 2017

Karin Krchnak
World Wildlife Fund &
World Water Council

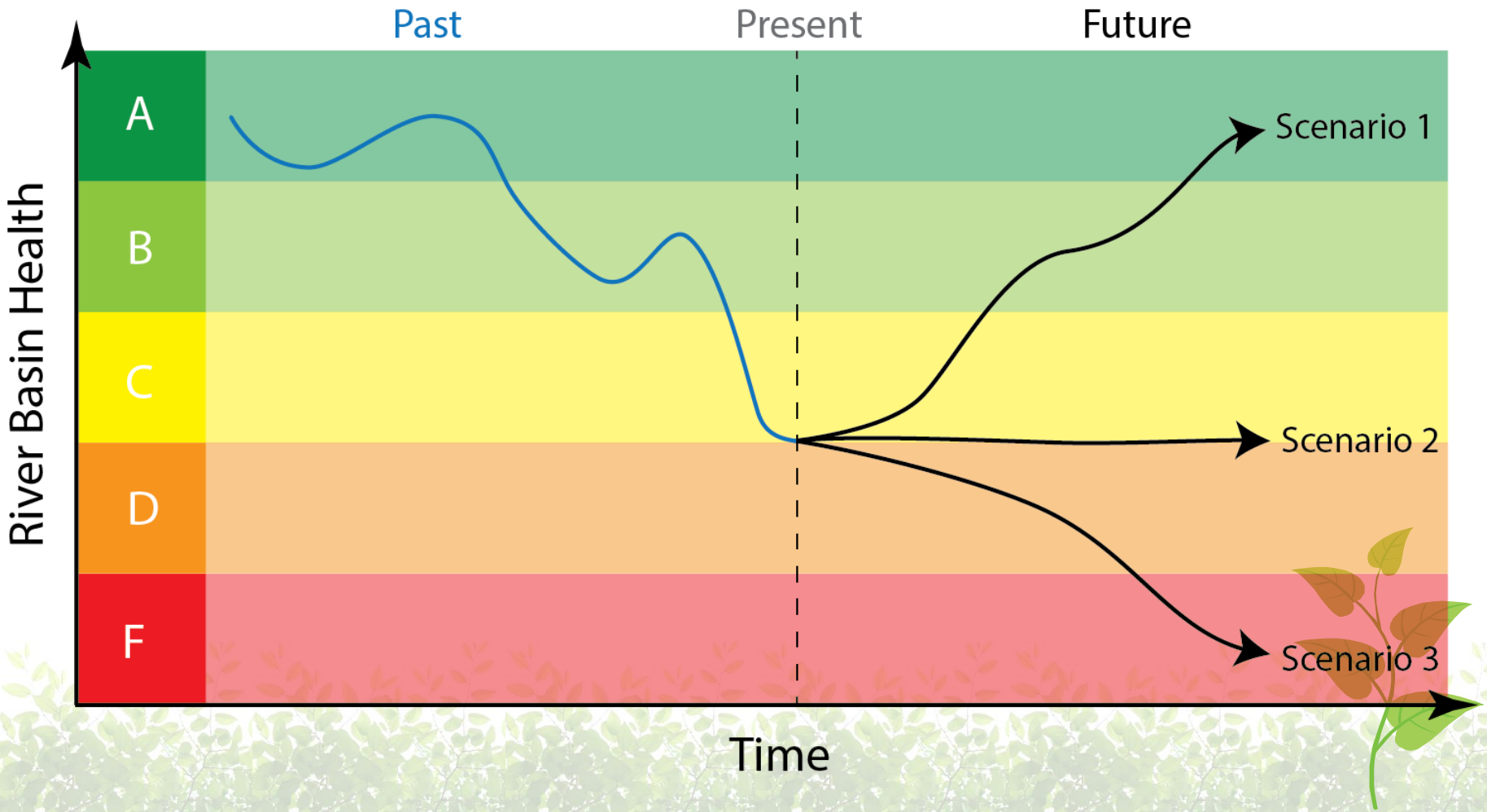

Climate change
Headwater degradation:
subsistence farming/forest destruction
Impacts from commercial
aquaculture
Runoff from
commercial agriculture
Coastal habitat destruction
for new construction
Unsustainable fishing


EPIC FAIL
Save Our Freshwater
WWF


Overall score¹
D+
Upper Western Shore
C
Upper Eastern Shore
D
Patapsco and Back Rivers
D-
Upper Bay
C
Lower Western Shore (MD)
D
Potomac River
D
F
Patuxent River
D
Choptank River
D
Lower Eastern Shore (Tangier)
D+
Mid Bay
Rappahannock River
D+
York River
D
C
Lower Bay
James River
D+
F
Elizabeth River
N
0 10 20
Mi
0 16 32
Km
Bay health scale
100%
80
60
40
20
0
A
B
C
D
F
Very good
Moderate
Very poor


Basin Report Cards
Health & Nutrition
Management & Governance
Economic
Social & Cultural
Water Quality & Quantity
Ecological

Raising the Grade to Achieve Basin Health



Thank you

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PRIZE DRAWING