South Asia Water Initiative (SAWI)

Paper 3: Economic and Institutional Landscapes

Regional Conference on Risks and Solutions: Adaptation Frameworks for Water Resources Planning, Development and Management in South Asia

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Source: Saniiv de Silva

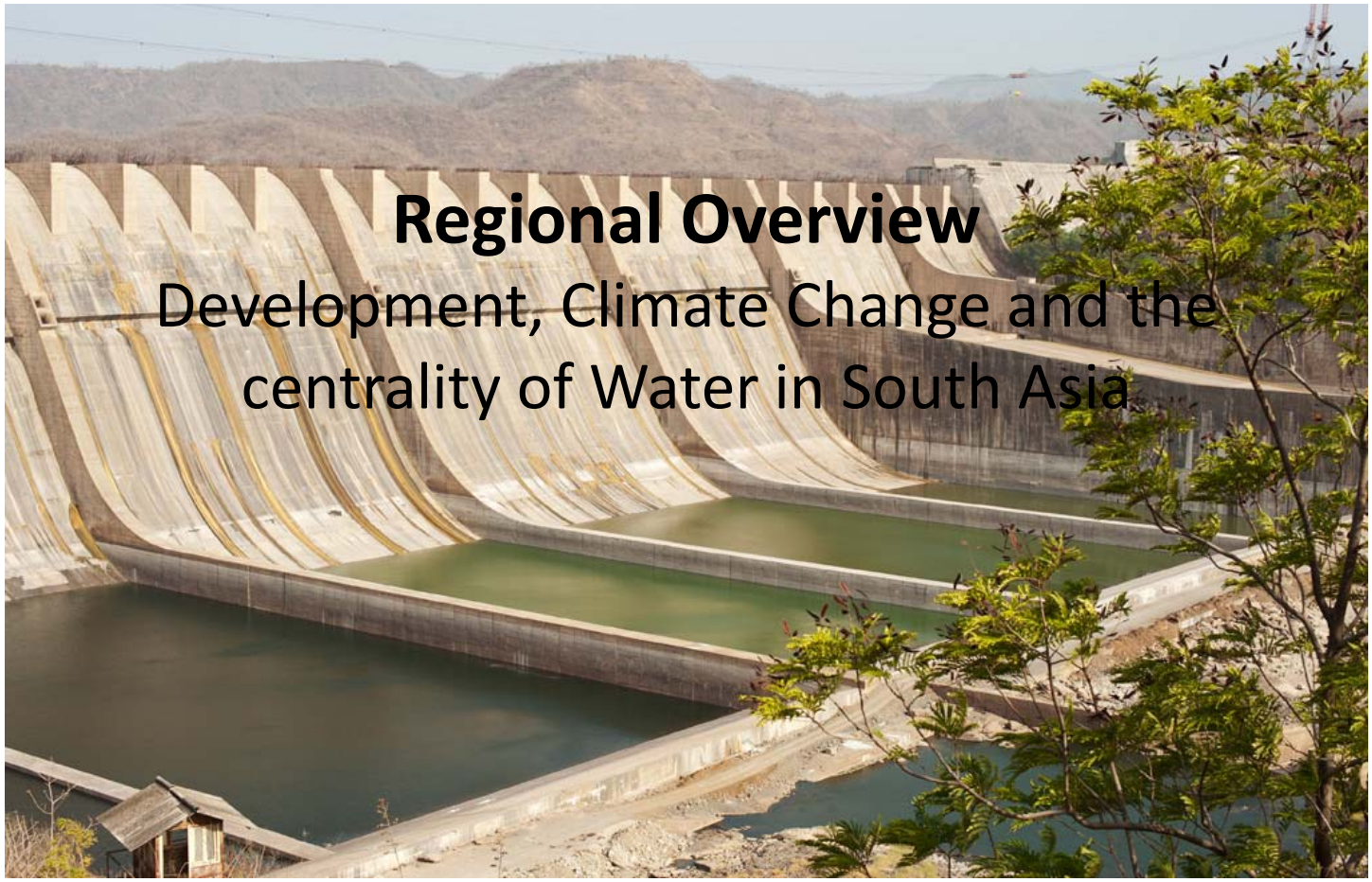
Preface

- An entirely desk-based exercise
- Findings are therefore tentative and subject to feedback from this meeting
- Open to constructive correction!

Source: Saniiv de Silva

Objectives

- How well are the costs of climate change and costs for adaptation understood?
- What volumes of adaptation finance (external and internal flows) have been available, and how are they spent, especially re. water resources?
- What institutional arrangements exist for decision making in adaptation responses in terms of
  - Finance sourcing, allocation, and tracking
  - Linking water resources planning to adaption strategies
- What are the implications of the finding to the above questions, and what may be key focal areas moving forward?



Regional Overview

Development, Climate Change and the centrality of Water in South Asia

Source: IWMI

Regional Overview

- Fastest economic growth rate of any developing region. Yet,
  - 67% of the population remains rural…
  - …and despite falling contributions to GDP, agriculture accounts for at least 50% employment except Sri Lanka (30%). It also
    - Drives food security in all countries.
    - Has continued relevance to rural poverty reduction (e.g. Bangladesh, World Bank 2016; new avenues opening e.g. groundwater in Sri Lanka)
- Agriculture's continued relevance highlights water's centrality to development
  - Including to many other key sectors (e.g. energy, industry, domestic water)
- Therefore changes in water scenarios lead to ripple effects across development

Regional Overview

Growth masks high vulnerability:

- Supports 25% of the world's population with only 5% of global water resources
- By 2030, water demands in the largest South Asian economies projected to be double that of available supplies.
  - Reflects multiple existing drivers (e.g. population growth and urbanization; industrialization including demand for hydropower)
- Environmental and climatic stresses to be intensified by climate change
  - Water again central - many stresses expressed through water (floods, drought, storm surges, salinity)

Climate change vulnerability index: S. Asia in the red

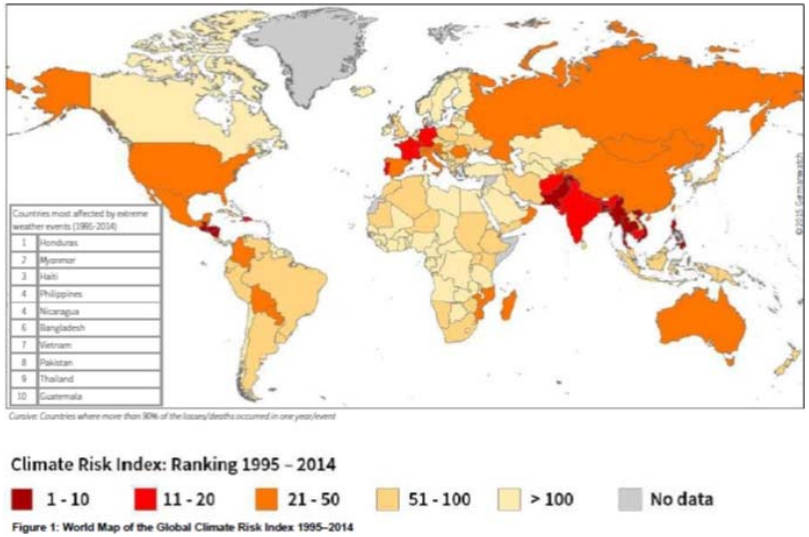


Figure 1: World Map of the Global Climate Risk Index 1995–2014

Source: Kreft et al. 2016

Regional Overview

Vulnerability to climate change: temporal and spatial variation based on varying bio-geographies and socio-economic contexts. Includes differences in

- Where, when and how much water will be available
- Frequency and intensity of floods and droughts
- Specific development contexts (e.g. Nepal & Bhutan's dependence on hydropower; groundwater dominance in India, Bangladesh; coastal salinity)
- Transboundary dimensions (e.g. GLOF, Bangladesh as a riparian)
- Adaptation is also therefore inherently transboundary – a compelling motive to
  - Overcome strong identity and ideological differences
  - Develop more deliberative regional planning despite significant power disparities

Regional Overview

Predicted average loss in GDP across South Asia

	Business As Usual		<2^{0}C increase	
Year	2050	2100	2050	2100
Impact on GDP	-1.8%	-8.8%	-1.3	-2.5

Source: Ahmed and Suphachalasai (2014).

- Yet costs in terms of GDP simplifies what is at stake:
  - Masks disparities across geography and populations
  - Highlights need for a more granular understanding for building equity into adaptation responses.

Source: Saniiv de Silva

Financial Trends and Mechanisms in Climate Adaptation

Source: Saniiv de Silva

Financial Trends and Mechanisms

Financing flows for adaptation

- Except Bangladesh and India, all other countries rely heavily on external finance
  - Afghanistan, Bhutan, and Nepal in particular rely heavily on grants
  - Recent trends towards more loans suggests this will become more expensive
- **The adaptation gap**: between estimated adaptation costs and current adaptation financing is significant for all countries
- Proliferation of international finance sources can strain under-staffed national bodies' efforts to compete for such finance
- Data on external and internal climate finance flows remains patchy, with no in-country mechanisms to track these

Financial Trends and Mechanisms

Financial allocation for adaptation

- Proved difficult to track
- Many adaptation outcomes are in fact windfalls or co-outcomes of more generic investments
  - Many investments may not be labelled as adaptation (e.g. dam building), due to other sectoral drivers (e.g. energy)
  - Difficult therefore to disaggregate the situation in the case of water resources (and other sectors too)
- How investments are articulated is therefore important, and the extent to which this occurs links to broader institutional challenges discussed below

Source: Saniiv de Silva

Financial Trends and Mechanisms

Gaps in mechanisms for mainstreaming and tracking adaptation finance emerge as a major constraint

- Mainstreaming climate financing into budgets is being attempted in Bhutan, India, Nepal and especially Bangladesh
- The absence of private sector investments in climate financing

Source: IWMI

Financial Trends and Mechanisms

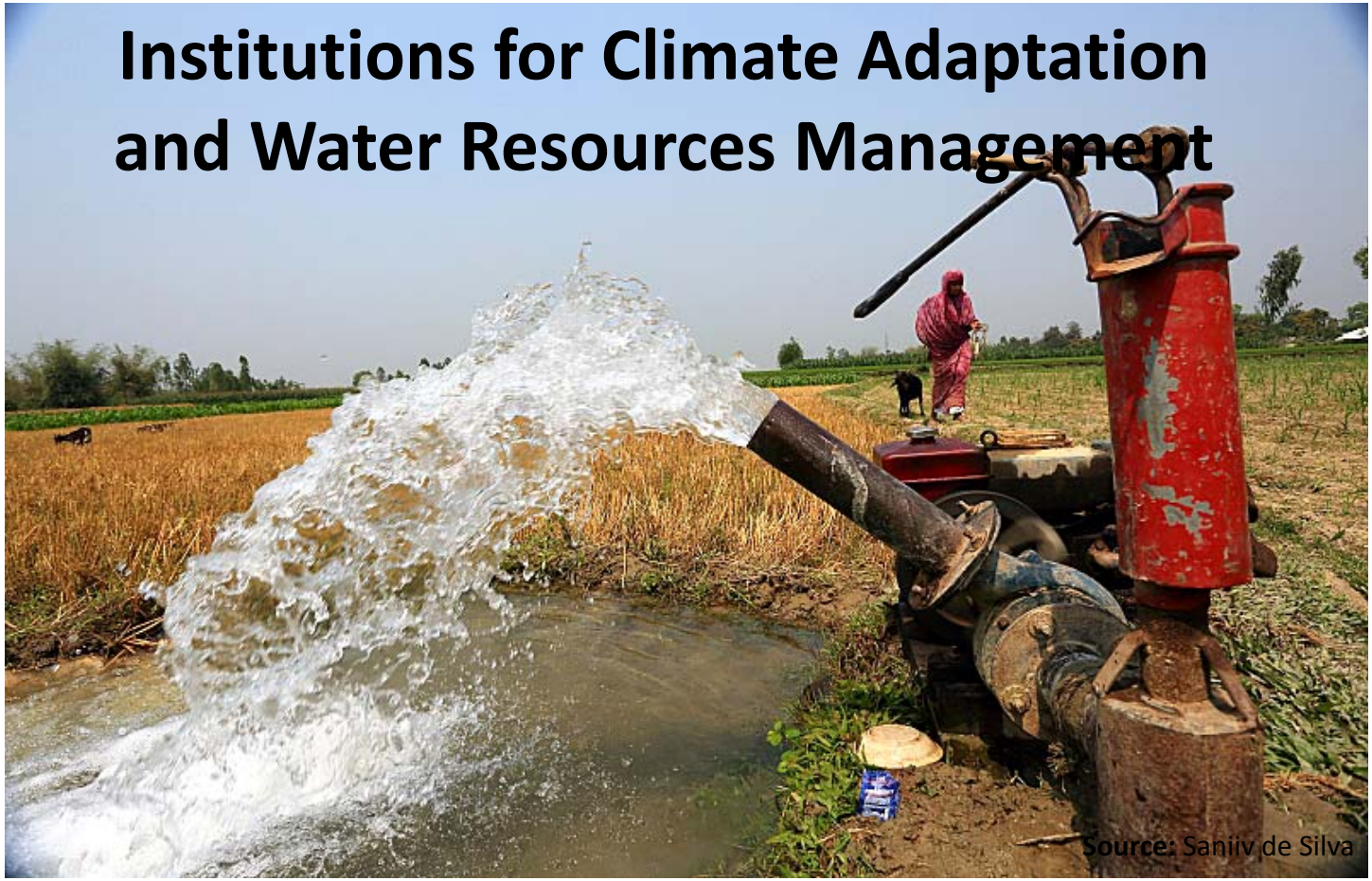
Bangladesh is an exception

- Most significant institutional efforts to:
  - Link finance allocations to policy and technical line agency planning
  - Develop mechanisms for accountability against allocations
- Critically: government commitment that views adaptation as mission critical to overall development – not just the climate focal point pushing
  - Domestic finance significantly outweighs external funding

Technical and finance planning remains centralized in all countries

- Undermines local and specific stakeholder voices
- May also prevent development of local government capacity to implement adaptation programs

Institutions for Climate Adaptation and Water Resources Management



Source: Saniiv de Silva

Institutions for Adaptation and WRM

A gap exists between policy and practice around water management

- At a country level, and for the water sector specifically, climate risks highlight the need for Integrated Water Resources Management
- In practice, however, institutional frameworks for climate adaptation are not directly linked to IWRM
  - Water management remains driven by traditional sector needs (e.g. water for hydropower)
  - How adaptation can be driven by better WRM remains unclear

Institutions for Adaptation and WRM

Coordination structures exist, but are weak

- Each country has a special body to deal with climate change issues, but…
  - Links between these and other sectors appear to be poor
  - Many are new and trapped in pre-exiting institutional fragmentation and competition
    - Including surface –groundwater disconnects
  - Insufficient authority and a road map mean they remain peripheral
  - Technical and financial planning processes rarely converge
- Implications
  - Insufficient estimates of adaptation costs related to specific climate risks
  - Poor connectivity between the science – policy – planning - finance continuum
  - Uncoordinated channeling of funds for adaptation
  - Lack of accountability that links adaptation spending with results

Institutional trends for climate adaptation

The underlying issues are mainly structural

- Some drivers relate to capacity:
  - Limited staffing and budget stifles fundraising, allocation and effective implementation of adaptation on the ground
- But the major issue is deeper (structural):
  - Challengede to drive cross-sectoral integration and collaboration in planning
  - Gaps in finance allocation, tracking and accountability
  - Centralisation with little space for local stakeholders despite SAPCCs in India, (framed almost entirely by the NAPCC), and LAPAS in Nepal.
- Bangladesh demonstrates how network development can ease the challenge of sectoralisation

Summary and Ways Forward

Summary and Ways Forward

Water is a dominant narrative within adaptation

- A key enabling resource across multiple sectors that influence GDP, food security and other development dimensions
- Yet highly vulnerable to climate change, with high levels of uncertainty
- Therefore, its role as a key developmental resource x high vulnerability = high risks across sectors
- Suggests a strong case exists for seeing better decision-making through IWRM as a key aspect of adaptation
- Overall, assessing financial flows to the sector has been difficult, and may reflect the systemic gaps discussed

Summary and Ways Forward

Financing gaps for adaptation are unlikely to change in the short-medium term

- Ensuring limited finances are well targeted is therefore critical

Such efforts require more nuanced information

- A focus on impacts on GDP is insufficient for adaptation targeting
- Needs a more geographically and population disaggregated understanding of risks
  - Bring attention to specific groups of people
  - Important in linking with SDG targets

Source: IWMI

Summary and Ways Forward

Adaptation financing must be seen as a continuum from sourcing to allocation and accountability to specified objectives

- Currently, more attention on sourcing finances than how these are spent
- Structural gaps in how finance is targeted and accounted for
- Bangladesh an exception and signs that India and Nepal are also taking steps to bridge these gaps
- Most national focal points fulfil administrative but not strategic roles

Source: IWMI

Summary and Ways Forward

Current institutional frameworks do not promote deliberative decision making capable of achieving informed, inclusive and accountable climate adaptation

- Poorest and most marginalized groups are frequently the most vulnerable
  - Involves large segments given poverty levels and exposure to climate change via physical location and climate (and water)-sensitive livelihoods
- Yet mechanisms to afford them a voice appear either absent or rudimentary
  - Planning and decision making lacks local representation, despite some efforts to decentralize planning (India, Nepal)
- Means significant human potential remains untapped in the adaption effort
  - Engaging these populations can also align adaptation with efforts to reach SDG goals

Summary and Ways Forward

Serious efforts are needed to promote greater regional cooperation

- An inescapable necessity given the region's biogeography
- Poor cooperation will enhance the level of uncertainty around country climatic risks, especially for Bangladesh (riparian) and others dependent on glacier melt.
- Unclear whether climate risks will further polarize country attitudes or bring them together
- Should be a priority challenge for SAARC and similar regional cooperation forums given the overarching implications for development.

Source: Saniiv de Silva


Thank you
Source: Sanjiv de Silva