SHARING OF NATURAL RESOURCES: Case of South Asian Waters

Position paper and presentation by
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SOURCE: www.cawater-info.net 2013
South Asia and Natural Resources

- Alluvial soil, River water, Sea water, timber-rain forests in India.
- Pine, fir in Bhutan and Nepal
- Coal (Daccan Plateau), natural gas Uranium Pakistan
- Iron-ore, mica, diamonds, India
- Gemstones, Sri Lanka
Rivers and Water Resources in SA

- River System: 4 major rivers - Ganges, Indus, Brahmaputra & Meghna all have origin in Himalayas.
- Ganges flows east across Northern India
- Indus flows West and South through Pakistan to Arabian Sea.
- Brahmaputra and Meghna flows east, then west, then south through Bangladesh.
Major Treaty & Conflicts b/t Countries

- India-Pakistan (Indian concerns & need of water and Pakistan’s perspective)
- Indo-Bangladesh (Ganges & Barhamputra River Issue & Tipaimukh Dam)
- Indo-Nepal (Mahakali Treaty & Sharda Barrage)
- Pak-Afghanistan Perspective

SOURCE: TFMR Podcasts 2013
Indo–Pak Treaties & Disputes

- **Indus Water Treaty B/T Pak-India (1960)**
  - Indus, Jhelum, Chenab rivers, 75% of Indus system.
  - **Provision regarding Western Rivers (Article III)**
    I. Pakistan shall receive all waters of Western Rivers.
    II. India only can use for following usages
      - Domestic use, Non-consumptive use, Agricultural use (limited), Generation of Hydro-Electric Power, Storage works (limited)
  - **Provision regarding Eastern Rivers (Article IV)**
    I. All the water of the Eastern rivers
    II. Pak allowed limited agriculture use of 45,500 acres from Ravi.
- **Article X: Provision to Deal Emergency failed**
  - Pakistan is dependent upon the Indus River supply.
  - The headwaters of all six rivers within India.
  - India is not permitted to build projects on Indus, Jhelum or Chenab to divert or store water flowing to Pakistan.
Indian Projects

- Chenab: 11 projects and 24 under consideration.
- Jhelum: 13 projects and 74 power potential schemes are identified.
- Indus: 9 projects commissioned/under construction.
- Wullar Barrage/Tulbul Navigation Project
  a. India started in 1984 (1987)
  b. Obstruct the flow of Jhelum
  c. Wullar lake feeds Jhelum River Pakistan’s Mangla dam.
Baglihar Dam Dispute

- River Chenab, 900MW Baglikhar Hydro-Electro project in Doda district.
- ¾ objections of Pakistan were accepted. Only on the design of spillways not accepted.
- Kishenganga hydro-electric projects
  a. 330MW hydro-electric on Neelum River in Gurez valley, kashmir.
  b. A tunnel through North Kashmir mountain range will redirect the Kishenganga waters to Wullar lake.
  c. Danger for Neelum-Jhelum project
Pakistan’s Growing Water Scarcity

- On the brink of water disaster in 2009. Because from 5000 m³/capita 60 years ago decline to 1200 m³/capita
- It may fall to 800 m³/capita till 2020.
- Primary drivers; Irrigation and agriculture.
- Pakistan Water storage capacity is 30 days.
- India is 120-220.
- Pakistan major 3 dams having capacity 6,385MW
- While India 74 dams have capacity 15,208MW.
- Pakistan hydro project under construction, while India 37
- Pak planned 35 hydro project capacity 33,769 while India 318 project capacity having 93,615.
India-Bangladesh

- Share 54 rivers
- 4 major rivers, Ganges, Brahmaputra, Meghna, Teesta are trans-boundary rivers.
- Water shortages occur in Bangladesh by blockade of the Ganges water after the Farakka barrage.
- India constructing the massive Tipaimukh barrage on the Barak river with a capacity of 1500MWs to entertain Indian state of Assam.
Nepal is concerned about inundation and backwater effects of the proposed storages and link canals.

Indo-Nepal Mahakali Treaty

- Mahakali River since 1816 when East India Company signed a treaty.
- In 1997, India favours Lipu Lekh as its source but Nepal favours the Limpiyadhura.
- The Nepalese feel that they have been ‘cheated’ in these agreements and projects.
Nepal deserves 1000 cusecs of water from this barrage from 15 May to October 15 and 150 cusecs onwards.

It is compulsory for India to maintain flow of at least 350 cusec water downstream of it in Makhali River to sustain the ecosystem.
Afghanistan is constructing Dam on Kabul and Kunar rivers
- These two fall in Indus river at Attock.
- Dam will affect the flow of Indus River.
India Water Concerns

- Water is a basic driver for hydropower for growing electricity need. (9% plus annual growth rate).
- Indian Peak power demand in 2007-8 was 108,886MW while power demand met was 90,793mw with 18,093 mw or 16.6% shortfall.
- Pak developed 12% Hydel Potential, India and China 30%.
South Asia: A Water Stress Region

- South Asia being heavily populated is becoming a water-stressed region, and consequently, most countries face water scarcity with limited access to water for drinking and sanitation.
- Water resource demand in India is expected to double and exceed 1.4 trillion m$^3$ by 2050.
- Pakistan faces greatest water crunch with 1000 m$^3$/person water supply, and a fall below the mark would make it a water scarce country.
- Nepal and Bhutan are in better state but need improved management, whereas, Bangladesh is subject to all kinds of downstream hydrological impacts.
- Problem of water scarcity exacerbating hydro-politics gets worsened by the fact that all countries have subsistence agricultural economy.
- Besides there is increasing demand of water for industries and rapid urbanization.
- South Asia is likely to face 50% water deficit by 2030.
Findings

- Political Mistrust
- Less integrative region
- No multilateral cooperation
- Internal security threats and political instability
- High population density
  - Subsistence agricultural economy
  - Lack of integrated transportation and communication systems
- Shortage of Energy
- Geographical Disadvantages
Way Forward

- Efficient water management system to minimize waste and ensure conservation through integrated watershed management.
- Bilateral, regional and multilateral cooperation and coordination are essential particularly involving China, and SAARC and ICIMOD could play effective roles in developing water diplomacy.
- It is important to build up national political leadership/interest through evidence-based assistance.
- Wider regional approach needs to be prepared in terms of regional priorities for trans-boundary water.
- Governments-citizen-donor agencies partnerships to support investment.
CON’T

- Clear and strong institutional arrangements, practices, adaptations, innovations, and novel institutions supported by clear regulations and agreements
- A complete and clear package of basin-wide policies, procedures, and strategies to guide water and natural resource planning, management, and governance facilitating participation for all basin stakeholders and partners
- Water treaties need to be reviewed time to time as conditions change and treaties become increasingly out of tune
- Knowledge management for coordinating information exchange among agencies and stakeholders
- Adoption of regional cooperation for improved water governance