Attitudes to Water in South Asia
Discussion about water in South Asia – in particular the shared rivers of the region – is vociferous, antagonistic and increasingly associated with national security. Renewable water resources in the region have fallen dramatically on a per capita basis since the 1960s. India hit the ‘water stress’ mark around a decade ago, Pakistan slightly earlier. Groundwater is fast depleting in India, Pakistan and Bangladesh, and there are few feasible options for increasing supply. Management and governance of water have not adapted to the escalating pressures of demography. With the population of South Asia projected to rise by 32 per cent in three decades – from 1.68 billion in 2010 to 2.22 billion in 2040 – the outlook under current trends is for greater competition over water between agriculture, urban centres and industry, and between countries which share rivers.

This report explores attitudes in five South Asian countries: Afghanistan, Bangladesh, India, Nepal and Pakistan. It lays out the evidence based on almost 500 interviews conducted in 2013 as part of a Chatham House project by five local institutes with a range of water experts, policy-makers and decision-makers from NGOs and the private sector. It focuses on two river systems: the Ganges-Brahmaputra-Meghna and the Indus-Kabul basins. All the countries face similar challenges relating to these rivers. For instance, both basins are reliant on the summer monsoon as well as some upstream mountain snowmelt, leading to concerns about seasonal supply, flooding and water storage.

However, different narratives prevail across the region. With around 90 per cent of water used in agriculture, the relationship between food and water is seen as paramount in all countries. The linkages between water, energy and food are most clearly identified in India, where the provision of subsidized or free electricity to farmers to pump groundwater for irrigation is seen as unsustainable. In Nepal and Pakistan, the relationship between water and energy is seen through the prism of unfulfilled hydro-power potential, while in Bangladesh the focus is on infrastructure in India – the Farraka barrage in particular – and the consequent reduction in water flows to its downstream neighbour.

The balance of blame between local mismanagement and the actions of upstream or downstream riparians in affecting access to water varies between countries. In two upstream riparians – Afghanistan and Nepal – there is a widespread view that downstream riparians undermine their ability to store water.

Water has differing impacts on regional relations. Between India and Pakistan, and Pakistan and Afghanistan, water
disputes exacerbate already strained bilateral relations. For Bangladesh and Nepal, Indian approaches to water are a primary source of distrust. Conspiracy theories and blame are prevalent throughout South Asia – Afghanistan blames Pakistan and Iran for its water problems, while Nepal, Bangladesh and Pakistan blame India. Within India and Pakistan, water shortages are also blamed on the actions taken by upstream provinces or federal states. This culture of blame reflects the absence of trust that plagues interregional relationships and makes river-sharing arrangements particularly difficult to negotiate.

In spite of the shared river systems and interdependencies, South Asian governments have signed few bilateral water agreements and no regional ones. Those transboundary water treaties that do exist face criticism on a number of grounds: for time periods too short or too long; for the absence of dispute resolution mechanisms; and for their lack of provision for environmental factors or new challenges such as climate change.

Of the agreements currently in place, aside from the Ganges Treaty between India and Bangladesh and the Mahakali Treaty between India and Nepal, the rest were signed in the 1950s and 1960s before terms such as water stress had been formally coined. The Indus Water Treaty, for example, took seven years of negotiations and was signed in 1960 when the population of India and Pakistan combined was just a third of today’s 1.4 billion. Despite these criticisms, respondents generally rate existing water treaties between countries more positively than their respective overarching bilateral relationships, suggesting that even a sub-optimal treaty is better than none.

Part of the problem is the zero-sum way in which water relations are viewed throughout the region. Agreements imply the division of a volume of water between two countries or the provision of a minimum flow at certain times of year. This, in turn, implies that one party will be worse off than in a pre-agreement status quo. Water is highly politicized in the region, with strong links to food security and the livelihoods of the large proportion of the populations dependent on agriculture. This plays out through the various systems of democracy across South Asia, meaning that transboundary water issues are increasingly dealt with in the domain of national security. There is little perception of water as a ‘shared challenge’. Rather, sentiments towards other riparians are coloured by nationalist standpoints, focusing on past injustice or perceived hostile intentions. These factors mean that negotiations as they are currently configured stand little chance of success, enhancing distrust if they fail.

The Indus Waters Treaty is generally seen as one of the most positive aspects of the relationship between India and Pakistan, garnering support for its proven ability to resolve disputes and for its 50-year survival through political tension and war. Suggestions for its improvement chime with wider recommendations for future agreements in the region. They include revision to take into account new challenges such as the impact of climate change as well as falling groundwater levels, and to provide for engagement with stakeholders such as the river communities themselves.

Figure C: How do you rate the current water management? (%)

<table>
<thead>
<tr>
<th>Afghanistan</th>
<th>Bangladesh</th>
<th>India</th>
<th>Nepal</th>
<th>Pakistan</th>
</tr>
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<tr>
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<td>82.7</td>
<td>40.8</td>
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<td>37.4</td>
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<td>9.9</td>
<td>2.0</td>
<td>24.5</td>
<td>1.1</td>
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</tbody>
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Although most South Asians continue to live in rural areas, urbanization is an emerging cross-regional challenge. The urban population of South Asia is expected to double over the next two decades. The existing focus on water as a source of irrigation means that water management systems...
Attitudes to Water in South Asia

Executive Summary and Recommendations

are ill-placed to adapt to the changing demand patterns. The share of water consumption will shift to cities in the coming decades, sharpening the imperative of improving already inadequate urban water management.

This is not a simple story of upstream riparian hegemony versus downstream complainants. Even the most water-secure country, Nepal, suffers severe water shortages during the dry season owing to insufficient storage capacity, resulting in most water flowing to downstream countries. Midstream Afghanistan suffers from the same problem, which is blamed on conflict and deforestation. Downstream Bangladesh has more available water per person than India, Pakistan or Afghanistan but cannot store and redistribute its flood rains.

Across the region, there was near unanimous agreement among those interviewed that the current state of water management is poor. This is a serious threat because of rising demand (from both population growth and socio-economic changes) and creeping supply-side infrastructure and quality degradation as a result of pollution, under-investment and the unpredictable effects of climate change.

Price reform or privatization of water supplies elicited mixed responses. Throughout the region, the notion of water as a scarce resource - and therefore one whose use should be priced or regulated - is continually challenged by notions that water is a 'human right' or an infinite gift from God. Scaling up awareness campaigns on water usage has proved difficult across the region and in all sectors. Many civil society respondents felt that water should be conceived as a 'common resource' rather than as a commodity or economic good. In India, there is a widespread sense that the 'Western model' of water provision has failed, and support for greater community self-reliance. Nevertheless, private-sector delivery was widely welcomed, especially in India, as long as it worked – although some considered the idea that water could be supplied 24/7 as far-fetched.

Domestic water-sharing remains contentious, particularly in India and Pakistan where there are long-standing internal disputes between states and provinces. And if domestic allocations and management are so difficult, how can countries expect to resolve disputes with their neighbours? In Afghanistan, for example, many respondents questioned whether the government should be entering into negotiations on transboundary water before it has met its own water needs.

Numerous interlocutors across the region criticized their country's lack of domestic 'vision' for water. The approaches of different ministries frequently conflict – for instance, while water ministries may devise good water conservation policies, other ministries may have contradictory priorities for water use and incentives that exacerbate inefficiency. Crucially, while existing water policies are often considered good, implementation is seen as poor. These problems have been complicated by a decentralization of power. The power of regional parties has increased in India since independence, and in Pakistan too power has shifted towards the provinces. Nepal is also discussing implementing a federal system.

This lack of vision and coordination affects transboundary water relations. For example, the state government of West Bengal was able to scupper an agreement between India and Bangladesh over the Teesta river. Moreover, in the absence of any sense of how countries aim to utilize their water, international negotiations are framed in abstract terms without a sense of why each country requires a particular volume of water.

Data challenges affect domestic water management and exacerbate transboundary water concerns. Across South Asia, concerns were expressed about poor-quality, unreliable data and declining standards of data collection. Data are often not shared between ministries, while government officials are often unaware of those collected by non-government sources. Accuracy of data, and the extent to which they are useful interpreted and disseminated, are frequently questioned. For example, India's classification of a range of data as secret – notably information pertaining to rivers that flow into downstream neighbours – does little to build trust. Rather, it allows critics, particularly in Pakistan, to apportion blame to the Indian government for shortages or floods downstream.

If South Asia's worsening water conditions are to be addressed through cooperation rather than competition, its countries will need to adopt a new approach. The outlook on current trends suggests that local grievances over water availability and quality will spread and intensify. Unless water governance is improved with greater coordination of relevant policies in agriculture, energy and environment, localized conflicts over water usage are as likely as transboundary disputes to undermine stability.

Since the interviews were conducted, India has elected its first majority government for 30 years. The difficulty of decision-making within coalition governments was identified as an important impediment both to better local management and to transboundary water relations. In India this impediment has now been removed, presenting a window of opportunity for a new approach.

For some bilateral relationships, cooperation on water could become a source of mutual benefit and improved security. There are numerous examples of cooperation between upstream and downstream communities to create win-win solutions. In South Asia, one clear example – although not without criticism – is the arrangement
between Bhutan and India whereby India pays for hydroelectricity generated in Bhutan.

Domestic water management and transboundary water relations are inseparable parts of the same problem. In this respect, the evidence from interviews presents several potential possibilities for changing the transboundary water narrative.

Data improvement, comprehensibility and dissemination are one vital supportive endeavour. The research and interviews indicated that greater awareness within and between countries of available information would serve to ease transboundary water tensions and could facilitate improved domestic water management.

There is strong regional support for learning from best practice and for improvement and development of rainwater harvesting in both rural and urban areas. The desire for greater community participation is widespread, particularly in relation to micro-conservation techniques.

The concept of local watershed or basin-wide management, linked to issues such as conservation and environmental projection, also provides scope for cross-regional dialogue and knowledge-sharing.

In addition, cases of successful domestic water management reviewed in the report indicate that the most effective collaborative approaches focus on water usage rather than simply water supply. What are the energy service, food production, health, livelihood and socio-cultural needs and development expectations involving water in each area or country? What changes are desired or anticipated over the next 30 years that could impact on water? This thinking at the domestic level could help transform a stagnant dialogue framed in terms of insurmountable conflicts of interest into regional dialogue and cooperation initiatives based around shared challenges or even shared threats.

**Recommendations**

1. **Improve domestic water management.**
   - Poor access to water within countries raises regional tensions. Improving water management is imperative both in itself and as a means of easing these tensions.
   - Enhance coordination between relevant ministries connected to water, such as those for agriculture or mining, and ensure that policy on water is coordinated with agriculture and energy policies.
   - Create domestic ‘visions’ for water usage to enable transboundary negotiations to be driven by demand as well as supply.

2. **Enhance understanding of the nexus between food, energy and water to enable pricing of electricity, and ideally water, to better reflect social and environmental costs.**

3. **Disseminate examples of best practice to facilitate broader understanding of what can be achieved and, importantly, how it was achieved.**

4. **Shift management of water at the local level to the communities themselves. Current top-down approaches frequently fail to meet communities’ actual needs. This approach would enable a more holistic understanding of cross-regional commonalities, encouraging a focus on sustainability, as well as shared cultural and social approaches towards water.**

5. **Ensure that water-related policy documents, examples of best practice and so forth, are translated into local languages.**

2. **Enhance data collection and expand data-sharing.**
   - Establish nationally accepted standards of data measurement and, in time, regionally accepted standards.
   - Improve the availability of consumption data to help guide policy-making.
   - Enhance data-sharing, in particular in relation to floods and droughts. Streamline processes by which flood and drought data are cascaded to relevant local agencies.
   - Publicize existing data-sharing agreements.

3. **Ease demand for water.**
   - Incentivize the cultivation of less water-intensive crops.
   - Encourage less water-intensive methods of irrigation through pricing and/or through the promotion of cost-efficient technologies.

4. **Boost supply of water.**
   - Where appropriate, focus on local rainwater-harvesting projects.

5. **Connect cross-country discussions about water to the uses of water, rather than to its abstract supply.**
   - To build understanding of shared challenges, as well as opportunities, connect debates about water to issues such as climate change; disasters (and disaster warning and preparedness); energy; environment and ecology; fisheries; food, agriculture and livelihoods; groundwater management; health,
sanitation and water-borne diseases; navigation; tourism; urbanization.

- Enhance and expand existing cross-regional dialogues both on local approaches (such as watershed management) and on macro-level basin-wide management.

- Expand dialogues beyond technical experts. At present technical dialogues fail to garner political buy-in. Media, civil society, government and politicians need to be engaged in water challenges.

6. Revisit existing treaties and agreements or focus parallel discussions on emerging issues.

- Ensure treaties address technological advances, environmental factors and climate change.

- Ensure new treaties have built-in third party or mutually agreed arbitration clauses.

7. Enhance engagement between decision-makers at state/provincial level in India and Pakistan with their counterparts in neighbouring riparian states.

8. Build the capacity of water policy-makers and international negotiators in Afghanistan, Nepal and, to a lesser extent, Bangladesh, and at state/provincial level in India and Pakistan.
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