



A guide to preparing river basin plans

Alluvium International has been engaged through the Australian Water Partnership to consult with the national and state level water managers in India to develop a draft User Guide for the development of River Basin Plans.

India is a country facing considerable challenges in water policy, planning and management. With a population of 1.25 Billion, more than 15% of the world's population, it has only 4% of the world's freshwater resources.

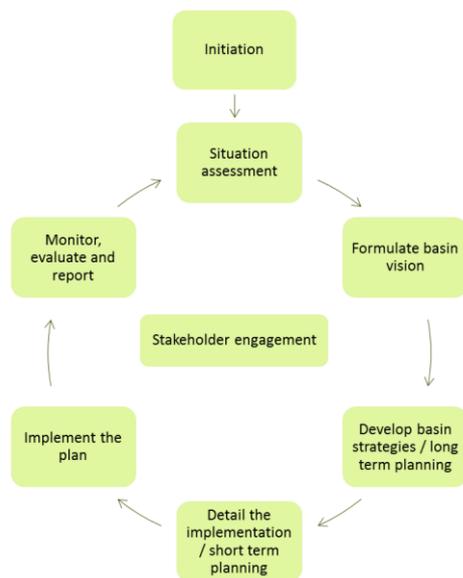
The third Phase of the Government of India (GOI) National Hydrology Project (NHP III) aims to address water management challenges in India by strengthening the institutions and water information required for integrated water resources management. The NHP III will involve all states and union territories of India in four components aimed at enabling improved decision making for water resources planning and operations: A) Water Resources Data Acquisition System; B) Water Resources Information System; C) Water Resources Operations and Planning; and d) Institutional Capacity Enhancement.

Through these components the NHP III aims to build both improved water information products (components A and B), as well as the institutional capacity - both technical and policy and planning capacity – of state and federal agencies to use the collected data for river basin planning (components C and D).

In support of the NHP III and on the request of the Government of India (GOI) and World Bank, the Australian Water Partnership (AWP) is drawing on the Murray Darling Basin experience to develop a User Guide for River Basin Planning and Implementation in India. Alluvium International is providing river basin modelling and water policy/regulatory expertise to the team developing the guide.

The GOI has identified that a review of river basin planning policy and regulatory frameworks in India is needed that will lead to a User Guide with recommendations on possible policy reform options, including appropriate policy frameworks and related institutional and legal mechanisms to support effective basin planning and governance. The Krishna Basin, covering areas of Maharashtra, Karnataka, Telangana and Andhra Pradesh states, has been selected for a pilot study to demonstrate how the recommended reforms can support effective river basin planning.

Figure 1. The basin planning process (compiled from Pegram et al, 2013; GWP, 2009; Cap-Net, 2005; DEHLG, 2008)



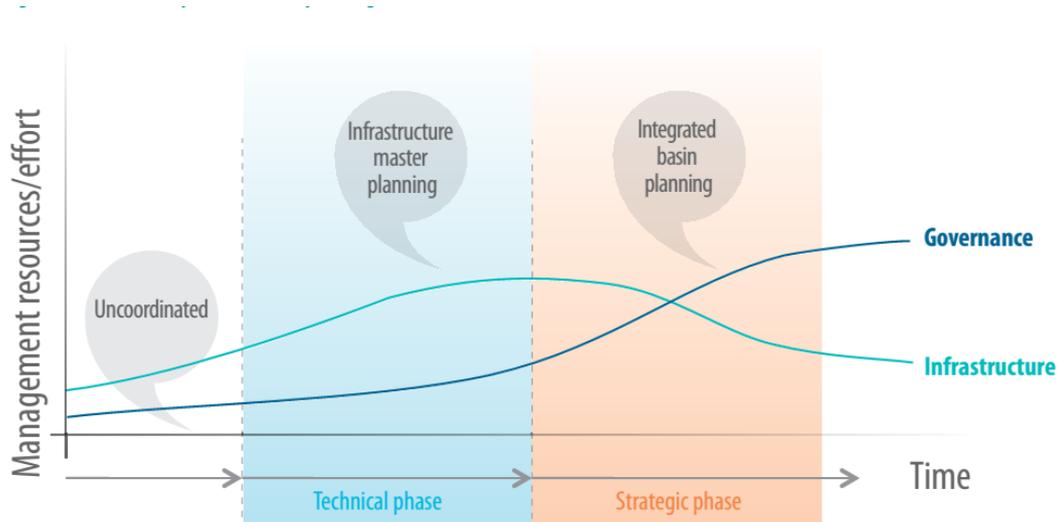
To date, the team has undertaken a review of river basin planning policy and regulatory frameworks in India. The purpose of the review was to: i) document the existing policy and regulatory framework for water management and river basin planning in India, both nationally and at the state level focussing on the riparian states of the Krishna Basin; and ii) provide a comparison of the Indian policy and regulatory context against global best practice for river basin planning and the policy framework developed for the Murray Darling Basin. Comparison of the global and Australian river basin planning experiences with the institutional and legislative framework in India provides insights into opportunities for river basin planning in India, and important aspects to take into account in a User Guide.

A key outcome of the review was establishing where India and Australia are in the historic phases of basin planning. The historic phases of river basin planning can be conceptualised as moving from *uncoordinated* through to *coordination focussed on infrastructure planning* and then to *integrated basin planning* (Figure). As basin planning moves through these phases the level of governance resources required tends to increase compared to the resources required for infrastructure.

Australia is currently in the strategic phase, where basin planning is integrated and requires a high level of resources and effort on governance. India is currently moving from the technical phase to the strategic phase, with a broad recognition of the need for integrated basin planning and the beginnings of appropriate legislative and institutional frameworks as well as management tools.

Water managers in India are aware of the need to move from a technical focus to a strategic focus with more resources for governance, and have requested support for this through the development of the User Guide for River Basin Planning.

Figure. The historic phases of basin planning (ADB, 2013)



The review also identified 13 opportunities for river basin planning under seven themes: i) Process of developing a basin plan; ii) Policy and legislation; iii) Institutional structure and capacity; iv) Management tools; v) Stakeholder engagement; vi) Economic incentives and funding; and vii) Monitoring, Evaluation and Reporting.

The team will now draw on this review and consultations with the national and state level water managers in India to develop a draft User Guide.