

DEVELOPMENT COORDINATION

A. Major Development Partners: Strategic Foci and Key Activities

1. The Asian Development Bank (ADB) has supported a range of investments in Karnataka, including water supply and sanitation. However, the proposed Karnataka Integrated and Sustainable Water Resources Management Investment Program is the first ADB investment in natural resources in the state. The World Bank has provided support for projects in the state in water resources and irrigation. The Department for International Development of the United Kingdom (DFID) has provided support for research on aquaculture but will be terminating bilateral assistance to India in 2015.

2. The Food and Agriculture Organization of the United Nations Regional Office for Asia and the Pacific (FAO-RAP) has identified Karnataka as a candidate to establish a training center of excellence on irrigation modernization, based on the Mapping System and Services for Canal Operation Techniques, also known as MASSCOTE diagnostic tools.¹ The FAO, with the Central Water Commission, proposes to implement a capacity building program to support the National Water Mission; this will complement the program's investments.

3. The Network of Asian River Basin Organizations (NARBO), the United Nations Educational, Scientific and Cultural Organization Institute for Water Education (UNESCO-IHE), and the Government of Karnataka have initiated discussions on establishing a capacity development program on integrated water resources management (IWRM) leading to professional certification in IWRM. NARBO proposes to partner with the Advanced Centre for Integrated Water Resources Management (AC-IWRM) to provide IWRM professional certification courses open to participants from Karnataka, other states of India, and other countries in the region.

4. The 2030 Water Resources Group, initiated by the World Economic Forum and headquartered at the International Finance Corporation of the World Bank Group, is collaborating with the Government of Karnataka to catalyze a transformative water reform process in the state—based on water sector analysis—to enable the state to meet its economic aspirations by 2030.

5. The Government of Karnataka has initiated collaboration with nine research centers of the Consultative Group on International Agricultural Research (CGIAR) to help the state improve agricultural support services, with a focus on management of drought impacts on farm operations.²

6. In addition to the international development partners, the Government of India is the major water sector development partner, with a number of support programs including the Accelerated Irrigation Benefit Program, the Command Area Development Program, the flood management program, and the National Water Mission. Karnataka receives grant and loan support for agreed investment programs; this has amounted to about \$10.4 billion since 1974 in

¹ This is a step-wise methodology to evaluate and analyze different components of an irrigation system and then develop a modernization plan

² The centers involved are (i) the International Crop Research Institute for Semi-Arid Tropics, (ii) the International Rice Research Institute, (iii) the International Water Management Institute, (iv) the International Livestock Research Institute, (v) the International Maize and Wheat Improvement Center, (vi) the International Food Policy Research Institute, (vii) the International Center for Agricultural Research in the Dry Areas, (viii) the World Agroforestry Centre, and (ix) the World Vegetable Center.

addition to the state budget allocation to the sector. The state of Karnataka FY2014 budget included allocations amounting to about \$2.06 billion for water sector investments and operation and maintenance costs.

Major Development Partners: Natural Resources

Development Partner	Project Name	Duration	Amount (\$ million)
World Bank	Irrigation Project - Karnataka	1978–1986	126.00
	Irrigation Project - Karnataka Tank	1981–1989	54.00
	Karnataka Community-Based Tank Management Project (Supplement)	2007–2012	64.00
	Karnataka Community-Based Tank Management Project	2002–2012	98.90
	Upper Krishna Irrigation Project (02)	1989–1997	325.00
	National Water Management Project	1987–1995	114.00
	National Hydrology Project Phase I	1995–2003	101.00
	National Hydrology Project Phase II	2004–2014	104.98
	Karnataka Watershed Development Project I	2001–2009	127.60
	Karnataka Watershed Development Project II	2012–2018	85.70

Source: World Bank. <http://www.worldbank.org/en/country/india/projects/all>

B. Institutional Arrangements and Processes for Development Coordination

7. Development coordination has been conducted through close cooperation of ADB missions with development partners, particularly the Australian Agency for International Development (AusAID) and FAO-RAP. Coordination with development partner teams working on Karnataka water sector issues is maintained through regular email and teleconference exchanges in addition to meetings to maximize the alignment and complementarity of activities in the sector.

8. The proposed program will continue to build on existing partnerships, both formal and informal, established with the CGIAR centers, eWater, FAO-RAP, NARBO, and UNESCO-IHE to ensure synergy between development partners' activities. The AC-IWRM will play a central role in the provision of policy advice and supervision of pilot application of new technologies and techniques supported by the various development partners active in Karnataka.

C. Achievements and Issues

9. During preparation of the program, ADB met with the FAO, UNESCO-IHE, NARBO, the World Bank, and the Water Resources Group to coordinate proposed activities in Karnataka. Program activities are designed to complement and build on initiatives supported by previous and ongoing projects, including utilizing hydrological observations and database systems established through the World Bank-financed National Hydrology Projects.

10. The Government of Karnataka has indicated that activities that are shown to be successful will be replicated in state-financed activities. Effective coordination of project activities supported by development partners will be essential to ensure clarity and consistency in emerging lessons with potential for wider replication. The state IWRM steering committee will coordinate the review and adoption of recommendations emerging from the program and AC-IWRM studies.

D. Summary and Recommendations

11. The Government of Karnataka is committed to improving the performance of agriculture and the management of the state's limited water resources—illustrated by the substantial

annual budget allocations to the sector. Public awareness about water resource constraints is expected to continue to increase, making it essential for development partners to coordinate project actions, in partnership with the AC-IWRM and relevant agencies.