

TECHNICAL ASSISTANCE COMPLETION REPORT

Division: EAER

TA No., Country and Name TA 7049-PRC: Implementing the National Flood Management Strategy			Amount Approved: \$500,000		
			Revised Amount: \$500,000		
Executing Agency: Ministry of Water Resources	Source of Funding: ADB TA funding program (\$200,000) and the Netherlands Trust Fund for the Water Financing Partnership Facility (\$300,000) ¹		Amount Undisbursed: \$620.70	Amount Utilized: \$499,379.30	
TA Approval Date: 20 December 2007	TA Signing Date: 10 March 2008	Fielding of First Consultant: 20 October 2008	TA Completion Date Original: 28 February 2009 Actual: 30 September 2011		
			Account Closing Date Original: 28 February 2009 Actual: 31 October 2011		
Description					
<p>To shift from dependence on structural measures for reducing flood damage to a balanced approach using both structural and nonstructural measures, the Ministry of Water Resources (MWR) supported by the Asian Development Bank's (ADB) technical assistance (TA4327),² prepared a national flood management strategy (NFMS) in 2005. TA4327 formulated the NFMS and its action plan to provide a basis for integrated flood management at the provincial level. TA4327 concluded that the traditional approach of the People's Republic of China (PRC) of using structural flood control measures is no longer practical or economically feasible and flood risk management to manage or reduce flood risk to levels regarded as acceptable should become the core of a new concept of flood management in the PRC. TA4327 was awarded for outstanding achievement under the Second TA Award Program.³ In order to follow up TA4327, MWR requested ADB for a new technical assistance, TA7049-PRC: Implementing the National Flood Management Strategy (the TA), to further develop and implement the NFMS at the provincial level focusing on a typical mountainous area with serious flash flooding and a typical floodplain with flood detention basins.</p>					
Expected Impact, Outcome and Outputs					
<p>The expected impact of the TA was to promote the sustainable economic and social development of flood-prone areas in the PRC through effective and integrated measures of flood management. The expected outcome was the implementation of the NFMS at the provincial level. The expected outputs were (i) recommendations for improving existing flood management strategies of two model provinces, (ii) development of provincial flood management action plans to implement the NFMS in the two provinces, (iii) pilot tests implementing the NFMS in the two provinces based on the provincial action plans, (iv) on-the-job capacity building through the pilot tests, and (v) dissemination of lessons learned to promote the implementation of the NFMS at the provincial level. The TA design was sound with the objectives in line with ADB's strategic objectives and ADB's water policy. The TA formulation was adequate with active stakeholder participation.</p>					
Delivery of Inputs and Conduct of Activities					
<p>Originally, the TA was to be implemented from May 2008 in Sichuan province where flash flooding is especially severe and in Hunan province where riverine flooding is the most common form of flooding. However, because of a massive earthquake that struck Sichuan province on 12 May 2008, a decision was made to replace Sichuan province with Jiangxi province which has a mountainous area where flash flooding is also severe.</p> <p>The TA was carried out by a team of consultants comprising 8.0 person-months (pm) of international and 42.0 pm of national consultants engaged by using the quality- and cost-based selection method. The inputs of international and national consultants were adjusted to 8.5 pm and 42.5 pm, respectively. The team produced all required outputs and its performance was considered excellent. In addition, an international flood management specialist (1.0 pm) was engaged on individual basis to draft a knowledge product (KP) based on lessons learned from the TA, as well as from TA4327.⁴ The performance of this consultant was considered excellent. International water resources management (0.4 pm) and drought risk management (0.4 pm) specialists were also engaged on individual basis to provide inputs to another KP⁵ on drought management. The performance of these consultants was considered satisfactory.</p> <p>To address the delay in TA commencement because of the Sichuan earthquake and prepare the KPs (see footnotes 4 and 5), the TA completion date was extended from the original completion date of 28 February 2009 to 30 September 2011. The executing agency, MWR, established a steering committee and a TA management office, provided counterpart staff, office accommodation, and logistical support, and organized training and workshops managing funds provided by ADB. The executing agency's performance was satisfactory. ADB provided guidance, fielded timely missions for the TA's inception, midterm, and final reviews and its performance is assessed as satisfactory.</p>					

Evaluation of Outputs and Achievement of Outcome

The TA produced the expected outputs and achieved the expected outcome. The final report provided all the outputs including recommendations for the two provinces on improving existing flood management strategies, on provincial flood management action plans to implement the NFMS, and on the details of the pilot tests conducted. Several prototype projects for potential future investment were also proposed for the two provinces, including development of improved flood forecasting, flood risk mapping, and flood hazard zoning; development of a computerized flood management asset database; and preparation of a flash flood risk management plan. Finally, recommendations were provided for implementing the NFMS at the provincial level, including adequate effort and resources for training and information dissemination, establishment of units at national and provincial levels to advocate the NFMS and flood risk management, collection and completion of relevant data, development and integration of flood management technology, flood hazard zoning based on flood risk mapping, integration of flood warning systems with weather forecasting, land use control in upper catchments, and reform of funding mechanisms. The recommendations were accepted and adopted by MWR and the provincial governments. Workshops were held in the two provinces and at the central level to gather information and data, obtain feedback, and disseminate TA findings. In addition, a KP on flood risk management (see footnote 4) will be published to disseminate findings of the TA as well as of TA4327.

Overall Assessment and Rating

The TA is rated as highly successful. All activities planned under the TA were fully completed with excellent performance of the team of consultants and active participation of the executing agency. The TA was highly relevant in supporting the integrated flood management approach adopted by the government and supports the PRC's Twelfth Five-Year Plan (2011-2015) to strengthen water resources management.

Major Lessons

If local governments, as implementing agencies, are intended to commit human and technical resources to a TA, it is critical that adequate consultation with them take place well in advance of TA commencement and resourcing of inputs is openly discussed.

Adequate time needs to be allowed in TA scheduling, not only for the conduct of the tasks required by a TA, but also for delays unavoidably incurred in acquiring essential data.⁶ Budget provision for data acquisition must be realistic, and take into account the high costs involved in data exchange between government agencies.⁷

Recommendations and Follow-Up Actions

It is recommended that (i) the established provincial flood management action plans be reviewed continuously by authorities in Hunan and Jiangxi provinces and be considered when updating and/or formulating future flood management strategies for these provinces, and (ii) the proposed prototype projects be reviewed and a selection be made for future investment and implementation.

ADB = Asian Development Bank, KP = knowledge product, MWR = Ministry of Water Resources, NFMS = national flood management strategy, PRC = People's Republic of China, TA = technical assistance.

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¹ Administered by the Asian Development Bank.

² ADB. 2006. *Technical Assistance to the People's Republic of China for the Flood Management Strategy Study*. Manila (TA4327-PRC).

³ This program is a priority subproject under TA7313-PRC: Facility for Policy Reform and Capacity Building III. The program selected seven TA projects from 87 advisory TA projects completed in the PRC from 2005 to 2009 for awards for outstanding achievement (1), policy support (1), institutional innovation (1), best dissemination (1), and honorable writing (3).

⁴ The tentative title is *Flood Risk Management in the People's Republic of China: Learning to Live with Flood Risk*.

⁵ This knowledge product on drought management is based on lessons learned from this TA, TA7261-PRC: Strategy for Drought Management, and TA4912-PRC: Strengthening Water Resources Management in Guiyang. The tentative title is *Drying Up – What to do about droughts in the People's Republic of China: With a case study from Guiyang Municipality, Guizhou Province*.

⁶ All spatial data except for satellite data is controlled by government agencies in the PRC. Under the TA, there were delays in receiving spatial data from government agencies since it took a long time for data exchange between different agencies, bureaucratic procedures, and security clearances.

⁷ The cost of data exchange in the PRC is high, particularly for data exchange between different government agencies. The budget allocation for data in the TA was rapidly consumed by purchase of mapping products and satellite imagery.