

NATURAL RESOURCES MANAGEMENT GROUP
FRESHWATER

Creating, accumulating and harnessing knowledge to promote pro-active water governance strategies for improved productivity and sustainability in the Asia-Pacific region

Freshwater is essential for life, with no substitute. In Asia and the Pacific, the agricultural sector consumes a huge amount of water and also homes, offices, and factories are using more water than ever. As the result, water has become scarce and polluted in the region. This crisis of freshwater is an issue that requires an integrated management approach not only for drinking water and food security needs, but also for resource sustainability and environmental protection. Based on the assets of past research, the Freshwater Group mainly focuses on groundwater resource issues that are critical in the region. Practical, sustainable and integrated forms of groundwater governance are sought through research so as to ensure sustainable water resources in the region. In addition to the research, the Freshwater Group plays key roles in regional networks on water such as the Asia-Pacific Water Knowledge Hub on Groundwater Management.



RESEARCH COMPONENTS

☑ **Study on Groundwater Governance for Sustainable Development**

• **Baseline study of groundwater use and its governance in Asia**

This study aims to identify what is really happening on groundwater in Asia and how people manage this resource, since lack of such information is one of the major barriers to promote effective and sustainable management of groundwater.

• **In-depth study on enabling environment for introduction/effective implementation of economic instruments for sustainable groundwater management.**

Economic instruments (EI) are recognised as a measure for effective and rational use of water resources but introduction and implementation of EI is often challenging for policy-makers because of various reasons such as opposition from water users, possible negative impacts on the local people and the poor. Inadequate institutional arrangements are also a barrier for implementation of EI. The study analyses pre-requisites for the application of EI to promote rational use of groundwater.

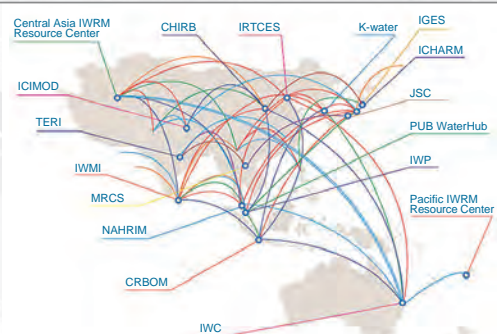
☑ **Groundwater Management KnowledgeHub Operation**

IGES was approved as the regional knowledge hub on groundwater management by the Steering Committee of the Asia-Pacific Water Forum in June 2009. To ensure the equitable and sustainable use of groundwater resources in the Asia and Pacific Region, IGES will not only conduct research to develop sustainable groundwater strategies to overcome the existing and anticipated problems but also provide necessary assistance to those who are working for groundwater management. Networking of policy-makers, professionals and other relevant stakeholders working for groundwater management in the region is another important task for IGES as the groundwater knowledge hub.

Asia-Pacific Water Forum Regional Water KnowledgeHub Network (APWF RWKH)

The network of regional water knowledge hub-organisations with different expertise of water management was officially launched in June 2008 for the Asia-Pacific Water Forum. Each hub-organisation is expected to be a centre of excellence committed to improving water security in the region by promoting knowledge sharing and championing feasible solutions for its priority water topic.

<http://www.apwf-knowledgehubs.net/>



Water Environment Partnership in Asia (WEPA)

WEPA is an initiative aiming at promoting good water environmental governance commissioned by Ministry of the Environment, Japan. Thirteen countries in Asia including Japan have joined the partnership programme and promote dialogues on critical issues for improvement of water environmental management. A database of the information on the water environmental management in WEPA partner countries was developed.



SELECTED PUBLICATIONS

Publications / Articles

- Promoting Wise Use of Water: Application of Economic Instruments. Chapter 7 in *IGES White Paper III*. (2010)
- Proceedings of WEPA First International Workshop – Coping strategies for water environmental challenges in Asia (2010)
- Groundwater and Climate Change: No Longer the Hidden Resource. Chapter 7 in *IGES White Paper II*. (2008)
- WEPA Outlook of Water Environmental Management Strategies in Asia (2008)
- Sustainable Groundwater Management in Asian Cities: A Final Report of Research on Sustainable Water Management in Asia (2007)
- International Review for Environmental Strategies (IRES): Groundwater Management and Policy: Its Future Alternatives. Volume 6 No.2 (2006)
- Sustainable Groundwater Management in Asian Cities: A Summary Report of Research on Sustainable Water Management in Asia (2006)



Presentations

- Oral Presentation in the 1st Annual Progress Review Meeting of APWF KnowledgeHubs: Business/Development Plan on Regional Water Knowledge Hub on Groundwater Management in Asia and the Pacific Region (24 June, 2009, Singapore)
- Oral Presentation: Sustainable groundwater management in Asia in 5th World Water Forum (March 2009, Istanbul, Turkey)
- Oral Presentation Proceedings in Second International Symposium on food and water sustainability in Asia: No-regret adaptation strategies to cope with potential impacts of climate change on groundwater resources of Asian cities (2008)
- Oral Presentation Proceeding: International Forum on Water Environmental Governance in Asia (2007)
- International Symposium on Community Activities for the Conservation of Water Environment – Lessons Learned from Community Activities (2006)

Policy Briefs

#004: Rationalisation of Industrial Sector Water Use is the Key to Sound Groundwater Management (2006)

FOR FURTHER INFORMATION

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