

**Project Title:** Regional and Country Scale Water Resource Assessment: Informing Investments in Future Water Supply in the Asia Pacific Region – a Decision Support Tool

**Project Contact:** Magnus Moglia

**Project Objectives:** The project developed a decision support methodology and tool for assessing the water needs of different locations to inform investments in future water supply in the Asia Pacific region.

The objectives were:

**Component 1: Developing a decision support tool to inform future investment decisions for water supplies:**

- Designing a methodology for assessing the multiple dimensions of water needs in countries and regions; as well as incorporating a range of information types.
- Developing a prototype software tool for applying and visualizing the Water Needs Index; and instructions for how to make this a full-scale knowledge sharing and assessment tool

**Component 2: Application of the methodology at a national scale for target countries; and at a sub-national scale for the Mekong River Basin and one Pacific Island State.**

Three case studies using the methodology:

- a. For 29 countries in the Asia-Pacific region
- b. For the Mekong River Basin
- c. For the islands of Kiribati

**Component 3:** to embed the methodology and decision support tool into AusAID's decision making capability. The decision support methodology was tested at the watershed scale during a workshop in Iloilo City, Philippines May 2009.

## **Project Outputs**

### **Reports:**

Alexander, K.S., Moglia, M., Austin, J. (2008) Regional and Country Scale Water Resource Assessment; Informing Investments in Future Water Supply in the Asia Pacific Region – a Decision Support Tool CSIRO: Water for a Healthy Country National Research Flagship

Moglia, M., Alexander, K.S., Cook, S., Sullivan, C., Lane, B., Lipkin, F., Burn, S., Haskard, C. (2008) Regional and Country Scale Water Resource Assessment; Informing Investments in Future Water Supply in the Asia Pacific Region – a Decision Support Tool CSIRO: Water for a Healthy Country National Research Flagship

Alexander, K.S., Miller, C., Jovanovic, T Moglia, M. (2009) CSIRO-AusAID Alliance Tigum-Aganan Watershed Management Project: Workshop Report, Iloilo City, Philippines: CSIRO: Climate Adaptation Flagship.

### **Workshops:**

CSIRO-AusAID Alliance Tigum-Aganan Watershed Management Project: Workshop, Iloilo City, Philippines 2009

**Presentations:** Several presentations to AusAID, MODSIM conference, CSIRO seminar series

### **Conference Papers:**

Alexander K.S, Moglia, M. & Burn, S. 2009. Informing future investment decisions for water and sanitation projects in the Asia Pacific by integrating statistical and qualitative information. Proceedings of the 18th World IMACS / MODSIM Congress, Cairns, Australia 13-17 July 2009.

Salas, J.C., Miller, C, Alexander, K.S., and Jovanovic, T.A 2009. A community's way of managing conflicts in the Tigum-Aganan Watershed: A Philippines case study. Proceedings of the 12th International Riversymposium, Brisbane, 21-24 September 2009

**Journal Paper:** for submission to Journal of Mixed Methods.

Alexander K.S, Moglia, M. & Burn, S. 2009. Integration of qualitative and statistical data to better inform investment strategies for water and sanitation projects in the Asia Pacific. ( In preparation for submission to *Journal of Mixed Methods Research* Sept 2009)

**Project Outcomes and Impacts:**

During the testing of the decision support tool, in country AusAID staff have been informed of the methodology and trial in Philippines. Uptake by AusAID staff will determine the ongoing usefulness and extent of capability for the tool. As yet the tool is not in use by AusAID. There is a need to give a seminar to AusAID to describe the usefulness of the tool and the additional capabilities. Although CSIRO staff have benefitted significantly from project deployment, AusAID staff are yet to benefit.