

Information about the Work Package of the Partners of the SHAKTI Project

Project Phase 1 - from 2005 to 2008

Work Package No 1	Urban Water Resources
Coordination:	AGK
Main Interactions	WP2, WP3, WP7, WP8
Objectives	<ul style="list-style-type: none"> • Identification of major pressures and drivers including environmental issues. • Project implementation plan for the following project phase
Description of Work	
<p>Task 1.1 Background study on urban water resources with special attention to groundwater related problems in the Hyderabad administrative area.</p> <p>This background study should aim at collecting the necessary information for an environmental risk assessment which helps to quantify both the risks exerted from the urban community to the environment as well as the risks arising for the urban community from a qualitative deterioration of the water resources. A holistic urban water balance model will be explored and information gaps will be identified. The project will screen for all problems related to urban water resources in the overview background study but focus on groundwater related problems and the corresponding aquifer systems which are central to long-term sustainability. Issues to be addressed with special attention include:</p> <ul style="list-style-type: none"> - Usage patterns of natural urban water resources (surface water & groundwater tapping by private and unofficial water supply wells) · - Chemical and microbiological quality of urban water resources.· - Sources of water contamination (industrial sites, spillages, waste dumps, wastewater systems)· - Available computer models for the description of water quantity and quality.· - Relevance of groundwater and small wells to the urban and peri-urban poor.· - Legislation and current water conservation strategies. <p>Task 1.2 Report on alternative water management strategies available for Hyderabad.</p> <p>Following the identification of the key problems and drivers in Task 6.4.1, alternative water management practices with effects on groundwater resources will be preliminary assessed for their applicability to Hyderabad. The implementation of computer models for scenario analysis of urban water systems and their impact on the Hyderabad water system will be explored. A non-exclusive list of examples for different management options includes aquifer storage & recovery, artificial recharge, decentralized infiltration, vulnerability mapping for improved groundwater protection areas and changes in legislation. The report will link to the outcomes of the work package on sanitation and sewer systems.</p> <p>Task 1.3. Implementation plan for research & demonstration activities in the second project stage.</p> <p>Based on the problems identified in Task 1.1 and the inventory of possible solutions generated in Task 1.2, a implementation plan for the next project phase will be elaborated. Direct links to other implementation plans (funded by either urban, national or international sources) will be identified, discussed with the local stakeholders and harmonized with the SHAKTI-plan.</p> <p>Task 1.4. Input for WP 7 Monitoring & Evaluation</p> <p>Identification of relevant data for long-term groundwater monitoring and defining a set of indicators (economical, ecological and social) for monitoring and evaluation of the implementation projects.</p>	
Deliverables	<ul style="list-style-type: none"> • Background Study on urban water resources & related problems in the Hyderabad administrative area. • Report on alternative groundwater management strategies available for Hyderabad. • Implementation plan for research & demonstration activities in the second project stage. • Set of sustainable indicators and basic data for monitoring process