

Rural water supply and sanitation

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- WRC foray into CWSS area early 90"s
- Many projects initiated aimed at promoting the concepts of community based approaches and introducing appropriate WSS technologies
- Strategic interventions include seminars and workshops
- Studies undertaken to fill the gap in data and knowledge
- Impact achieved – information and knowledge used into formulation of the RDP Water and Sanitation strategy and the White Paper on WSS



- Over short space of time WSS became one of the important activity areas in the WRC
- WSS addressed across WRC portfolios
- Projects completed equals +/- 140



- Research addresses:
 - Technical aspects
 - Institutional aspects
 - Water Quality issues
 - Health and hygiene issues
 - Community participation and management
 - Monitoring and evaluation
 - Water resource and availability



Achievements

- Fog water collection
- Handpumps
- Decision support systems for the development of rural water supply schemes. The DBSA and DWAF (through a NORAD funded programme on groundwater supply and sanitation) have taken ownership of this system.
- Low-cost air-lift groundwater pump developed for use in rural settlements
- The gender dimension of the water policy and its impact on water and sanitation provision and management
- Training guidelines for participatory water resource management at catchment management area scales
- Management guidelines for water services provision
- SDSS – Sanitation technology selection support tool



Current initiatives

- WSS addressed in KSA on Water Use and Waste Management
 - KSA focuses mainly on the domestic, industrial and mining water sectors.
- Two main thrusts or areas cover water and sanitation issues, these being:
 - Thrust 1: Water Services - Institutional and Management Issues
 - Thrust 2: Water Supply and Treatment Technology



Focus areas

- Cost-recovery in water service
- Institutional and management issues – water services
- Innovative management arrangements - rural water supply
- Rural sanitation and hygiene education
- Peri-urban sanitation research
- Water treatment for rural communities



Focus area

- Groundwater Programme
 - Most rural communities in South Africa depend on groundwater resources for their domestic water use needs.
 - A research programme focuses on better understanding of groundwater resources in fractured rock aquifers, as 90% of aquifers found occurs in these domains.



Future Challenges

- Sustaining WSS services delivery and implementation
- Strengthening local capacity, O&M
- Measuring improvement in quality of life
- Meeting expectations for higher levels of service
- Infrastructure management
- Maintaining community involvement
- Improving technical aspects
- Developing new technical solutions
- Strengthening institutional capacity

