SASOL and SABI's Upper Vaal initiative takes off

Sasol, in partnership with SABI (South African Irrigation Institute) held two Information Days on Irrigation Management in May in Villiers and Danielsrus in recognition of the escalating risk posed by water issues in the Upper Vaal catchment. The information days, attended by farmers and other interested parties, focussed primarily on water use efficiency in irrigation. The talks were presented by subject matter specialists and provided both SASOL and SABI with more insight into the current situation and important issues in the area.

The Upper Vaal Catchment is a critical arena of water use in South Africa for industrial and agricultural use - as well as being an important waterway for transfers from the Lesotho Water Highlands to meet the water requirements of Gauteng.

This initiative was a demonstration of Sasol's commitment to increase their involvement with water management in the catchment area. It was also a first step towards engaging farmers in the area to start a process of multi-sector collaboration in the Upper Vaal Catchment, in order to improve water use efficiency. The engagement also created a solid foundation to build future relationships on.

Sasol New Energy's manager for sustainable water Andries Meyer says: "We found the information days and interaction with the irrigation farming communities and other stakeholders a very valuable learning experience and good preparation for future collaboration within this important water-use sector."

The topics discussed at the information days included soil fertility and water use interactions; irrigation system management and irrigation scheduling. During discussions, the following points of interest were raised and identified as requiring further investigation:

- Accessing weather data and lack of weather stations in the area
- Pollution of river water (biological contaminants specifically)
- Applying nitrogen under unpredictable and varying rainfall situations
- Sampling, analysis and interpretation of nitrogen content in soils
- Using SAPWAT and BEWAB to plan irrigation scheduling
- The economical and other advantages of scheduling services
- Irrigation scheduling of centre pivots on non-uniform soils
- Remote monitoring and control of centre pivots using cell phone technology
- The use of flow meters to monitor lawful water use
- Selection of pumps and motors for optimal energy efficiency

Future initiatives such as short courses and presentations will be conducted in conjunction with Sasol to continue and increase the awareness of efficient water use in the agricultural sector, and to practically address the issues raised during the information events. "What is important, however, is to undertake initiatives of which the impact can be measured and that will make a real difference to the water situation in the catchment," says SABI Technical Executive Officer Isobel van der Stoep.