**Integration of earth observation data in hydrological models**

When applying hydrological models in Third World countries for water resources assessments the data basis is often limited and insufficient for making reliable predictions. Earth Observation (EO) data may in such cases supplement the missing information or may even provide better estimates of the regional variation of certain variables than traditional point measurements. Most hydrological models are not capable of accommodating EO data and one of the objectives of the project is to make such modifications to a specific model that it can utilize this information. The modified model will be tested on the Senegal River basin in West Africa. Specifically the study will investigate to what extent use of EO data improves the performance of the model as compared to using conventional data only.

**Streamflow and recharge generating processes in a glacial till catchment**

Glacial till covers large areas of the eastern part of Denmark. Even though this type of geological deposits is of little significance from a groundwater resources point of view it nevertheless has a major impact on the recharge to the primary aquifer systems and on streamflow generation. Observations of the spatial and temporal variations of hydraulic head of moraine till have not been used in the past for calibration of hydrological models. One of the objectives of the project is to examine whether this type of data is of importance for improving model predictions of recharge and streamflow. Intensive field investigations carried out in a small catchment will provide the data base for testing a hydrological model. Specifically the impact of subsurface drainage on recharge and streamflow generating processes will be studied.

**Land use and runoff generation in SW Tanzania**

Since 1993 a monitoring programme has been carried out in three small catchments with different land use practices (one forested and two cultivated - with and without soil conservation measures) in the south-western Tanzania. The aim of the
The project is, through theoretical considerations and with at least three years of field data, to assess the impact on the water balance and the runoff generation of the land use practice in the three monitored catchments. The project is carried out in collaboration with the Danida-financed Iringa Soil and Water Conservation Project and the Regional Hydrologist's Office in Iringa, who has carried out a major part of the data collection. So far the data collection has been running smoothly, and it is aimed at continuing the monitoring until 1999.

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Number of participants: 2
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Financing sources
Source: Internal funding (public)
Name of research programme: DTU-stipendium
Project: PhD