

Water management

Partner organisation	SASOL FOUNDATION
Country	KENYA
Fieldwork period/year	2012
Disciplines	Water management
Title of the assignment	Survey & mapping of the rivers and sand dam in Kitui district.
Area of work, region, housing, accommodation, transport	Students will be working in Kitui district inclusive the newly created districts. Accommodation in Kitui town and its environs. Transport by public service vehicles (matatus) or by taxi where possible organised by SASOL.
Organisation(s) (NGO, training education institute, community)	SASOL and kitui community
Context, situation, problem(s) (regarding sector program)	For the last 15 years, SASOL has built over 700 sand storage dams in Kitui district. These sand dams has not being mapped keenly hence there is need to have a compiled data base for all the streams which SASOL has being building sand dams. This information will help SASOL to come-up with a more organized album for the said rivers and easy update of future stream/channel and dams built.
Objectives (project and program level)	<ol style="list-style-type: none">1. To come up with streams and sand dams data base2. Evaluation of existing sand dams3. Survey and mapping of streams and rivers as a practical experience for water management students.
Brief project description including major activities	Mapping of the rivers entails coming up with names of the streams, their location in terms of catchment grouped, their geographical positioning systems and their current status. Database is a collection of information

that is organized so that it can easily be accessed, managed, and updated.

Activities under objective 1

1. Mapping of all rivers within Kitui district in which SASOL has built sand dams
2. Gather all the historic information for the streams in terms of hydrology and indicate their present state.
3. Indicate all channels noting their age and give their possible causes of emanation i.e. whether anthropogenic or natural.
4. Group all the streams as per their catchment divide.
5. Note all impacts of the dams on the surveyed streams; liase with residents.
6. Produce layout plan of all the streams / channels surveyed.

Activities under objective 2

1. Evaluate status of entire sand dam in terms of structural & hydraulic conditions.
2. Investigate the conditions & composition of reservoir
3. Investigate on well positioning, their status and performance.
4. Give recommendation on optimal well positioning based on their yield.
5. Reporting

Activities under objective 3

1. Guidance, supervision and discussions with technical supervisors
2. Involvement and discussions at all steps and levels by both Dutch and Kenyan students for exchange of knowledge
3. Participation in multicultural events
4. Reporting
1. Plan layout produced for the streams mapped/surveyed.

Expected results (project and program level)

Project phasing

Level Dutch and Kenyan students/graduates
Supervision and guidance (name(s), function)

2. Students should have the ability to communicate and relate across cultures
3. Exchange of knowledge between Dutch and Kenya students and also between all the students and the community.
4. Give recommendations for the next team
5. A draft report.

First week – Orientation

In between weeks – Project activities

Last two weeks – Report writing

University and Higher Education – graduates or undergraduates

Evaluation and progress meetings done after every two weeks by SASOL staff.