

**SASOL**

**EDUKANS**

**SASOL/EX-CHANGE PROGRAM**

**LOGFRAME 2008-2010.**

**JULY 2007**

## **INTRODUCTION**

Since 2002 SASOL is involved in a partnership with a Dutch NGO Ex-change The profit of learning , in order to realise the construction of sand dams and related capacity building in the Kitui district. Since January 1<sup>st</sup> 2007 Ex-change is a program of Edukans Foundation The Netherlands.

Ex-change The profit of learning realises her goals by organizing and facilitating practical placements for teams of Dutch students and schools from secondary vocational level up to university level in all relevant disciplines.

The co-operation between SASOL and Ex-change has resulted in a first pilot project of building a sand dam in the Kitui district. As a result of this pilot project and the inventory of the needs in the Kitui district 5 follow-up projects were realised in 2003. For the year 2004 Ex-change executed about 10 projects in cooperation with SASOL.

Related to the strategic view of SASOL and the circumstances that the co-operation with Ex-change outgrows the stage of pilot projects made SASOL and Ex-change conclude that a programme log-frame should be developed.

This was done in June 2004.

The log-frame was developed for the period 2005-2010.

February 2007 the management staff of Sasol and the manager of Ex-change evaluated the projects they were involved in.

Simultaneously the log-frame was evaluated and readjusted for the years 2008 up to and including 2010.

The existing subjects of the log-frame and the validity were discussed based upon the acquired knowledge and experiences so far.

The result of this exercise is an updated log-frame.

In July 2007 Sasol and Ex-change passed through the subjects again in order to plan the activities for the year 2008 up to and including 2010. The feasibilities of the different activities of the log-frame have been discussed. As a result some corrections were made compared to the log-frame of February 2007.

Now, as the program of Sasol/ Ex-change has become sustainable, more emphasize has been laid on education as part of the program, in particular bringing ICT in schools, school improvement programs and vocational education and training.

The part of the previous log-frame 2005-2010 for the period 2008-2010 expires.

Since January 1<sup>st</sup> 2007 Ex-change merged with Edukans Foundation in The Netherlands, specialised in educational projects in developing countries under which Kenya.

From January 1<sup>st</sup> 2007 Ex-change acts as a program of Edukans.

## **PROGRAM DISCRIPTION**

### **1. Program duration**

The chosen program period is from 2008 up to and including 2010. This period gives SASOL the opportunity of further expansion in capacity building. It gives Ex-change the opportunity of consolidating and expanding the program in cooperation with SASOL.

### **2. The target population**

The program log-frame divides the Kitui district in two regions.

- (a) Kitui North. This region includes Kitui Centre (KC) and Yatta Plateau.
- (b) Kitui South, including Mutomo district. The South region, divided in the so called Near South (NS) and the Extreme South (ES) where the construction of sand dams already started.

The population in Kitui North: number of people 420,000, number of households 80,200

The population in Kitui South: number of people 140,000, number of households 25,400

### **3. The program procedure.**

Sasol and Ex-change make an agreement of the program, based on the log-frame.

Sasol makes a description of a project case related to the issues of the log-frame and sends the project case to Ex-change. The description is made in accordance with the existing (and eventually adjusted) format.

Based on the project case and format student teams will be selected by Ex-change.

The students make a proposal in accordance with the proposal format. The proposal is a result of the demands of the educational institutes, Ex-change and Sasol.

The proposal is checked and sent by Ex-change to Sasol and will also be checked by Sasol.-

After the students arrive in Kenya they make a work plan in co-operation with Sasol.

Students make a progress report halfway of their 3 months stay in Kenya and send it to Ex-change.

A draft of the final report is made by the students before they return to the Netherlands and will be evaluated by Sasol.

The final report is completed ultimately 6 weeks after finishing the field work in Kenya and send to Ex-change, the educational institutes and Sasol.

### **4. The composition of the log-frame**

The co-operation of SASOL with Ex-change covers two main subjects.

- (a) Water supply
- (b) Internal Sasol Capacity Building

**(a) Water Supply**

Water supply is sub divide in:-

- Construction of sand storage dams
- Water management
- Water quality
- Extraction and distribution.

**(b) Internal Sasol Capacity Building, sub-divided in:**

- Small business development/trade and marketing
- ICT
- Energy
- Hygiene, Sanitation, Nutrition
- Vocational Education and Training
- Educational and Social Infrastructure

Compared with the 2005-2010 version of the log-frame the following subjects are added: Small Business Development, Vocational Education and Training and Educational and Social Infrastructure.

Compared with the version of February 2007 water management is assigned.

The subject food production has been cancelled. Agriculture is a very wide sector. The scale of the Sasol/Ex-change program in this sector is too small to be successful. Besides the Ministry of Agriculture has set up programs for farmers and started training on a larger scale.

However if there is a specific demand that attunes the Sasol/Ex-change program, this subject remains possible as a placement project.

The subjects trade and marketing and small business development are connected to one subject because the subjects are in line.

## **CONSIDERATIONS AND DECISIONS**

Sasol and Ex-change will evaluate the program and projects two times a year. This will be an internal evaluation.

An external evaluation will be done at the end of the year 2010.

Input for this external evaluation is also the final reports of the different projects.

Dams, funded by Ex-change and constructed together with students will all be situated in Kitui South.

Kitui Polytechnic is involved in the construction of (rope) pumps. With regards to these pumps constructing materials, collected by students in The Netherlands, had been handed over to the polytechnics.

To make relations clear when it comes to ownership of materials and equipment respectively the following decisions are made:

Students only have a direct relation with Ex-change. Their relation with SASOL is indirect via Ex-change.

Ex-change has a direct relation with SASOL.

SASOL has direct relations with communities, polytechnics and possible other partners.

These relations of Ex-change to them are also indirect via SASOL.

This means that materials and equipment, collected by students will be handed over to Ex-change. Ex-change will hand over materials and equipment, collected by Ex-change and the students, to SASOL.

SASOL decides which materials and equipment, at what time and under which conditions will be handed over to other participants.

**STUDENTS CAN NOT HANDOVER MATERIALS/EQUIPMENT OTHER THAN TO EX-CHANGE.**

SASOL serves as an Information and Communication Centre (ICC), related to SASOL's strategy in capacity building of communities in the Kitui North and South. Input is collected information, the output can be processed or unprocessed data.

Within the scope of extraction and distribution cooperation with the Kitui Polytechnics, related to the construction of (rope) pumps, already takes place.

Contrary to the decision made in 2004 not to enter a permanent relation with a Polytechnic, a relation will be entered with Mulango Polytechnic in Kitui Centre and Kyatune Polytechnic in Kitui South.

All relevant subjects of the log-frame can be performed in co-operation with Primary and Secondary Schools.

Capacity building will generate related activities and small businesses will come into existence.

Stimulating and development of small enterprises is a strategic issue of the log-frame contrary to the 2004 version.

Training is part of most subjects of the log-frame.

Infrastructure is seen as an important issue in increasing educational and social standards. The Ex-change Sasol program restricts infrastructure to physical infrastructure.

Dissemination of best practices is obvious for all subjects of the log-frame.

**Appendix A: Shows the complete log-frame.**

## CLARIFYING TEXT AT THE LOG-FRAME SUBJECTS.

### **(1a) Sand dams.**

Numbers of sand dams build by Sasol

	South	Yatta	
2008	10	50	
2009	10	50	
2010	10	50	
financed by Ex-change			student teams
2008	10		6
2009	10		6
2010	10		6

Student teams are related to the construction of sand dams, not to the funding.

### **(1b) Water management.**

The availability of (sustainable water has an environmental, social and economic impact and causes ecological transformations.

- Case studies should be done by students of higher level for a catchment of approximately 10 sand storage dams.
- The case study should include how water changes the ecological circumstances and how to improve sustainability of water supply by interventions.
- Also how to design the best utility and use of water by the households.

### **(2) Water quality.**

- The standard of water quality of the WHO is the achievable standard.
- To achieve a sufficient view on the water quality sampling should take place four times a year during a period of at least five years.
- Sampling should take place in the periods February, April-May, August and October-November.
- Sampling and analysing in the periods April-May and October-November can be done by student teams. It should be done by students and/or SASOL all over the year.
- Testing should also take place during the dry season and validation during the wet season.
- Samples, taken in coolers because of the distance, have to be recalculated.
- De-central labs are not an option because of the costs.
- Teaching the communities about contamination and purification is part of Sasol.
- A case study of a catchment near Kitui town should be done during a period of three years all over the year. The purpose is to characterize the water in terms of bacterial pollution.

### **(3) Extraction and distribution.**

- Extraction is defined as: getting water upwards.
- Distribution is defined as: how to get water at the wanted destination.

- The so called Kawongo pump, a well pump, will be tested till end 2008. By positive results it will be locally produced.
- The tredle pump, an irrigation pump, will be tested and if necessary according to the test results, modified.
- Testing takes place on the following subjects:
  - Construction
  - Maintenance
  - Prototyping
  - Economic exploitation
- In 2008 will be decided, given the test results, which pumps, where and which number of pumps will be produced and placed.
- The involvement of Polytechnics in Kitui District in constructing pumps will be continued.
- Distribution systems will be developed, tested and implemented by irrigation engineers, starting in 2008.

**(4) Small business development/Trade and marketing.**

- Activities are directed at production as well as trading enterprises.
- 2 so called ICC's (Information and Communication Centres), realised in 2010 at St Lukes and Sombe Secondary school for Girls, should support communities by opening up new business as well as marketing opportunities. (See also ICT).
- Students will collect relevant data as input for the ICC's
- SASOL considers trade and marketing groups as functional groups of different types cultivating the same products. The groups are not seen as co-operations.
- Marketing data of Kitui Central (wet area) is already available. The collected data of the South (arid area) should be based on the method of the centre but can not be copied.
- Collecting data in the Extreme South will be continued as a baseline survey.
- Sasol has the knowledge to inform and train communities.
- Desired are student teams with a background of crops as well as livestock.

**(5) ICT**

The Information and Communication Centre: (ICC)

The Information Hub at Sasol as already installed will be transferred in a so called Information and Communication Centre.

It contents a relevant library, knowledge base, relevant mapping and information of the different strategic issues as mentioned in this log-frame.

Sasol, students, Ex-change and communities will have access to the ICC

So called sub-ICC's can be arranged in schools as well as in Community Centres.

In 2007 12 secondary schools and one primary school are already equipped with computers.

The following levels of equipment are distinguished:

Level 0           no computers

Level 1           5 computers



Level 2	10 computers
Level 3	15 computers
Level 4	20 computers

The school program for 2008-2010 includes only secondary schools and polytechnics.

- 2 secondary schools will be upgraded from level 1-2 in 2007 to an ICC in 2010.
  - In 2008 from level 1-2 to level 3
  - In 2009 from level 3 to level 4
  - In 2010 from level 4 to ICC

The intended schools are St Lukes secondary school (Yatta) and A.I.C Sombe Girls Secondary School (Zombe).

July 2007 the intention of upgrading both schools to an ICC is discussed with the board and management of the schools as part of this log-frame. Both schools will produce a discussion paper, not later than October 15 2007, in which they will describe their view what it means to be an ICC, as part of the Sasol/Ex-change program, and how to function in relation with the communities. The perception and ideas of both schools to develop into an ICC in 2010 will be discussed at the end of October/early November 2007, so a plan of approach can be made in 2008.

- 2 secondary schools will be upgraded to level 4 in 2010 and should become an ICC in 2011.
  - In 2008 stay on level 1-2
  - In 2009 from level 1-2 to level 3
  - In 2010 from level 3 to level 4

The intended schools are Ikutha and Jondoni secondary schools.

- 6 secondary schools will be upgraded to level 1 in 2010.
  - In 2008 3 schools from level 0 to level 1
  - In 2009 3 schools from level 0 to level 1
  -

Sasol has developed criteria for ranking and selection of the schools.

In 2010 an overall evaluation will take place.

Schools which will be upgraded to an ICC have to provide an enabling environment in terms of

- Management
- Administration
- Knowledge
- Facilities
- Power

- ICT student teams are defined as students with access to hard- and software.

- Installing computers will be done mostly by students of secondary vocational level.
- Students in system engineering and programming are used for the hub function.
- Input and processing of collected data by specialized teams, e.g. food production, marketing, belongs to the tasks of the specialists.
- It is desirable that ICT students are available at the time the specialized students are in Kitui.

## **(6) Energy.**

Because of national laws and required qualifications related to design and installing electrical equipment and installations, electrical engineering is no longer part of the log-frame.

Also techniques like gas fitting are not part of the program.

In case of complete systems (like solar systems) installation is done by the supplier.

Sasol's main focus is on energy saving systems like biomass.

The so called "jiko" as an energy saving system will be continued and provided in the households. Because of the amount of work of installing a jiko student teams are not justified.

- The focus of student teams is how to provide biomass.
- Wood is part of the energy need. Creating a "tree culture" is part of the capacity building.

## **(7) Hygiene, sanitation, nutrition.**

- Collecting data on hygiene, sanitation and nutrition should be done by student teams, which will be led by Kenyan students. This is because Kenyan students have a better approach to the local people.
- The collected data about nutrition, both in the Extreme South and Yatta Plateau as well as in the Near South, should be transposed in to training materials by SASOL.
- Students can participate in development of training material.
- SASOL will train representatives of communities, elected by the communities. The trained representatives will train the people of the communities.
- Student teams will not be involved in the activities of health care institutions.
- In 2008 2 teams should collect relevant data.
- In 2009 validation on training materials should take place. Student teams of higher level in health care as well as lab techniques are required.

## **(8) Vocational Education and Training.**

- Building relationship with 2 polytechnics, Mulango in Kitui Central (near Kitui town) and Kyatune in Kitui South.

- Vocational facilities will be upgraded in terms of accommodation, educational materials and training, including ICT.
- Communities should be involved in activities at the polytechnics.
- Polytechnics must become Centres of Excellence (Centres of Knowledge and skills) for and within the communities.

In July 2007, as an introduction to this log-frame, a discussion with Mulango Polytechnic about the idea to be upgraded to a Centre of Excellence for and within the communities, according to the Sasol/Ex-change program, took place between board and management of the school, Sasol and Ex-change.

The school joined and supported the idea.

Mulango Polytechnic will produce a discussion paper, in which their view will be described what it means to be a Centre of Excellence according to the Sasol/Ex-change program and their function within the community not later than October 15 2007 and send it to Sasol/Ex-change. At the end of October/early November 2007 school's perception what a Centre of Excellence should be will be discussed in view of this discussion paper.

A plan of approach and/or a possible feasibility study should be made in 2008.

At Kyatune Polytechnic a similar discussion took place.

Kyatune Polytechnic is chosen by the Ministry of Youth Affairs as one of the 17 polytechnics in Kenya to become a Centre of Excellence. However the time schedule is not set, although the construction of a new building for practical training has started.

The consequences of being one of the 17 polytechnics were part of the discussion. Withdrawing Kyatune Polytechnic from the Sasol/Ex-change program because of this governmental is not an option.

Kyatune Polytechnic will also produce a discussion paper, like Mulango Polytechnic, with their perception of being a Centre of Excellence according the discussed Sasol/Ex-change program.

The school will send this paper to Sasol/Ex-change not later than October 15 2007 and it will be discussed at the end of October/early November 2007 so a plan of approach and/or a feasibility study can be made in 2008.

## **(9) Physical Infrastructure**

Physical infrastructure as part of the Sasol/Ex-change program is directed to:

- Multi Purpose Community Building (MPCB).
- School Improvement Program.

A Multi Purpose Community Building is a centre to enable communities to undertake various activities in their area geared towards improving their living standards.

The centre will house among other things offices, meeting hall, veterinary shop, and animal feed store.

Schools, already involved in the Sasol/Ex-change program will participate in the school improvement program.

In 2008: realisation of one MPCB  
one school improved  
In 2009: realisation of one MPCB  
one school improved  
In 2010: realisation of one MPCB  
one school improved.

- Construction of public roads is excluded from the program
- Collecting data for design and physical use is part of the program.
- Construction innovation and techniques should be developed.
- 2 teams a year are required, one for development and design, two for realisation.

### **Experience the Profit of Learning Awareness of the Kitui Exposition**

In the first draft of the log-frame in 2004 tourism as a subject of the Sasol/Ex-change program was brought up.

Because of the rather early phase of structuring the Sasol/Ex-change program tourism as a subject was cancelled.

Now, as the program shows sustainability, time has come to look at the feasibility of developing a program for tourism.

This program should be intended for people who are interested in the kind of development work performed in the Sasol/Ex-change program.

Possible interested parties are:

- Students
- Sponsors
- Teachers
- Family and friends of students

The first step is conceptualisation of the idea. This should be done in September 2007.

In 2008 a student team should do market research and should make a feasibility study.

If the results are positive the organizational set up can be made early in 2009 so the first tourists can arrive May-June 2009.