Revised Second Kitui Sand Dam Project (CFGB Project A036)
Report of Results from around 1 November 2002 until 30 November 2003

Introduction

Ukambani or Kambaland, densely populated by the Wakamba people and consisting of four Districts – Machakos, Makueni, Kitui and Mwingi – ESE of Nairobi in Kenya traditionally has been quite treeless, hilly, gullied, semi arid, agricultural (as opposed to pastoralist) area which often has suffered from famine. Fortunately, much of the parent material and soils of the area are quite sandy such that any heavy rains result in sand saturated with water being deposited in some waterways. However, several months after heavy rains, people must dig dangerously deep (sink holes) in order to obtain water for people, animals and irrigation and many rivers are so steep that little or no sand remains after the rains, such that people and animals often must travel 15 to 20 kilometers for water. But, the construction of cement and stone barrages (sand dams) at 0.5 – to 1 kilometer intervals in a river bed results in the collection of sufficient sand and water in most rivers such that water is available at shallow depths year round.

The NGO entitled Sahelian Solution Foundation Kenya (SASOL) with financing from many donors such as DFID, EU, SIDA, World Neighbours (and CFGB) began in 1994 catalyzing the local communities (one community unit around each sand dam) to work together in constructing such sand dams in the central portion of the Kitui District on the eastern side of Ukambani. To date, SASOL has catalyzed the construction by local communities of 400 sand dams. The construction of such sand dams along with the associated installation of terraces adjacent to the river valleys has resulted in much of central Kitui district being transformed into "oases" surrounded by a much more barren landscape.

Over a two-year period beginning in early 1999 in what we shall now call "The First Kitui Sand Dam Project", CFGB financed ($50,000 US) the construction of 13 sand dams in central part Kitui District on the Kiindu River just south of Kitui Town. The dramatic increase in the economic level of the Wakamba people located in the vicinity of SASOL's sand dams resulted in CFGB funding what we will now call "The Second Kitui Sand Dam Project" (formerly named "The Nthongoni Sand Dam Project") in Nthongoni Location of Yatta Division over 60 kilometres SW of Kitui town. In October 2002 CFGB sent around $37,500 US of a proposed total of $50,000 US to construct 16 sand dams and associated shallow wells.

Several months ago we were informed that there was an additional $25,000 US from a private donation directly through MCC so that SASOL can now construct an additional nine sand dams and associated shallow wells in Nthongoni Location. This "Revised Second Kitui Sand Dam Project" will involve the construction of 25 sand dams instead of the original 16 and associated shallow wells for 14,750 beneficiaries instead of the original 11,500. We are now assuming that the resulting Revised Second Kitui Sand Dam Project (still CFGB Project A036) with total funding of $75,000 is to be handled as if it were a CFGB project. After the project is half completed using the first about $37,500 (about half of the total $75,000), additional funds up to a total $66,500 ($75,000

minus 10% of $75,000) will be released upon submission of receipts for the about $37,500. The project likely will be about one half completed by the end of 2003. Since it will take well into January to assemble the additional receipts, MCC Kenya likely will "borrow from itself" sufficient funding to keep the project going.

The purpose/ goal (impact), objectives (outcomes) as well as outputs are not given clearly in the Revised Proposal for the Project. Quite simply put, the overall goal/ purpose of the Project is to bring full food security as well as an increased standard and quality of living to the 14,750 people in the Nthongoni Location. The goal/purpose (impact) will be achieved through increased food grain and vegetable production (outputs) which in turn will increase the food intake and income levels (objectives/outcomes) of the 14,750 people in the area as the result of increased water retention and supply (outputs or outcomes) which in turn result from the construction of terraces (activity) adjacent to intermittent rives and from the construction of 25 sand dams and associated shallow wells (activities) in those same rivers.

Much of the discussion of activities completed, as well as outputs and outcomes up through 30 November 2003 is included in SASOL Foundation's Progress Reports 1,2 and 3 copies of which are being sent by email along with this report. Therefore the discussion that follows is in the form of a relatively short summary. Also, with this report is a copy of the contract between SASOL Foundation and MCC Kenya for the first $37,551 given to SASOL in October 2002.

Finally, a DHL package should arrive in Winnipeg by 12 December 2003 which will contain hard copies of the email attachments, receipts up to 30 September 2003 (not to 31 August as suggested in the Revised Proposal Introduction), pictures of sand dams, shallow wells as well as crop and vegetable production in an area similar to Nthongoni Location and another copy of the publication entitled "Kitui Sand Dams; Social and Economic Impacts". All of this information in conjunction with that already received by FDMR and CFGB should show that the impact of sand dams in Ukambani is nothing short of miraculous.

Activities Through 30 November 2003 (also refer to SASOL's Progress Reports 1,2 and 3)

Although the first $37,500 US were released to SASOL in October 2002, the project until now has gone slowly because of all of the preparatory work that needs to be done before starting the actual construction of dams and shallow wells. Such preparatory work included community mobilization and organization up to around 1 August 2003. Before 1 August the process went through baseline data development including an assessment of the level of food security in the target area before sand dam construction, natural resource management training of the target communities, dam site selection and the election of site committees. Another factor contributing to the seemingly slow progress in dam and well construction was the fact that SASOL had decreased its staff so that in the event that DFID and SIDA (who have provided most of SASOL's recent funding) stop funding after the current contract ends on December 31, a very likely event, not as many employers will need to be laid off. Also, it is simply good economics not to be over

staffed when funding is tight. The few employees left had to spend much of their time on the SIDA and DFID dams and had little time for CFGB's dams until a short time ago, making the progress slow. Now the work has speeded up greatly and until 30 November 2003, eight sand dams have been completed and it is felt that by the end of December, 12 dams or about one half of the (now) 25 dams will have been completed necessitating the advancement of additional funds to SASOL in December if construction is not to be delayed. It is expected that all dams and wells will be completed by mid 2004 although measuring of the impact upon food security of the target area will take place later in 2004.

Outputs and Outcomes

Miraculously, relatively heavy precipitation has resulted in all eight dams completed thus far having been filled with both sand and water (outputs or outcomes). Within the next few months the incomes of many of those households living near the eight dams will increase dramatically resulting from the production of irrigated vegetables (potential outputs or outcomes).

The goal/purpose (impact) of bringing full food security and increased standard and quality of living will be at least partially fulfilled as early as mid 2004.

Finances
(Please refer to the "Project Financial Report" through 30 September 2003 that is attached to SASOL's Progress Report 3 for the discussion of finances.)

Both the total expenditures according to the financial statement of SASOL as well as the summation of the receipts through 30 September were similar and come close to $15,000. It is expected that by the end of December 2003 these two figures will be very close to $37,500 such that additional funding can be advanced. By that time 12 sand dams should have been constructed.

Pictures

1. One of SASOL's most complex/ elaborate sand dams shortly after its construction in November 2002
2. A typical shallow well located near a sand dammed river near Kitui. Water level in the well is about 2.5 metres above the sand/water level in the adjacent streambed.
3. Michael Mutia Katongu (being photographed by Grant Rosenberger) near Michael's tomatoes irrigated from a sand dam built near Kitui in 2000.
4. Michael Mutia Katongu (L) and Grant Rosenberger (R) in Michaels's Kale garden irrigated from the same river in picture 3.
5. Sand dam in midst of construction near Kitui. Note that it is reinforced with steel rods and that the sand dam penetrates 3 to 4 metres into the stream banks.
6. Healthy maize during the dry season; it is obtaining water from a "perched table" 4 metres above the sand/water level in the adjacent dammed river near Kitui.
7. A typical sand dam site committee. Note the predominance of women. They also far out number men in the construction crews. The predominance of women results

partially from the fact that “Kathambi” the Supreme Kamba Female Goddess has supreme control over matters related to water and that she works through particular Kathambi women. Also, because the area is poor due to frequent drought, women in Ukambani have become powerful because they remain at home on the land while their husbands are away in Nairobi or other cities earning extra money.