CONFLICT BETWEEN DEVELOPMENT AND RESEARCH OBJECTIVES IN KITUI

G-C. M. Mutiso

Any external development agency needs to pay attention to the conflicting interests of development and research as they impact on local populations. This is of tremendous concern to SASOL as we build relations with other partners in development and research in the name of assisting Kitui communities. We discuss some experiences in areas proximate to where we work and draw some conclusions, which we hope our partners will keep in mind as we plan both development and research programmes jointly. We do this to call attention to the fact that the base populations we use to justify our activities are also critical judges of what is useful to them.

The first case is about a tree programme. In the past a location within the environs of Ukambani became an objective of development and research. This location was dry- bottom of Agro-ecological zone 4. The international body responsible for developing this area decided that the approach to food security would be to get trees into the farms. Trees were supposed to address soil fertility, energy and food needs of the local population. Trees were selected from around the globe to address these parameters. They were to fix nitrogen, to provide fuel wood and to get some fruits into the local diet. To make a long story short over 15 years 50 PhDs and 132 MA and MSc thesis were produced on all sorts of subjects, which focused on how this particular community was to be developed. Funding was cut for the project ten years ago. Recently, SASOL visited the area to glean on what is remaining on the ground. There are no trees on the farms. Farmers cut them for as soon as the trees grew, the crops withered. There is vicious competition by trees and food crops in the arid and semi-arid areas. If the trees were some of the local nitrogen fixing species, wood fuel providing and pole providing and deep rooted not to compete for moisture with crops, the people could have adopted them. Unfortunately they were imports and the people uprooted them. The fruit trees- imported Valencias- got greening disease – introduced into the country by another donor and dried. The research on local vegetables was not used by the local community for there was land shortage and the necessary need of ensuring water for intensification was not seen as a critical area for development funding. Consequently the local population concentrated on assuring themselves subsistence grain for vegetables could be bought or jettisoned out of the diet if necessary.

The second case is about provision of water for communities from rock catchments. A multilateral donor spent a lot of money in one division in Kitui on rock catchments. The idea is simply to put a skirting on the large rock masses found in many areas on the continent where the basement rock has not weathered over eons of time. It sounds useful but local communities point out that the water is only around when the occasional rains are around. Since the amount of water co0llected is stored in exposed collection points, local people point out that the water evaporates in very large quantities after the onset of the dry season and by the middle of the dry period they have no water. Similarly, there is a quantity limitation on how much water can be harvested for it depends on the size of the rock and the amount of rain falling. Typically most rocks are no t even an acre in expanse. This limits how much water can be harvested. It in turn limits how many people can use the water. One cheeky

The third case is about organizing groups. Typically in Kitui each donor since 1963- the year of Kenya's independence- has organized his or her groups. The Kenyan state recognized this and created a whole bureaucracy for registering these groups. They are institutionalized in such a way that they split base communities. A case is several sand dams and wells. . Many donors have built them in Kitui but access is only by the group, defined as those individuals who got in touch with the donor as the beneficiaries. In contrast, SASOL asks those living in a particular sub location-the lowest level administrative unit – to organize themselves to establish who works on the dams and thus gets the benefits. As SASOL we have had to build sand dams in some communities simply because the majority of people in some villages did not have access to the water provided by some donors under self-selecting of individuals. To us this is counter productive for if the local communities would have had access to some of these structures, our financed dams could have gone to other communities thereby extending the needed coverage.

The fourth case study is about the involvement of external people in the actual development work. Usually these are justified in terms of teaching local people some skills. At Utooni- where a locally based CBO has been building sand dams as a platform to other innovations in development, they argue that external people basically learn. They have come with the solution that unless external people are financing some development activity in return for being taught by local people, it is not worth having external people involved either in construction or even management of a development activity for their costs- in terms of food, security and teaching are more than those of local people. This is not to argue that external people cannot bring knowledge to local communities or even to local development agencies. In the case of

SASOL, we have wanted to get some research on technical aspects of the sand dams. We tried to get this from local universities but they did not have a financing mechanism by means of which they could avail us civil engineers and other specialists to undertake some of the research we and our local partners saw as priority. For example, we needed to know whether the masonry construction technique was sound from an engineering point of view, other techniques for construction in black cotton soils, the ground water table recharge potential of the dams, the water quality, changes in the ecology etc. We were not particularly concerned about innovations on utilization of the availed water for given the costs even if the dams were used for only domestic water supply and livestock watering the benefits were more than adequate. We expected local communities to utilize and innovate on utilization for we had not only taken them to Utooni where the later community had innovated on water from sand dams but we also got Utooni community leaders-women and men- to come to Kitui to offer the local communities a menu about dam utilization.

Fortunately, over the past two years we have had five groups from TU Delft. During the first year, the civil engineering oriented group did a "Project" and "Practical Work". In the Dutch system "Project" is more research/theory oriented and "Practical work" is more construction oriented. Their project was technical evaluation of the masonry dam and the practical work was construction of one dam with the community. One of the other groups was management oriented and their work did not really turn out to be useful for they did not really understand the complexity that is involved in organizing different sub locations in the district. The third group- made up of an architect and a lawyer- was a total disaster for they had fixed ideas about public private partnerships and how they could be used in planning rural centers. During the second year, we have two groups. One is doing project-designing alternative sand dam construction techniques in black cotton soil areas. Their practical is studying the water table recharge system of existing dams. The second group is doing a practical –construction of a sand dam in black cotton areas based on the design of the first group. Since the groups overlap we expect some very good outputs. No doubt SASOL benefits tremendously out of this type of collaboration. However, given that donors who finance construction of sand dams do not finance research, SASOL incurs management costs derived out of handling and supervising these students, which are not catered for. We also have benefited from a new relationship with Ex-Change. They have financed a dam. Their students' practical will be to build a masonry dam. Again the issue of financing overhead and management will be discussed. The reason is simply that when one handles external people doing construction in the bush- where the students cannot shop or get transport costs to the hosting institution comes in.

To date the bulk of the 320 constructed dams has been from DFID and SIDA. The initial five dams were financed by WATERAID UK, which moved out of the country. We have received funding for a few dams from Canadian Food grains Bank. The dams have had fantastic socio-economic impacts. District wide interview data shows that households owning land adjacent to the regenerated rivers are now earning over Ksh 100,000 in the dry three months of August, September and October from bucket irrigated vegetables. Income from horticultural trees is on the rise, though yet to be aggregated and documented. There are 1,969 households in Maluma/Ithumula sub-location. 38.5% of the interviewed households reported that they were engaged in vegetable planting the first year after completion of the dams. Conservatively assuming that only 2% of the households did serious planting, the first year, and further averaging down the household earned income to Ksh 90,000, with an average household having 8 people, the dry months per capita income is Ksh. 3,750. This compares to the mean income from food sales of Ksh. 125 as reported in the 1999 Welfare Study by CBS. The vegetable household incomes translate to Ksh 3.1m. during the first year of adoption for the entire Maluma/Ithumula region. This figure is collaborated by the local councillor who estimated that Ksh.4 m. was earned in the sub location. For the whole district, keeping the same assumptions, the dams could generate Ksh. 118 m. during the dry three months whilst using the land for other production during the rest of the year. We should note that there was no extension effort on this new production. With these incomes, the whole district can move into a higher economic plane dramatically. Further, from a health point of view, consumption of vegetables and horticultural produce has impacted positively on health, especially of women and children. This is the way to fight poverty.

What is SASOL's long-term interest? **Currently our priority is to get funding for the needed 500 dams for Southern Kitui. This is clearly in the development as opposed to the research side**. The needed dams fall into three groups. Some (100) are in the National and District Parks, others (100) are in the interface area of human and animals who spill out of the park and the last -the greatest number- (300) are for human use. We are not sure about future funding from the two big donors for it is tied to their attitudes towards Kenya Government. Corruption and lack of good governance has seems to be affecting their funding of activities in the country in the future. What we would like is to get other funding sources if for nothing else to hedge since Kitui's water need is yet to be fulfilled.

Prof. G-C.M. Mutiso

19/06/02