# NCA EASTERN AFRICA: WATER AND SANITATION CONCEPT PAPER

## INTRODUCTION

**SASOL is convinced that water for production is the most critical factor in the arid and semi-arid lands of the continent. Production water is defined as the creation of a sustainable water supply to enable communities to 1. reduce the time and energy currently used in water fetching 2. get reliable drinking water for humans and livestock 3. create alternative production systems for food security.**

**We are also convinced that the technology for assuring this is sand/subsurface dams. The reasons are 1. that the technology is within the organizational reach of the communities 2. that it recharges ground water 3. that it facilitates land rehabilitation especially growth of biomass in the recharged areas 4. it facilitates survival agriculture.**

**Creation of sand/subsurface dams in cascades therefore addresses some of the concerns of the millennium development goals, global warming, and poverty at the micro level.**

## SPECIFIC COMMENTS ON THE CONCEPT PAPER

1. **The document should state more emphatically that at the micro level (community level) the technologies to be supported will emphasize those technologies within the construction, operation and O&M capacities of local communities with limited technical and financial resources.**

2. **At the meso-level (Kenyan equivalent of district level) there is need to support reliable water provision for local urban conglomerations which will be important for driving the local economies. If rural towns do not have reliable water and sanitation they become disease and poverty factories.**

3. **At the macro level there are very serious problems. Engineers typically dominate ministries of water. They have not really supported sustainable water technologies at the micro and meso levels. Even where they have made policy that water provision and management is to go to communities, as Kenya Government has done, there is little discussion of the organizational and technical capacities of the communities. Since in the document the macro level is the main focus of advocacy activities there is need to specify what institutions and technologies will be advocated for support at the meso and micro levels by national organizations responsible for water policy and funding.**

4. **Since the main partners are churches, it is clear that they can develop a lot of practices in different micro settings. There is however a policymaking problem. Churches are not particularly good in preparing public policy options. For example, you are not likely to get budget specialists analyzing the national expenditure in water ministries in churches. How does one monitor or practice advocacy on the issue of national water budgetary allocation at the micro, meso and macro levels? Some data shows that upwards of 80% of national recurrent expenditure in water is consumed at national level, mainly by bureaucracies. Water development budgets are essentially donor funded. Local revenues finance insignificant number of projects. Where is the capacity for analyzing these and similar issues for advocacy going to be located? In terms of institutionalizing the advocacy activity, should NCA**

**create a specialized regional body of experts, not necessarily water engineers, to struggle with the data and concepts over and above what is suggested in the draft? The reason is simply that integrated water resource management at micro, meso, macro and regional levels calls for totally multidisciplinary thinking and development of options for different levels of policy. I am not so sure it is a derivative of ongoing implementation activities standing on non-existent data on water resources as well as very little evaluation of the different impacts of assorted technologies of water provision, water quality and pollution monitoring and rates of exploitation and attendant depletion of the resource.**

5. **On Sustainable Local Water and Sanitation Management Systems, there maybe reason to add another focus above the three specified in the document. This is documentation of water resources. This ranges all the way from just simple rain gauges, river monitoring, ground water mapping, river and ground water pollution monitoring, etc. The reason is simply that there really is no data for systematic development of water resources. I have argued that the most important data is just collection rainfall data for it enables more meaningful decisions about sources and technologies. Perhaps it is important to get familiar with the practices of Namibia, Botswana and South Africa on this for almost all those developing water resources in the region work without reliable data.**

6. **There is an urgent need to create coordinating institutions at the micro, meso and macro levels for evaluating construction, O&M, pollution and catchment management. Perhaps this is what the document refers as best practices but the Kenyan reality is that each development organization works without coordination at all these levels. As a result, there is no coordinated planning at a water catchment or administrative unit level. Again in the Kenyan case, individuals are privatizing some of the constructed supply structures in the name of communities. Catchments are not protected. Witness the problems in the Uaso Nyiro North catchment, Molo catchment, not to talk of Nyandarua catchment - the main source for Nairobi. Athi /Galana catchment, the main source for Malindi and Mombasa water supply is not heavily polluted by Nairobi and other towns but nobody seems to be in charge of monitoring the impact of this.**

**CONCLUSION:**

**Let me conclude by stating that my theoretical standpoint is that water is still seen as a standalone arena for engineers in the region. Other disciplines defer to the engineers at all policy and implementation levels. This leads to biases on organization and technology provision, which favor engineering rather than choosing technical, institutional and management technologies, which affirm that water is a basic right and a tool for development.**

**From this stand point the future struggle then is to get water development strategies, which evaluate the salience of provision and management technologies (including pollution) to micro, meso and macro levels production and therefore reduction of poverty, the central concern of the millennium goals.**

**I hope that commenting on your draft from this perspective has merit.**