



Box 85 Kitui
Kenya
Phone 254-020-22873
Email sasol@kenyaweb.com

SAND DAMS REDUCE POVERTY

Most communities in the Arid and Semi-Arid (ASAL) parts of Africa have suffered development since often knowledge is borrowed from wetter parts of the continent and applied irrationally to their development. Expertise, usually from without, more often than not does not listen to the communities who have operated some of the most sophisticated social institutions in human history. Short-term sectoral thinking compounds these problems. ASALs account for most of the poor on the continent. ASALs development to reduce poverty must be within sustainable ecological resource use. This demands that communities participate in the design, implementation, operation and maintenance of development structures and processes. New ideas, technologies and techniques have to be generated to produce food security and surpluses for the exploding ASALs population.

ASALs form 82% of the Kenya landmass. They now carry 40 % of the national population. The key development issue is provision of water for production. Sand dams on the ephemeral rivers provide this effectively and efficiently. Sand dams not only provide water for domestic and livestock use but also create wetlands through lateral recharge and build up ground water for subsequent extraction. Created wetlands enable communities to grow both subsistence and high value cash crops in sustainable environments. That sand dams are easy to construct and maintain enables communities to manage them systematically. Sand dams limit evaporation of stored water. Sand dam water is relatively safe for it is filtered. Sand dam water provides trace minerals, important in rural areas where nutritional supplements are critical for the health of the population especially mothers.

Since 1990, Sahelian Solutions Foundation (SASOL) has constructed over 600 sand dams and extraction wells on ephemeral rivers in Kitui. Where the dam densities are more than two per kilometre of river basin, the river flow is maintained even in the driest periods. Sand dam impacts on the population are immediate and dramatic. First and foremost, they have cut the distance to reliable water sources from 10 kilometres to less than two kilometres. This has tremendous impact on the health of women and girls for water fetching chores are in the female gender. Given that 60 % of the households are female headed in the project area, reducing water fetching time and energy means that these become available for production. Improvements in food security, health, housing, and diversification in the farming systems are evident. All these translate into improved incomes thereby attacking poverty. These improvements are afoot in communities within a year of permanent sand dam water being available.

SASOL is a foundation registered in Kenya and the Netherlands. It was created by founder members with more than one hundred and fifty years of experience in research, teaching, management and consultancy in ASAL development. Their training backgrounds are as diverse as theology, social sciences, development studies, geo-

hydrology, ecology, construction and land use planning. Central in SASOL philosophy is commitment to participative development, which cannot be if resource conservation within the framework of time tested technologies sustained by ASAL populations are ignored. This does not mean that the scientific approach, planning, management and new ideas are not introduced to base communities. It simply means that the beginning point is what is known and sustainable by the base communities as evaluated by community representatives and sector specialists in participatory ways.