- Miracle of sugar in the desert -

More than 1,200km from Port Sudan is a sugar estate and factory that most observers said would never work. Situated right in the middle of nowhere, there was no road to the port, no water and no power. But those doubters who said the development would turn into a white elephant in the middle of the desert `have been proved wrong. Today, the Kenana Sugar Company (KSC) is the world's largest producer of white sugar. Prior to the establishment of the estate and factory, Sudan imported the bulk of its sugar, which was a drain on its limited foreign exchange.

The plan for a sugar-processing plant and cane estate was the brainchild of the late Tiny Rowland, whose Lonrho company already had extensive interests in Africa. In 1972 he and the Sudanese government signed an agreement to produce sugar. There was a long gestation period during which capital costs of $1 billion had to be raised and the construction contracts signed, before the factory's foundation stone was laid in 1976. Four years later the plant began processing sugar cane and it was officially inaugurated in 1981. Production was initially for domestic consumption and it was not until 1991 that exports began. But ever since 1981, KSC has delivered more than 150,000 tonnes of sugar annually to the Sudanese government. Last year, KSC produced 387,000 tonnes of sugar, of which some 195,000 tonnes were exported. In 2002, KSC expects to produce 420,000 tonnes, and forecasts this will rise to 450,000 tonnes by the 2003-2004 season.

The KSC estate lies on the east bank of the White Nile, where it draws water for irrigation and processing. Six pumps raise the water 46 metres above the level of the river, sending it along a 40km canal to the plantation area. The sugar cane is fed by gravity by some 400km of smaller canals, which follow the contour lines of the estate. Around 7,000 million litres a day are needed for irrigation alone. The estate's generating station has a capacity of 53MW, making it the third largest electricity producer in the country.

**Kenana is in the process of reversing the deforestation in central Sudan**

The factory crushes and processes more than 20,000 tonnes of cane a day. About 8,000 people are employed and a further 8,000 workers during the cropping season. Road and rail links have been established to Port Sudan and to main centres around the country. The estate encompasses a township complete with mosque, primary and secondary schools, a hospital, several satellite villages with primary healthcare facilities, and a vocational training centre with modern equipment and teaching aids. Kenana is in the process of reversing the deforestation in central Sudan. North of the factory, the company has planted more than 2,000 hectares of trees.

A secondary project, which started in 1998 and is having a significant impact already, is the production of nearly 6,500 tonnes of charcoal a year from bagasse (the waste material left over from the crushed sugar cane) and molasses. As this provides a substitute for the charcoal traditionally obtained from local trees, it is helping to reduce the rate of tree loss in Sudan. Osman Abdalla al-Nazir, managing director of KSC, says the company is diversifying the range of its output.

Among the new crops it is producing are sesame and sunflowers. "We are now diversifying because we know the price of sugar sometimes goes down to such levels that it could close down the company," he says. "Many sugar factories throughout the world have closed - in the Philippines and Thailand. But by diversifying, other products can give us an income and sustain operations. This is why we are safeguarding against cyclical fluctuations."

Most of the sugar that is exported goes to African and Middle Eastern states, as well as India and Bangladesh, and as far away as Europe. Molasses are sold to Britain and the Netherlands. "We have a very efficient market with exporters and we find the best way is to negotiate our own contracts, based on the international sugar prices, instead of someone else negotiating on our behalf," adds Mr Al-Nazir. The Islamic Corporation for Investment Guarantee, an offshoot of the Islamic Investment Bank, is providing funds for the expansion of Kenana. One idea is to manufacture paper from the remains of the crushed sugar cane.