THE SAN: SUSTAINABLE DEVELOPMENT BEFORE ITS TIME

Key element of sustainable development, water management presupposes a solid knowledge of the environment and its resources. Indigenous populations often have mastered this knowledge for generations. This is true of the San, who for centuries were able to make the most of the scant water resources to be found in the desert region of the southern Kalahari (South Africa). This knowledge, however, based on respect of the local ecosystem, was lost at the time of colonisation.

Elders of the San community consider water a fundamental element of their culture

When the political leadership of the ‡*Khomani* San Association (1) sat with three of the most fluent speakers of the ancient *N/u* language, they asked the elders for guidance on the land claim and restitution process. The elders identified the three most important resources of their aboriginal culture in the Southern Kalahari: *!haa*, *!āo*, *//kx'am*. That is: water, land and truth. Water, and access to water, has been a key variable in the defense, conquest and colonisation of the Southern Kalahari.

The oldest members of the San community remember a time when there were no boreholes in the Southern Kalahari. There was no surface water available except during the rains. The people lived off those plants that absorbed water, including the all important tsamma melon (*Citrillus Lanatus*), a favored wild food with plenty of liquid. During the 19th century, settlers could not penetrate the interior of the Southern Kalahari (where the present borders of South Africa, Namibia and Botswana come together) without using the traditional technology of the San people.

WAR AND WATER

When this region became engulfed in the Nama-German war (1904-1908) that spilled over from neighboring Namibia, the humble tsamma melon became critical to all parties. The German imperial

army had to water its men, horses and camels entirely on desert food. This all took place in the peak of summer when temperatures soar up to 50 degrees in the shade - and there is very little shade. Both sets of aggressors kidnapped San trackers to be able to help them through the endless sand dunes and find all the crucial plants to feed and water them.

The San themselves had a number of techniques for capturing and managing water. Ostrich eggshells would be cleaned out and buried deep within the red sand dunes during the rainy season. Water would percolate down through the sand dunes, weeks after the rains and the surface water were gone. The eggs would be recovered when necessary and plugged with a wax stopper. To this day the practice continues on some farms, though people now use plastic bottles.

The government of Britain and the Union of South Africa were deeply disturbed about the sovereignty issues involved in the German invasion of the Southern Kalahari, and soon Britain was at war with her previous ally. The South African government of the day decided to recruit white settlers to fill up the frontier and consolidate the border. Boreholes had to be sunk to achieve this. During the early 1920s the government sponsored white farmers to sink boreholes, particularly along the riverbeds (the Auob, N‡osob, Molopo and Kuruman) where subterranean water was easily accessible.

CULTURAL IDENTITY VERSUS COLONISATION AND TECHNOLOGY

The sinking of the boreholes had a drastic effect on the Southern Kalahari. Firstly, the seasonally nomadic San people lost all of their territory in a matter of a few years. Fences were put up and people were not permitted to move freely. Secondly, as elsewhere, the settlers went on killing sprees, devastating the wild animal population. By 1927 there was a famine throughout the area, as game had become so scarce. This drove San to live and work on farms where they would earn a meagre income to afford to buy food that had once been theirs for the taking and managing. Farmers banned the San from practicing their traditional religion, including the powerful trance dance that was used for healing. The San identity was ruthlessly suppressed. First there were scientific efforts to determine authenticity that involved measuring people's heads, noses and genitalia. During this time much of the culture, language and traditional knowledge was not passed down to the younger generation for fear of stigmatising them. All of this because of borehole technology.

The Southern Kalahari is composed of a number of different soil types, but the predominant type is that of red sand dunes. When it rains, water runs down between two dunes. This is called a 'street'. Where several streets meet and the water cannot run off anywhere a 'pan' is formed. Some of these pans may have been in place for up to a million ▶

(1) In most San languages, extra-alphabetic signs are used to represent clicks, which are predominant and distinct. The phonetic inventory of the San language is in fact so rich that all the other symbols of the roman alphabet are already used for something else. N u has 145 different phonemes, which is three times more than in standard English. Many of the signs used come from the International Phonetic Association alphabet. *= dental click; = lateral click; ! = alveolar-palatal click; = palatal click*

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In the Kalahari desert, tsamma melons are a vital source of water

years. According to the San (and confirmed by scientists), the chemical composition of each dune and pan is distinct. Some pans are now mined for salt. The San know which streets produce the best plants, and which pans have potable surface water after rains. The water in some pans will cause immediate diarrhoea or can even be poisonous to humans. There are, however, traditional methods for purifying some of the water. The San give names to pans to remember this, such as Large Diarrhoea Pan (Xausndi ‡gas).

During the process of the land claim against the Kalahari Gemsbok National Park (now Kgalagadi Transfrontier Park), the Park officials argued that there was no potable water in the park. A mapping project has demonstrated that not only is water available through the plant life, there are also a number of sites where water can be had on the surface or just below the surface. These water sources were already pointed out seventy years ago to the settlers and the warden, and are still known to some of the older people.

On March 21, 1999, the South African government awarded the Southern Kalahari San almost 40,000 hectares of land outside the national park, and 25,000 hectares inside the park as restitution and redress for their losses. On the day that Thabo Mbeki gave the land back, the N/u speaking elders gathered and prayed to their ancestors to send rain.

As Mr. Mbeki climbed into his limousine to depart, a large rain cloud moved over the land settlement site and rained huge drops of rain in the otherwise hot and dry desert. For many of the westerners this was a marvellous and inexplicable phenomenon. After the transfer of the first farm to the San in December 1999 a great rainy season began, with the highest rainfall since the early 1970's, when the last San were expelled from the park. The new rains have restored all of the wonderful plant life and replenished the animal life. Some of the elders are back on the land and are taking their grandchildren out into the dunes to collect tsammas, gemsbok cucumbers and desert onions. So much rain fell that the streets filled like reservoirs and both the N‡osob and Auob began to flow for only the third time in a hundred years. Ironically, the massively irrigated agriculture along the Orange River, land that was taken from the indigenous peoples by the settlers, was swamped with water and the crops started rotting that year.

Nigel Crawhall

President Thabo Mbeki during ceremonies for restitution of San land, 1999

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