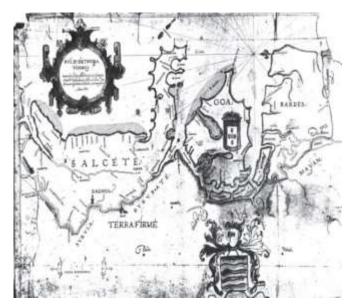
RIVER SAL - THE GODDESS OF SALCETE?

River Sal first appears as *Rio do Sal*, on the Map of the Old Conquests drawn in 1610 (see below). Was the river named by the Portuguese as *Sal* for salt, or the name predates the arrival of the Portuguese?

Two villages in Goa having homonymous names - Saligão¹ in Bardez and Sal in Bicholim, are likely named after the Sal tree (*Shorea robusta*). Known by several other regional names, the Sal (*Saal, Shala, Sakhua, Sarkua*) tree is native to northern parts of India, Bangladesh, Nepal and Myanmar. It can grow up to 50m. in height topping most of



the trees in the forest and is highly valued for its timber and therapeutic uses. More importantly, it has religious significance to several religions. To some tribes, the towering tree is the *House of the Goddess Sarna*.

Fig.1 A section of the map of 1610

^{1.} Mascarenhas, Nascimento, <u>The Land of the Sal Tree,</u> (2012), Publ, Goa 1556.

Sarnaism is the religion of the tribal people of Jharkhand. The Sarkua tree in this region has a central role at their Sarhul festival. The tree is worshipped by the local tribes for their belief that the Goddess Sarna² protects them from all natural calamities.

Other Indian religions also have deep reverence to *Saal* trees. Lord Buddha is believed to have been born and died near *Saal* trees. Jains believe that Mahavira was enlightened under the *Saal* tree, and in Hinduism, the tree is associated with Vishnu.

Thus, the naming of the river Sal in Salcete may go back to prehistoric times, and likely attributed to the post-Neolithic settlers who developed the agricultural landscape of coastal Salcete on both sides of the river. The river must have been their life-line.

River Sal originates from the springs bursting from the hills of the contiguous villages of Cuelim, Nagoa and Verna. The tributaries formed by these springs converge near the villages of Arossim/Verna to form the freshwater stream, which gradually widens and meanders in the southerly direction and empting in the Arabian Sea at Betul, for the total length of 35 Km. (16 Km. as the crow flies). Along the way it is joined by other tributaries. (See the maps figs.1 and 3), covering the Taluka of

^{2.} Ningishzida, (Lord of the good tree), Sumerian deity of vegetation. 2a. Daphne was a Greek tree spirit. 2b. Enki, Sumerian deity of fresh water.

Salcete. The salt water tides reach up to Margão. However, several maps of Goa, and particularly, the one published by The National Institute of Oceanography (NIO), on its Wikipedia website does not depict the full length of the river. (SeeFig.2). Failure to have accurately drawn landscapes leads to poor planning, resulting in undesirable environmental consequences. As an example, the Verna Konkan Railway Station was located at the origin of River Sal, in the midst of the tributaries, and the housing for the railway staff built on the banks of these tributaries. With the waste strewn about, the river is now polluted



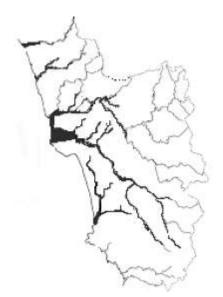


Fig.2. NIO Website Map of Goa (www.nio.res.in)

Fig.3.Map of Goa with rivers shown.

at the very source. It is further polluted with human and other waste disposed around Margão, and, furthermore, with the location of the Waste Treatment Plant nearby, the once pristine river that provided livelihood, like fish, crabs and salt, to earlier generations living along the

river are now deprived of their basic needs.

The river also served as a waterway for commerce. Sail boats and dhows once brought roof tiles from Mangalore and other goods from afar to the markets at Margão, and, in return took local products and salt extracted from the ancient salt pans, seen along the river in many villages south of Margão. The river is no longer navigable.

Fig. 4 shows a section of the river separating Benaulim (left) and Sinquetim that is totally covered with water hyacinths and other weeds.

The highest order of priority is to stop polluting the river and depriving nutrients to the invasive water hyacinths (*terror of Bengal*) and other weeds growing around Margão, and spreading fast southwards. It is a pest that is hard to eradicate. Desilting/dredging is only a temporary solution.

The weeds, however, can be an important source of bioenergy to be tapped. When fermented and distilled, produces ethanol and, when composted will liberate methane, hydrogen and other fuel gases.³

The river was most likely once revered as a divinity and named Sal or *Saal* or *Sarna* by the first developers/settlers of Goa, as it was their lifeblood and housed their divinity.

^{3.} Wolverton, B.C., McDonald, R.C., Economic Botany 35(2), pp.224-232.

Sadly, it is now in the process of eutrophication and is dying!



Fig.4. Section of the River Sal between Benaulim and Sinquetim to the right. (The river is green, covered with the invasive weeds compared with the blue water in the salt pans (mitachi agor). The partially constructed bridge, politically paralyzed, is now a white elephant) (Photo Google Earth)

Respect the ancient wisdom. Do not desecrate the house of the divinity. Save it for the future generations. SAVE THE GODDESS!!!

Themistocles D'Silva (August 2023)