

CHAPTER – 4**ANCIENT SCIENCE AND TECHNOLOGY - A STUDY****Dr. T. GANESAN**

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The introduction of science and technology is going back to the pre historic age, when man started his settled life on the earth. Neolithic man constructed his house in the circular form to protect the wind and natural disasters. Megalithic age associated with the iron Industry. It associated with the Sangam age.

During Sangam age, several Industries has been started including iron industry. They constructed temples by using their Engineering skill. During early age they well verse is metallurgy, engineering automatic engineering and other sciences. This paper will study science and technology through literature and archaeology materials.

From the beginning, when the man started the settled life, he used his knowledge in the fields of Science and Technology He applied his scientific knowledge for the development. Palaeolithic man was Hunting the animals by using hand axes. He picked - up the stone babbles and made as a hand axe by cutting the stone Neolithic stones were used as an industry. They polished their stones. Megalithic age is associated with the Sangam age in Tamil Nādu. The same Megalithic period is associated with the Iron Age Iron was melted during this period. Iron was largely found in Tamil Nādu around 3rd Century BC.

IRON INDUSTRY

There was an Iron melting industry, found in the archaeological excavations of Andipatti¹ and Kodumanal.² Both the sites yielded, furnace for melting iron and Iron ores Iron was melted in these places. Iron objects, Iron slags Iron ores, Blowers, Iron nails and Iron chisels were found in both the places. There was a furnace found at Kodumanai³,. Archaeological excavations of Kodu Manal reveals that there was a circular big furnace .It was installed with regular intervals of 30 c. m. diameter There was a another crucible furnace was also found in this place.

GOLD INDUSTRY

Gold industry was also found in Tamilnadu. A gold melting furnace was found at Andipatti Trench No.8.⁴ Gold pieces, rings and other ornaments were found in this place.⁵ Gold was melted from the ore in this place Gold was melted from the ore in this place. There was a reference in Sivagasindhamani,⁶ a Tamil work, It referred the melting of gold and fire for melting gold (ponsuduneruppu).

SILVER AND COPPER INDUSTRY

There was reference for silver manufacturing industry. A furnace, was made of silver referred in the Tamil work Sivazasindhamani. (vellivadumbu)⁷ and it referred the silver plate for fixing on the walls and ceilings. known as vellipezh.⁸

AIRWAYS (MAMAYIL)

Airways was referred in the Sivazasindhamani⁹ It mentions about Mamayil. it was manufactured by seven days. It would fly over big buildings and forest grows. When we switched on the key (panavazhviralir Pavai) by rotating on the clock-wise it would fly over the sky and when it was switched off the key by rotating anti-clockwise it would ground by stretched-out his legs. Namagal of land on the Sivagasindhamani¹⁰ travelled in the mamayil and landed on the ground.

SUGGER MILL:

Sivagasindhamani¹¹ referred a Sugar Mill. Sugar cane juice was crushed out from the sugar mill. The juice was distributed who ever came to drink. The extra juice was taking for making sugar.

KILLING MACHINE

There was a killing machine mentioned in the Sivagasindhamani¹² It was having capacity to kill one hundred persons at a single attack on enemies. It was called as Nukki Yeri Pori.¹³ There was another machine, referred in the Sivakasindhamani,¹⁴ known as Puli pori. (Tigger Machine) It was also to be used in the war for killing the enemies.

WEAVING INDUSTRY

There was a weaving industry and dying Industry referred in the cloths were manufactured like a smoke of the milk. The designs were compared with the Stars of the Sky. Dying Sivagasindhamani.¹⁵ The cloths were manufactured like a smoke of the milk

the designs were compared with the Stars of Sky of the Sky printing technology was existed at that time.

BEAD MAKING INDUSTRY

Bead making industry was famous during Sangam age. The excavations of Andipatti Trench No.12 yielded number of beads such as carnelian and beryal.¹⁶

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