

TRADITIONAL AGRICULTURAL OF SANGAM PERIOD - A STUDY

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Abstract

Agriculture was the main occupation of the Tamil region of India during the Sangam period. Agriculture in the state of Tamil Nadu is not of recent origin but has a long history dating back to the 2nd century. C. He changed the lifestyle of primitive man from nomadic hunter of wild fruits and roots to farmer of the land. Agriculture benefits from the wisdom and teachings of the great saints. The wisdom gained and the practices adopted have been passed down from generation to generation. Traditional farmers have developed nature-friendly farming systems and practices such as mixed farming, mixed farming, crop rotation, etc. The great Sangam literature of the ancient Tamil region conveys the depth of knowledge possessed by the older generations of Tamil Nadu farmers. Modern society has begun to appreciate the importance of traditional knowledge, which has undergone a refinement process through generations of experience. The ecological considerations shown by traditional farmers in their agricultural activities are reflected today in the renaissance of organic agriculture.

Keywords: *Sanga Kaalam, Tholkappiyam, Silappadikaram, Manuscripts, Mansoon, Farming, Uzhavar, Uzhattiyar, Vellalas, Valanar, Ulutunbar, Plowing, Irrigation, Biopesticides, Parasites, Flatterers, Transplanting, Soil classification, Vanpulam, Menpulam, Livestock, Thinai, Ilavenil, Kulirkalam, Munpanikalam, Pinpanikalam, Monoculture, Kar, Kuruwai, Thaladi, Muladi, Samba, Crop Rotation, Agronomic, Transplanting, Avanam.*

Introduction

The Tamil region in southern India stretched along the east coast from Cape Comorin in the south to Tirupati (in Andhra Pradesh) in the north and parts of present-day Kerala and Karnataka in the west. The Sangam period (200 BC to 100 AD) is well known for the wisdom and knowledge of the people of the Tamil region. Sangam literature provides very valuable information on the social, economic and political life of the people who lived in the current state of Tamil Nadu. Sanga kaalam (Sangam period) is regarded as the "golden age of Tamil literature". 'Sangam' is a Sanskrit word meaning 'association'. The corpus of Sangam literature includes Tholkappiyam, Thirukural, Ettuthokai, Pathuppattu, Pathinenkeelkanakku and the two epics: Silappadikaram and Manimegalai. Tamil Sangam was a body of Tamil scholars or poets, a literary academy founded by the Pandya kings. Sangam was known as "Avaiyam", "Kudal" or its variant "Kuttu" before 500 BC. In Purananuru the expression 'Kudal' was used. Kudal was also used to indicate the city of Madurai. The Sangam period constitutes an important chapter

in the history of South India. According to Tamil legends, there were three Sangams (Tamil Academy of Poets) in ancient Tamil Nadu, popularly called Muchchangam. These Sangams flourished under the royal patronage of the Pandiyas. The first Sangam, celebrated in the then Madurai, had the presence of legendary deities and sages, but no literary work of this Sangam was available. The second Sangam was held in Kapadapuram, but all literary works were dead except Tholkappiyam. The third Sangam in Madurai was founded by Mudathirumaran. A large number of poets participated and produced voluminous literature, but few works exist. These Tamil literary works are useful sources for reconstructing the history of the Sangam period. The literature of the Sangam period covers broad aspects of people's lives, such as epics, ethics, social life and religion. Several poems composed during this period have been passed down from generation to generation through memorization and singing and later through manuscripts written on palmyra leaves (*Borassus flabellifer*). With the advent of paper and printing presses, Shri Swaminatha Iyer, popularly called "Grandfather Tamil", painstakingly compiled the manuscripts and produced them as printed books. Two poems from the Sangam period, Tholkappiyam and Thirukural, give us a vivid picture of agricultural practices in that period.

Sangam Literature on Agriculture - Tholkappiyam & Thirukural

The Tholkappiyam poem was written by the poet Tholkappiar in 200 BC. C. Provide descriptions of various agricultural aspects. The Thirukural (Kural) poem was composed by a talented poet named Thiruvalluvar during 70 BC. C. It consists of 1330 verses (133 songs, each with 10 lines). It is the pride of Sangam Tamil literature and its greatness can be seen from the fact that it has been translated into English and many other languages. Dedicate a topic (10 couplets) to agriculture in the policy chapter. This clearly reveals that a king's main task was to ensure agricultural production. Even today we know that government fails when people go hungry.

Importance of Agriculture

The kings considered agricultural development their main task. They believed that soil fertility and irrigation systems should be the country's resources. The increase in agricultural production was considered a criterion for the prosperity of the country. The stability of a kingdom was not ensured by the army, but by agriculture and the production of sufficient crops. The failure of the monsoon rains and the reduced grain yield were attributed to the sins of the king. "The world revolves around many sectors. All these industries revolve around agriculture." (Kural, 1031)" If farmers stop farming, even the rishis (sages) cannot

survive." (Kural, 1036) The main and esteemed profession of the people of the Tamil region was agriculture during the Sangam period. Thiruvalluvar had described the desirable feature of a territory or country. a country should have good and wise and wealthy farmers. it should be free from hunger, disease and enmity. a country should not be under the influence of hunger. In whatever occupation others may have, all must ultimately depend on the peasant (Kural, 1031); even the ascetics will be left helpless if the peasants do not cultivate the land (Kural, 1036). agriculture is no longer dignified by other professions, on the other hand, farmers are positively supported by all (Kural, 1032).

The peasants were called 'uzhavar' (farmers) and their wives, 'uzhattiyan' (farmers). The classes of people who owned the land and those who actually cultivated it were 'Vellalas', the former known as Upper Vellalas and the latter known as Lower Vellalas. Uzhavar was also known as valnar, ulutunbar or yerin, while in Purananuru they are known as kamar. The term 'uzhavar' itself indicates the use of the plow and the 'vellalar' term denotes the soil properties. The cultivation methods practiced during this ancient period have been revealed by various villagers proverbs and songs, as well as the literature of the time today. It is quite surprising that people had a good knowledge of farming (seed varieties, seed selection, seed storage, plowing, compost, irrigation, weed control, crop protection, pest and biopesticides). "Only farmers live an independent life; others adore them and follow them." (Kural, 1033).

Only the peasants lead a truly useful life, the rest are only parasites and flatterers (Kural, 1033). According to Thiruvalluvar, a farmer must: (i) plow the land; (ii) pay it; (iii) transplanting the seedlings; (iv) ensuring a constant supply of canal water; and (v) protecting the farm from stray livestock (Kural, 1038). Warns the farmer against lethargy; He asks you to be active and never lose heart (Kural, 1040). The farmer must protect himself from the absent landlord (Kural, 1039).

Soil Classification

Tholkappiar classified the land as Vanpulam (Kurinchi and Mullai) and Menpulam (Marutham and Neithal). The cultivation of fruit trees and livestock crops was carried out in Mullai (forest land). Tholkappiar referred to the land of the Mullai as "Kadurai Ulagam" as the trees were found in predominant areas. It had grasslands in larger areas. Another profession was sheep farming and the weaving of woolen clothes. Thinai (*Setaria italica*; foxtail millet) and rice (*Oryza sativa*) were grown in Kurinchi (mountainous region). Palai (desert) is actually an anonymous hodgepodge or mixture of Mullai and Kurinchi expanses rather than a simple stretch of sand (Source: *Silappadikaram*). There is no defined Palai or desert in Tamil Nadu. However, if it doesn't rain, Mullai and Kurinchi become palai

lands. Marutham (agricultural land) is suitable for agricultural operations. In Marutham, rice was the staple food, while cattle were the people's favorite animal. Vanji and marutham were the principal trees of the land of Marutham; in fact, the land got its name from the marutham tree. The main occupation of the people was agriculture and the lotus was their sacred flower. Neithal (coastal region) is full of trees punnai, crocodiles and sharks. The inhabitants are fishermen who go to sea to fish. Thiruvalluvar cites two main characteristics of a state / perfect country, namely, (i) Vilaiyal size: fertility of the land which ensures a continual supply of food to the population (Kural, 41); and (ii) Vallaran: suitability of the land for the defense against foreign attacks (Kural, 40). Features of the landscapes of ancient Tamil Nadu.

Soil Preparation

Thiruvalluvar offers some insights into agricultural operations. If a farmer has allowed the plowed land to dry out so that a todi or palam (35 g) of powder dries in a kashi (1/4 palam), i.e. if it is reduced to a quarter (1/4) of the original quantity, there will be no need to land even a handful of eru (manure) (Kural, 1037). The plowing was done several times instead of once. The plow was once called ulavu orusal; twice as much ulavu irusal and many times more ulavu chensal. The land was plowed more deeply than wide. The cattle were used for plowing. Weeds (*Cyperus rotundus*) and crab cavities were destroyed during soil preparation and leveled in wetlands. The crops were grown in beds and canals.

Seasons

The stations were generally classified as: Ilavenil (April-May), Mudhuvenil (June-July), Karkalam (August-September), Kulirkalam (October-November), Munpanikalam (December-January) and Pinpanikalam (February-March) (Martha, 2003). Vengai flowers (*Pterocarpus indicus*) bloom with loose petals and hanging petals grace the black sand lots of the river bed in the spring (early summer) season. Agriculture in the delta region has been classified into two systems: double crop and monoculture. The first was to grow a short rice crop first and then a longer lasting rice crop.

The Tamil Nadu rice growing season varies from region to region. The short crop, in turn, consisted of two varieties: a four-month variety called "Kar" and a hundred-day variety called "Kuruvai". The first was confined to the first stretches of the delta, where seedlings could be grown before the advent of the first rains and with reasonable advance of their certainty, and the second was the most common variety. The second crop grown on double crop land was known as "Thaladi", as opposed to "Mudladi" which was the first crop. The main agricultural economy

consisted in the cultivation of a five month old variety called "Samba". The first harvest season was from June to October and the second from October to February. The single harvest season was from June to January.

Agricultural Tools

Buffalo were used for plowing with a wooden plow. The deep plow was considered superior to the shallow plow. A labor-saving tool called a parambu (leveler) was used to level the rice fields. Water abstraction devices such as amiry, keilar and yettham have been used to extract water from wells, reservoirs and rivers. Tools called thattai and kavan were used to scare away the birds in the millet fields. Traps were used to catch wild boars in millet fields (Source: Tholkappiyam).

Crops Used

The ancient Tamils cultivated rice, black gram (*Vigna mungo*), horse gram (*Macrotyloma unifl orum*), varagu (*Paspalum scrobiculatum*; kodo millet), thinai (foxtail millet), sesame (*Sesamum indicum*), sugar cane (*Saccharum ofi cinarum*), banana (*Musa acuminata*), coconut (*Cocos nucifera*), bamboo (*Dendrocalamus calostachyus*) jackfruit (*Artocarpus heterophyllus*), tamarind (*Tamarindus indica*) and mango (*Mangifera indica*). Varagu was cultivated in the lands of Mullai. Thinai and mochai (*Lablab purpureus*) were grown as mixed crops in the lands of Kurinchi. Cotton (*Gossypium sp.*) And thinai were grown as mixed crops. Rice varieties such as Chennel, Vennel, Salinel, Mudandainel, Ivananel, Kulanel, Thoppinel, Pudunel, Varnel, Aviananel and Torainel were grown. Mungil nel or mungil arisi (bamboo seeds) obtained from bamboo were eaten as food in the time of King Pari (source: Purananuru, 109). Spicy peas (*Cajanus cajan*) and black sheep were grown in the lands of Marutham. Sugar cane was grown using the control basin method at the foot of the hills. The sugar cane variety Kalik karumbu was grown in the Thagadur region during the time of King Adiyaman (Source: Purananuru, 99). Rice, sugar cane, coconut, banana (*Musa x paradisiaca*), areca palm (*Areca catechu*; betel nut), turmeric (*Curcuma domestica*), mango, palmyra, seppa kilangu (*Colocasia esculenta*; taro) and ginger (*Zingiber ofi cinale*). in the valley of the Cauvery River (Kaveri). A veil (2.6 ha) of earth produced about a thousand kalams (one kalam = 30 kg) of rice. The farmer enjoys watching the first rains of the season and listening to the sound of the Cauvery River flowing and the water swirling and rubbing the dams (Source: Silappadikaram).

Seeds and Sowing

Foxtail millet seed was selected from those ears that first ripened. The selected seed was kept only for sowing and was never used as a food cereal. The sowing of thinai seeds (foxtail millet) was also practiced without plowing. It was believed that

such a deviation would destroy the family. The seeds were sown with adequate spacing (Source: Nattrinai).

Crop Rotation

Crop rotation was practiced by raising the black gram after rice. This indicates that the farmers were aware of the benefits of the subsequent rice crop, which we now know to be due to nitrogen fixation in the root nodules of the black gram. The farmers also practiced mixed crops; for example, foxtail millet with *Lablab purpureus* or cotton. Today we know that a balanced diet must contain starch (provided by rice and millet) and protein (provided by *Lablab purpureus*). In coconut and jackfruit plantations, ginger and turmeric were grown as catch crops.

Irrigation

The kings dug cisterns in the places where water flowed from the rains. Semicircular dams were erected adjacent to small mounds and water reservoirs similar to present day dams were erected and constructed. This indicates the awareness of collecting water. King Karikal Cholan (190 AD) brought 1000 slaves from a conquered country (present day Sri Lanka) and raised the dunes of the Cauvery River. The stone dam built centuries ago along the Cauvery River (Kaveri) is still considered an engineering masterpiece today. The 329-meter-long "Grand Anicut" (Kallanai in Tamil) is a huge and effective water diversion device, dividing the river into four streams and irrigating thousands of hectares of agricultural land in the Kaveri Delta. The river water was diverted to the cisterns via canals. It is said that watering should be given in the early morning or late at night and not during the hot midday (Source: Tholkappiyam).

Harvesting and Threshing

A tool called senyam was used to make rice. The threshing of the rice was done by hand with the help of a buffalo (and in large farms by elephants). Manual winnowing was performed to remove chaff. One sixth of the product was paid as a tax to the king. Agricultural workers were paid in kind (Source: Tholkappiyam). The land was plowed immediately after the harvest or water was left in the field to facilitate the rooting of the stubble. These agronomic practices are still recommended today on the basis of scientific principles. Men performed operations that required hard work, such as plowing, while women performed light jobs such as transplanting, weeding, chasing birds, harvesting and sifting (Source: Tholkappiyam).

Marketing

The market square was known as avanam. The products were exchanged by weight. In Madurai (the 'headquarters' of the Sangam poets), there was a grain

bazaar where 18 types of grains and legumes were sold. Customs duties were collected on imports and exports (Source: Tholkappiyam). The Sangam period also saw the rise of various cities such as Puhar, Uraiyyur, Vanji, Tondi, Muzuris, Madurai, Kanchi, etc.

Conclusion

The above account of agriculture from ancient Tamil literature clearly indicates the agricultural knowledge of our ancestors. Following in his footsteps, the current generation of agrarian scientists have used advanced technologies and sought to stabilize agricultural production in our country to meet our food needs.

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