# ASPECTS OF CRAFT PRODUCTION IN PRE-MODERN SOUTH KANARA

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#### Abstract

In any economy, whether it is a macro economy or micro economy, one can notice the existence of different economic activities like agriculture, cattle rearing, craft production and trade. These economic activities are found in the case of the district of South Kanara of Karnataka. However, in this region, agricultural production obtained greater importance due to the existence of fertility of soil and the necessary conditions suitable for the surplus production. One of the conditions which facilitated agriculture was the existence of trade and the location of ports having connections with global trade. When compared with agricultural production, craft production in South Kanara was meagre which catered to the domestic need of the society. Many artisans migrated to South Kanara from Goa, Gujarat, Tamil Nadu, Kerala, Andhra Pradesh and North India. The native agriculturists flourished by investing in trade. However there existed craft production which met the day-to-day needs of the people.

#### Introduction

The studies conducted on the economic history of the peninsular India show that craft production was closely related to agricultural production. This is obvious because Indian economy was basically dependent on agriculture which was the main occupation of the people. And agriculture produced the

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raw materials required for craft production. South Kanara, like North Kanara and many other parts of South India, was known for the availability of facilities for agrarian production. Geographical factors favoured the cultivation of food and commercial crops such as paddy, coconut, sugar-cane, cashew nut, arecanut, pepper and a wide variety of vegetables and fruits. Increased cultivation led to the expansion of the economy. It resulted in advancement of agricultural and industrial production. The techniques of production also underwent changes and improved over the years. However, the people concentrated more on the agrarian production than on industrial or craft production. There were communities like potters, goldsmiths, blacksmiths, leather workers, metal workers, oil pressers, etc., which carried out artisanal activities. Besides these full time artisans, the agricultural producers also took to craft production, particularly during their off-seasons.

The sources of our study, inscriptions, folk traditions, Portuguese documents, English and Dutch records indicate that South Kanara was a region which mainly produced agrarian products and not industrial or craft products. This proves that the main concern of the people of this micro region was production of agrarian commodities rather than non-agrarian commodities. Contrary to this, studies made on other coastal belts of India such as the Coromandel coast, the Bengal region, the Tamil coast and the Malabar region have proved that there was substantial production of craft goods.\(^1\) In fact, Malabar concentrated on the production of pepper and there was also production of textiles and other craft goods. This comparison enables us to understand the regional variations in the country as regards the production of craft goods. This does not mean that there was no considerable production of industrial goods in South Kanara. Different kinds of industries existed in the region. They included oil, pottery, textiles, sugar, jaggery, coir, construction of boats and salt. Besides, there were many traditional artisanal activities carried out by the carpenter, goldsmith, blacksmith, mason, sculptor, weaver, leather worker and others.

# Imbalance between agriculture and industry

Let us examine the probable reasons for this kind of an imbalance between the two sectors of economy in South Kanara. The nature of the economy of South Kanara was influenced by the political structure of the region. During the last centuries of Alupa period and later, different parts of this region were ruled by petty principalities like the Bangas, Chautas, Savantas, Bhairarasas and Ajilas. Below them there were a large number of subordinates called Ballalas and Heggades who wielded influence in different localities. After 11th century A.D., we find the strengthening of the feudal structure with the decline of the Alupa rulers. The Hoysala and Vijayanagara kings only imposed tributary power over this region. These big kingdoms considered South Kanara a place which fetched considerable governmental revenue in terms of land tax and an outlet to maintain trade contact with the outside world. In fact it was the latter reason which forced the imperial powers to control this coastal region which consisted of certain very strategically located ports which were significant for the economic development of the empire. The Nayakas of Ikkeri took interest in the promotion of trade and not in the field of industry. The smaller principalities were more concerned about petty gains and they always indulged in groupism and infightings. They were only keen to exact the land revenue and therefore encouraged agricultural production. Trade in agrarian goods also brought them revenue. Due to the size of their territories and the income they derived from them, these petty kings did not encourage large-scale production of craft goods. Also the people were willing to invest on land and there was commercialisation of agriculture. The economic scenario was that of an expanding agrarian economy. Some of the artisans were landowners and they made donations to the temples. This shows not only their affluence but also the interdependence between agriculture and industry. There are references to the plots of land that were owned by the artisans and cultivated with the help of the peasants. They owned private property known as mûliwara in the region and it was hereditary in nature. Thus absence of a strong political power and lack of royal patronage were perhaps the major factors which inhibited large scale industrial production in South Kanara, Sanjay Subrahmanyam<sup>2</sup> has rightly observed that South Kanara was a grain surplus region. It was always possible to exchange agrarian goods with craft goods. South Kanara was surrounded by the upahat regions which were known for the production of industrial goods like textiles, metal work and others. The sources bear testimony to the fact that there was import of these goods into South Kanara. When there was the easy option of buying craft goods or exchanging agrarian products for craft goods, what was the necessity to produce craft goods in large quantities?

It is argued that the Medieval India witnessed the transition from combination of agriculture and industry to the differentiation between agriculture and industry,

from artisan serving the village community as a whole to serving a single family which paid the artisan in cash or kind. Initially artisanal production was subservient to agrarian production. This system has been described as domestic industry which is "necessary adjunct of the subsistence (natural) economy of the household where the conditions for economic activity are fully or mainly produced in the household..." In the case of South Kanara what we could notice is basically the domestic industry. Here craft production was subservient to agrarian production. And the interdependence between agriculture and industry continued for a major part of pre-modern history. It was only during the later part of 18th and the early part of the 19th centuries that there was specialised craft production with the reference to workshops (kārkhanas) in the kadatas.

But domestic industry was essential to the subsistence economy. K.N. Chaudhuri states that industrial production always played an important role in the economy. The evolution of settled agriculture implied an early and fundamental division of labour expressed in a separation of functions between food producers, artisans and the service people. The actual details of methods of production and the nature of specialisation varied and were conditioned by the overall features of the regional economy. Peasant communities were capable of weaving cotton cloth and other textiles within single households and there were skilled industrial workers, carpenters, blacksmiths, and potters who practised part time crop raising alongside their respective hereditary crofts. A full time craftsman could not earn a living from his manual skill alone if the size of the market was strictly limited. If the size of market and cost of transport were important determinants of industrial production, the existence of surplus cultivable land provided the artisans with natural insurance against any sudden unexpected variations in demand. By being a subsistence farmer the rural craftsman made sure that his family would not be deprived of minimum supply of food.<sup>4</sup> Therefore, the domestic industry and the flourishing agriculture were largely co-existing and formed the two basic pillars of the economy of South Kanara. A distinction is made between industries that were strictly localised and those which served wider market and varied population.<sup>5</sup> The industries of South Kanara were more localised in nature.

#### Migration of Artisans

Douglas E. Haynes and Tirthankar Roy have discussed the migration of artisans in India. They argued that some sections among weavers were always mobile,

always willing to evacuate from regions in decline and move to those showing signs of expansion. The migration was also due to the encouragement given by the ruling class which wanted increased production of textiles in the capital city. The weavers migrated to those ports where there was greater potential for export of textiles. 6 During the Vijayanagara period, the Dévangas migrated from Karnataka and Andhra to the Tamil region due to the expansion of the Viiavanagara empire to the Tamil south.<sup>7</sup> Before the colonial period, the weavers of Andhra, Padmasālis, who produced cotton textiles migrated to Western India.<sup>a</sup> A.I.Tchitcherov has mentioned that the migration of artisans and peasants from their villages was a widespread form of class struggle and there was a certain social mobility among the village community artisans.9 The migration of people might be due to oppressive taxation as mentioned in the Vijayanagara inscription belonging to the period of Achyutadeva Raya. 10 Meera Abraham suggested that the influx of a non-agricultural population into urban areas might have been caused by increased long-distance trade, the development of crafts such as weaving and local trade, all of which would predispose towards the development of urban commercial nuclei. 11

The hypothesis that artisans and servicemen might have migrated to South Kanara from outside is supported by the sources. The Dharmasthala copper plate inscription reveals interesting details.<sup>12</sup> This inscription belongs to Saka year 1622. It speaks about the conflict between the washermen (agasaru) and the musicians (ólagadovaru) since the latter violated the earlier custom of giving respect to the washermen by using the symbol of white cloth. This matter was taken by the aggrieved party to the court. The matter was decided by a reference to the earlier decision taken at Kanchi. The fact that the controversy was settled by referring to an outside region indicates that the people remembered their earlier connections with that region. The inscription mentions many persons and places which are territories outside South Kanara. If they were indigenous people there was no need to refer to an outside territory. There is reference to the grāmapramukhas at the village level. They were Doddachilli Raghava Shettaru and Grāmadhipati Guruya Nayaka. Doddadayalapuri Venkatappa argued in favour of the musicians. Venkatappa of Doddapyatepalya argued in favour of the washermen. Fine was paid to Hagalu (which means day in Kannada), god of Chennapattana. It was decided to follow the earlier rule as enshrined in the Kanchi charter. The reference to people and places outside South Kanara clearly indicates that they had migrated, probably from the Tamil region or other parts of Karnataka. In Kashipatnam or Salur (Karkat Taluk), one dateless Telugu inscription in late

characters is discovered. It records the obeisance of Suryanarayana, son of Tiruvidhula Venkaya.<sup>13</sup> The name indicates that he belonged to the Telugu region and it is quite possible that he might have migrated to South Kanara and settled there with some occupation.

The medieval period saw the migration of artisans. It also saw the migration of Brahmans on the Western coast. The dynasties like Kadambas established Brahman settlements to strengthen their power in the region. The agraharas, the Brahman villages consisted of non-Brahmanical people. They served the Brahmans who did not indulge in any kind of materially productive activities. Thus it was likely that there was the migration of artisans to South Kanara from other parts of Karnataka and the Peninsula. The ports of South Kanara like Mangalore, Basrur, Gangolli, Baindur, etc. did not attract the settlement of artisans within their borders. Skilled labour generally come into work from outer suburbs. Artisans such as carpenters, stone masons, goldsmiths and others flocked to the ports. All these were taxed on caste basis and the caste heads were used in collecting taxes and paying the state. 16

#### Industries and their Products

Our sources do not give considerable information on industrial production during the Alupa period. But during this period several Shaiva temples were built and also several inscriptions were issued by the Alupa kings. Therefore, we can infer that there was some amount of artisanal activities during this period. The Hoysala period witnessed certain artisanal activities in South Kanara. The inscription of the Hoysala queen Chikkayi Tayi dated 1334 A.D. mentions the construction of a wooden bridge and its maintenance. The grant was given by Chikkāyi Tāyi for the maintenance of the wooden bridge constructed across the river which touched the western part of Barkur and encircled Bennekudru, a small island to the west of Barkur. The stone poles were installed in the river on which a wooden framework with wooden planks was placed. This bridge connected Barkur with Bennekudru which was well known for sugar-cane and coconut cultivation. Width of the bridge could be about four feet as it was made of three planks. Income from Hārady, a part of Brahmāvara-west, administered by Tirimalesvara Nayaka was set apart for the maintenance of this bridge and the responsibility of maintaining this bridge was that of Tirimalesvara Nayaka himself.<sup>17</sup> This shows that there existed a class of carpenters who worked in the public projects initiated by the state.

The inscriptions allude to the existence of artisanal activities. Madivālas or washermen had a separate colony called Madivālbettu. 18 There was also the existence of Bestarabettu or colony of fishermen. Temples employed a large number of people who performed different functions. Potters employed by the temples were paid through agricultural produce. The Barkur inscription dated 1359 A.D. refers to the payment of five mudes of paddy for the potters for one year.<sup>19</sup> The same inscription also refers to the payment through agricultural produce to the carpenters who did the work of the math. There were pipers or olagadavaru who formed a separate class of Sappaligas or Seregaras or Devadigas. These artisans and servicemen were employed by the temple.<sup>20</sup> Inscriptional evidences show that grants were given to persons who cleaned the temples. They allude to Maletharu, that is, land granted to the people who supplied male or garland for the worship of God in temples.<sup>21</sup> The potters had to supply panate or hanate (earthen lamp) and their work is mentioned as kumbāragarike.<sup>22</sup> The Tulu proverbs refer to oil maker. goldsmith, potter, leather worker, blacksmith, weaver (Jédarava)<sup>23</sup> and their activities in the society of South Kanara.

Another record dated 1377 A.D. refers to the payment to the ladies who rendered services to the temple. It mentions that two persons who did châmaraseve were paid two nădahanes daily. It mentions that Basavetti was paid two mûdes and two hānes for the whole year.<sup>24</sup> The Kukke Subrahmanya inscription belonging to Saka year 1309 mentions that potters Mudiya Setti and Belli Setti were the joint donees of land grant which consisted of the bowers and betel-nut, mango, jack and pepper groves and the tax amount of four nishkas. 25 This land grant would have certainly made these potters affluent in the society. An inscription belonging to Udupi Taluk dated Saka year 1323 refers to Virachari's son Nambiyachari.26 Even though the profession of the achari (an artisan working in metal or wood) is not mentioned here, we may presume that artisanal occupation had become hereditary and was pursued by particular castes. We find references to artisans owning land. There is reference to the garden of achari.<sup>27</sup> This is not surprising because there existed the practice of remunerating the temple servants through assignments of land. Besides, as noted earlier, many of the land owners also took to craft production. An epigraph of 1402 A.D. mentions badagiya bayalu (carpenter's field) which reveals ownership of paddy fields by the carpenters.<sup>28</sup> This inscription also mentions kumbaradi, a place inhabited by kumbāras or potters. An epigraph belonging to A.D. 1546 mentions the field owned by potter.<sup>29</sup> It

is possible that artisans had established their own maths. One inscription belonging to A.D.1562 mentions akkasõleya mathoda gadi.30 lt seems to be a usual practice to build maths by rich communities. An inscription belonging to A.D.1608 mentions the property of potters (kumbāra hakala vivara).31 The artisans owned both kinds of lands, wet and dry. The bettu lands indicate the dry character of the land owned by the artisans.<sup>32</sup> However there are references to wet lands owned by artisans. There is reference to badagiya bayala gadde and accukottariya gadde. 33 The remuneration of the artisans was poid both in kind and cash. The Uppunda inscription dated Saka 1369 registers gift of land for providing Panchavādya during the Œribali service in the temple.34 Another inscription dated Saka 1405 registers gift of land for the maintenance of the piper who played during the Œribali service in the temple.35 This practice of giving land grants to the artisans and other servicemen prevailed in other parts of South India also. In fact, in South India most of the villages consisted of the artisans and servicemen who were given land grants. The remuneration in kind was called ayam or aya and craftsmen were known as ayagars. There is reference to the artisans like potter, blacksmith, goldsmith, carpenter, shoemaker and others who were attached to the villages and a share of the peasant production was given to them.<sup>36</sup> Chennaya pāddana mentions the potters (odāri or kumbāra) 37 Koti and Chennaya went to one Abbu, the potter and asked: "We have given you a kalase of paddy, where are small and large earthen vessels?"38 The Bailuru kadata mentions that Kumbaro Chikku borrowed a loan from the rich merchant of the region.<sup>39</sup> This indicates that some of the merchants of the region had already emerged as moneylenders. The poorer artisans and farmers would have borrowed loans from them.

The corpenters, stone cutters and sculptors were in great demand. In the preparation of huge wooden cars (chariots) and wooden images of gods and goddesses, carpenters exhibited their skill besides doing their part of the work in building temples and other structures. The wooden chain and the beed in the Panchalingesvara temple and the wooden images in the Mahishasura temple at Mudukeri, Barkur, are some of the examples of their craftsmanship. Huge wooden figures called *tattirāyas*, used for procession, also provided the opportunity for the carpenters to exhibit their skill.<sup>40</sup> Copper brought from outside was used in Barkur for preparation of vessels and taken inland for coinage.<sup>41</sup> In South Kanara, during the Vijayanagara period and also during the Keladi period, there existed two minting places, at Mangalore and Barkur.<sup>42</sup>

It is possible that artisans were employed by the state to produce the coins. The main duty of the officer of mint house was to maintain the purity and weight of coins that were produced in his mint. This was done with the help of the goldsmiths who were appointed by the government. This means that they were the government servants and not private artisans.<sup>43</sup> This was another means of introducing alien artisans into South Kanara. These artisans always used to carry with them necessary instruments to check the purity and weight of the coins. They were very shrewd and had mastered their profession.<sup>44</sup> Even a petty principality like that of the Bangas had its own gadyānas.<sup>45</sup> The copper plate inscriptions refer to wood work and copper work in Karkala.<sup>46</sup>

There are not many inscriptions mentioning kallukuttigas (stone cutters or sculptors). Nevertheless, we cannot undermine their importance. The stone inscriptions, beautiful sculptures and temples suggest the role that they played in South Kanara. Besides doing their work as sculptors, they engraved inscriptions and thus helped the rulers to publicise their orders and commemorate their munificent deeds.<sup>47</sup> The Kallukuttiga päddana<sup>48</sup> mentions the activities of the stone workers. It mentions the construction of Jain monuments in Karkala. 49 The existence of Brahman and Jain settlements must have facilitated the craftsmanship of the stone workers because there was the need for the construction of temples and basadis. The artisans are referred to as Acchava in Kallurti pāddana. The artisans are also known as Vishwakarma Brahmans and Panchalas. The Kallurti pāddana mentions Kanchidesa.50 This must be a reference to Kanchi of Tamil Nadu which was an important trade and craft centre during the historical times. There is a tradition that artisans migrated from Kanchi to Vijayanagara. Vishwakarmas of Karnataka even today send their contributions to Kanchi. Those who collected these contributions are called Ponos Makkalu, who followed the traditional occupation of collecting money to be given to Kanchi.<sup>51</sup> The paddana also mentions Aigundi samsthana which is actually a reference to the math of Vishwakarmas of Anegundi.<sup>52</sup> When South Kanara became a part of Vijayanagara empire, artisans migrated from Andhra and other parts of the Kannada region. All the artisans did not migrate to South Kanara at the same time. Looking at the architecture of the region, it can be held that stone workers came here during the 7th - 8th century A.D. Later during the rule of Cholas, bronze workers might have come during the 10th century. During the period of Hoysalas stone workers came from Belur and Hasana. During the Vijayanagara rule many artisans came from Hampi. Other artisans,

for example, carpenters and blacksmiths migrated from Kerala and Shimoga. The påddana refers to tacchavaru from Malenadu. Earlier there existed the non-aryan blacksmiths who produced iron goods. The pāddana refer to them as karbatigare or kadtalegare. Later there was the migration of aryan bronze workers who were called kanchugaras and they migrated from Kanchi. There was the migration of gold workers from North Karnataka.53 In the Kalikamba temple at Barkur there is a figure of camel. Since camel was a rare animal in South Kanara it is possible that this was the work of an artisan from North India. $^{54}$  In South Kanara there exists a community of artisans who are goldsmiths called Daivajna Brahmans. They are supposed to have migrated from North India.55 The attempt to call themselves Brahmans indicate the influence of the brahmanical ideology on them and also their interest to occupy an important position in the ritual hierarchy in the graded brahmanical society. Some of the artisans were called acharya or achari, which means they were master craftsmen and they had a few apprentices. Kenneth R.Hall suggests that this distinction between acharya and 'superintending' artisans on the one hand and labouring artisans on the other may also be seen as a response to the spread of Brahmanical ideology.56

The busy trade and commerce on the Kanara coast facilitated the growth of a number of main and allied industries. The existence of several *kéris* (streets) at Barkur, Basrur, Karkala and Mudabidre represented possibly the various industries run by different guilds and the settlements of artisans. Rich Jain merchants and guilds, employing skilled labourers irrespective of religion or coste must have run many of these industries.<sup>57</sup>

# Production of Textiles for domestic consumption

We come across references to Patasalakeri in Barkur. The community of weavers was dominant among the settlers here and the name Patasalakeri denoted the settlement of weavers. The term patta or pata meant cloth, fine cloth, silk cloth, etc. and pattasaliga was a silk weaver. Hence we may think that the Saligas or weavers produced silk cloth here. Virabhadra was the chief deity of weavers. In Karkala when there was the ceremony to install the statue of Gamatesvara, the Acharyas were given silk cloth by the king Vira Pandya and we do get reference to cloth shops. The tracts round about Mangalore were industrial centres. Kavuru, Boluru and Irvaduru (Urwa) were centres of cloth manufacture.

Salera keri meaning street of weavers. Earlier there existed the settlement of weavers. <sup>62</sup> In the neighbouring district of North Kanara there were the settlement of Patsālis or silk weavers who were said to have come from Mysore. Their family goddess was Durga Parameshwari whose shrine could be seen at Haladi near Kundapura in South Kanara. In North Kanara there were the settlements of Jādas or handloom weavers and Padmasālis. <sup>63</sup> This indicates that weavers of South Kanara and North Kanara had certain relations and they might have migrated from the same place. The Baindur inscription dated Saka 1371 mentions saleyavaru which might be a reference to the weavers. <sup>64</sup>

The Bobbarya pāddana, which belongs to pre-14th century period, gives names of cloth manufacturing centres. King Dharma finished his toilet at the hands of the barber and asked his followers to tell him the remedy for having touched the barber. They advised him to take an oil bath in a tank which was constructed for the purpose; and when he had finished it, his servants asked their royal master from where they could get the silken clothes with which they could wipe off the water from his head. Then the king replied thus: A black silken cloth manufactured at Kavuru, a white silken one made at Boluru, a silken cloth called sopu kambali, a silken cloth made at Iravaduru, a silken cloth of which one piece could stretch to three hundred gavudas (1 gavuda = 12 miles), a silken cloth which could be soaked with a tear, and a silken cloth which could be hidden between the nail and finger were required. All the silken clothes were brought and the king dried his head with them.65 This paddana is useful in understanding the social custom, silk manufacturing centres in and around Mangalore and the quality of silk produced in South Kanara. However, the pāddana is not free from exaggeration, for, the length of a piece of silk cloth is said to be 3,600 miles!

Kavuru, Boluru and Iravaduru were silk cloth manufacturing centres. They are often mentioned in the pāddana as places where silk cloth was manufactured. Boluru has still some families of traditional weavers. The Ballala of Parimale reared the children (Koti and Chennaya), supplied them with food, a mura of rice, and a piece of thick pachade cloth, and a mandari. He also presented them with a white silk cloth from Boluru, a black silk cloth from Kaluru (Kavuru) and a girdle.<sup>66</sup>

Cotton was one of the agrarian products from which the state received some income.<sup>67</sup> This raw material was used for the production of cotton cloth. The

Italian traveller Pietro Della Valle described the Bazar of Ullala where there was the sale of abundant white striped linen cloth, which was made in Olala (Ullal), but coarse, such as the people of the country used.68 reference to the green and dark red finer varieties of cloth which was used in the royal houses.69 The production of these finer varieties of cloth needed advanced technology which was not available in the region. It was possible that these varieties were imported from outside. The fact that finer varieties of cloth was imported from outside regions is proved by the reference to Chinese silk in the inscriptions. The German traveller Mandel Sella who visited India in 1638 stated that there was import of cotton thread and washers cloth to Mangalore and other ports of Malabar. 70 Francis H. Buchanan wrote that raw silk was exported from this place. Also there was import of cloth, cotton thread and blankets.71 There was the import of blue cotton cloth from Surat, Cutch and Madras, coarse white cotton cloth from Cutch, Bavanagar, and other places north of Bombay. Raw silk for the use of manufacturers above the ghats was imported from China and Bengal. Buchanan noticed that much of the cloth used in the country was brought from above the ghats partly by the merchants of this place and partly by those of Bangalore and Cuddapa.  $^{72}$ 

Sturrock observed that there was no much weaving carried on in Kanara. The Sāles were the most numerous, and they as well as the Dévāngas were of Telugu origin. The Jādas were the Kanarese. The Dévāngas were a caste of weavers found in all parts of Madras Presidency. They were divided into two large linguistic sections, the Telugu and Kannada Dévāngas; the former were usually called Dévāngas while the latter were known as Jādas. <sup>73</sup> Sāles were the class of Telugu weavers. The most important sub-divisions of the caste were Padma Sāle and Pattu Sāle. Many of them were Lingayats and followed the customs of that sect. The Patvegārs were a Kanarese caste of silk weavers. The Biimaggas were a weaver caste of Tulu origin. They spoke a corrupt dialect of Tulu called Poromba.<sup>74</sup>

#### Production of Salt

We find reference to the production of salt in the coastal region of South Kanara. There are several place-names of South Kanara which are etymologically connected with production or sale of salt. These are Uppinagadi (shop of salt), Uppuru (place of salt), Uppina Kote (fort of salt), etc. There is reference to the salt producing places like Uppina agara (place where salt is

available in plenty) 75 and Uppina kala (well of salt). 76 An inscription from Kundapura dated A.D. 1451 states that a gift of 48 honnus (gold), which was the income from the salt pans in Kundapura was made to Joyisa Hariyappa.<sup>77</sup> The Murukeri inscription belonging to Saka 1407 registers a gift of duties on salt made to the temple of Somanatha at Murukeri by Virupaksha Odeya.<sup>78</sup> The above references indicate that there was the indigenous production of salt in South Kanara and the state derived income from it. 'Salt was produced in the coastal regions like Kundapura, Kotesvara, Borkur, Udyavara and Pavanje. The Queen of Ullala imposed and collected tax on salt. 79 According to Buchanan, salt was made on this coast by a process similar to that used in Malabar; but the quantity manufactured was very inadequate to meet the demand of the country. The man who manufactured it got from the Government an advance of five Pagodas in cash, and of rice to the same amount. He repaid the money, but not the rice, and paid on an average a tax of 43 Pagodas; so that in fact Government got from him 38 Pagodas for an ordinary salt-field. Larger and smaller ones paid in proportion. The manufacturer sold his salt as he pleased. It was mixed with a considerable quantity of earthy impurities, but not with more than the common salt of Bengal contained. The common price was one Pagoda for 1120 seers. 80

### Jaggery and Sugar

There are references to the production of sugar-cane in the inscriptions. It was mostly used in the manufacture of jaggery and sugar. Sugar was imported from the ghat region.81 One inscription belonging to Saka year 1353 mentions the import of sugar, the sale of which was restricted by the trade guilds. According to this inscription there arose conflict between the traders of Murukeri and Chaulikeri regarding the sale of sugar. This record prescribes certain regulations for the sale of sugar brought by local and foreign merchants from above the ghats. It states that merchants of Chaulikeri and Murukeri should collectively weigh and store the stock of sugar and that whatever quantity remained unsold should not be taken to Murukeri but should remain in the storehouse to be sold in times of demand.82 Sugar was brought from outside and it was sold here by the merchants. 83 Similarly jaggery was also imported. 84 In Karkala there was a shop which sold jaggery.85 During the Keladi rule there was the export of jaggery from the ports of South Kanara.86 Buchanan noted that in South Kanara only small quantity of sugar-cane was produced, mostly by the Christian populace. Ullala was famous for sugar-cane cultivation

and a special variety of jaggery known as Ullala jaggery was manufactured. There were two kinds of canes: the white and black canes (bili and kari kabbu). The same field was not used for the cultivation of sugar-cane every year; between two crops of sugar-cane, two crops of paddy were raised. Rotation of crops was required for sugar-cane cultivation. A piece of land that sowed one mora of rice produced 4000 canes. These canes were about six feet long, and sold to the jaggery boilers. Hundred canes were priced anywhere between 50 Paise and one Rupee. The tax levied on the field cultivated with sugar-cane was the same as that cultivated with paddy. The want of firewood was the areatest obstacle to sugar-cane cultivation, the thrash or expressed stem was not sufficient to boil the juice into jaggery. This operation was performed in earthen pots placed over an open fire. According to Buchanan, the jaggery manufactured in South Kanara was hard, black and of a bad quality. Three maunds of jaggery valued one Pagada. 87 Perhaps in South Kanara there was no superior quality of jaggery and sugar manufactured in sufficient quantity and these goods were imported from the upghat regions. Nevertheless, jaggery was exported from South Kanara. This was not just due to the local production but also due to the import of jaggery from outside. Like many other goods iagaery also figured in the entrepot trade.

## Metal, Wood and Leather Works

There were goldsmiths and craftsmen who worked on metals. The large number of temples, the gold, silver, copper as well as bronze work in these temples, the minting of coins and manufacture of wide varieties of industrial and agricultural implements indicate that there existed skilled artisans who produced metal goods. The role of blacksmiths cannot be exaggerated in the agrarian economy which depended on the iron-tipped wooden plough cultivation. Pietro Della Valle mentioned that in the Bazar of Banghel (Bangas) were found goldsmiths who made knives and scissors adorned with silver which were very cheap and other products like toys. 88 Linschoten said that people of Kanara and Deccan were experts in craftsmanship and also worked in gold and silver metals.<sup>89</sup> In Basrur there is one place called Chinivarakatte, and according to tradition there existed the jewel makers. In Basadi keri of Basrur existed the artisans like Kanchugaras and Chinivaras. 90 Keris of Kanchugaras existed in Karkala also.<sup>91</sup> They produced copper and bronze goods. The Sarala Jumadi paddana refers to the streets of kanchikaras. 92 The Mangalore inscription belonging to Saka 1550 records the details of the repairs (jimoddhara) and fixing up of copper sheets in the garbha griha and nandi mantapa of the Kotesvara temple by Mrityunjaya Vodeyar of the treasury (Chinna Bhandara). <sup>93</sup> An inscription on a metallic dipasthambha in Kollur states that the kambha (pillar) was the work of Pandappa, son of Sonnari Yollappa. <sup>94</sup> There are references to blacksmiths who worked in the mint houses. An inscription belonging to A.D. 1726 mentions Subbachari who produced the iron rods for the mint houses in the Keladi kingdom. <sup>95</sup>

In North Kanara there existed the Sonars or goldsmiths who were said to have come from Goa on its conquest by the Portuguese in 1510 and the subsequent policy of religious conversion and inquisition. They were called Panchals and took the title of Shet after their names. They had religious affiliation to the Vaishnaya monastery of Udupi in South Kanara. 96 The Sonars or Sonagaras formed an important group of goldsmiths in South Kanara too. They spoke Konkani and were said to have migrated from Goa. 97 There were also Akkasalis or goldsmiths who migrated from Shikaripur in north-west Mysore. They were divided into two classes: Akkasalis or goldsmiths and Kanchugaras or braziers. 98 Sturrock wrote that artisans in Kanara were generally of Kanarese rather than Tulu origin, as they mostly spoke Kanarese and followed the ordinary rule of inheritance. Akkasalis were goldsmiths of Tulu origin, but a number of them worked in iron, brass and wood also. They were religiously affiliated to the Swami of Anegundi. Like all artisan castes they worshipped the implements of their craft once a year. They styled themselves as Achari. Kanchugaras were a Kanarese caste of brass workers. They had religious connections with Lord Venkataramano of Tirupati.99

In South Kanara carpenters were known by names like Chaptegar, Kolayari, Charodi, Gudigar and Muvvari. Chaptegars spoke Konkani and they were believed to have come from the Konkan country. They had religious connections with Sringeri math. Charodis were Kanarese carpenters corresponding to the Konkani Chaptegars. Gudigaras were Kanarese craftsmen and were expert woodcarvers and painters.<sup>100</sup>

The pāddanas support the fact that there existed craftsmen with specialised skills. Folk literature provides information on shipbuilding. The Bobbarya pāddana says that they saw a fine ponne tree and a siruva tree, and berpaloyi tree, for the keel of ship and a teak tree fit for the planks. They called a carpenter. They cut down the trees and made them into logs by measure.

They cut off the top for the mast of the ship, and a trunk of a tree for the ship. They made hole in the trees and tied ropes and strong creepers to them and drew forth the trees. They dragged the trees to a higher ground at the junction of the rivers. They sent for Mallenadecchava and made him build a ship. They made seven decks in the ship, an office for business, holds for keru and haruve planks, a well, a cow-stall, a room for children and women, boxes for pearls, gems, diamonds, and carbuncles and also for rice and paddy. In this way they built the ship and finished the whole work. The fishermen gave a silken sail, a mast, an anchor and nails. They drew up the ship on the sea shore. They fastened the ropes and made straight a small mast. 101 The selection of the wood and construction of the ship with elaborate arrangements within it bear testimony to the craftsmanship of the carpenters. The paddano of Kallurti says that the first son of Travadi and Sambhu Kalkuda became a carpenter, the second a blacksmith, the third a goldsmith, the fourth a coppersmith and the youngest a stone mason. 102 The Koti Chennaya pāddana says, "Go to the bell-metal smith, and get small bells of bell-metal. Go to the black-smith, and get a shield for your dagger... and they got all the toys in three days which ordinarily required about twelve days to make..."103 Koti and Chennaya killed a blacksmith because he could not repair the iron instruments which they needed for ploughing. 104 These details indicate three aspects, that is, (i) each village consisted of different artisans who served the village community. (ii) order was given for the production of certain goods, and (iii) payment was made in kind.

There was the system of paying wages in kind. The Ballala of Mardal, who intended to propitiate the Panjurli bhuta, got together carpenter and workmen in order to build a sthana. The Ballala called the carpenters to him and went with them to the forest. He saw good trees and asked the carpenters and got them felled at their suggestion. Then the Ballala gave to each carpenter one tender coconut and one pot of water and quarter seer of jaggery. They got ready planks and posts for the sawyers. After they reached the house of Ballala they were given their wage (batta) which consisted of rice, coconuts, salt, tamarind, chillies, curry-stuff, and onions and everything else they needed. 105

When the Portuguese came to South Kanara in the 16th century they needed a large number of skilled and unskilled labour. They used both indigenous labour as well as skilled workers brought from outside. The local principality

Bangos supplied large number of carpenters and other workers who assisted the Portuguese engineers in the construction of forts. The construction of Gangolli fortress involved the labour of a thousand spade-men and miners, masons and carpenters and two engineers - Torral and Frias. With the increased external trade there was always demand for the local craftsmen like carpenters. The skill of the local craftsmen was utilised by the local traders for the construction of different vessels. 107

Samagaras were the principal caste of leather workers; the Chakkilis who were very few in number were Tamils, and the Madigas were Telugus. Samagaras were divided into two endogamous groups, the Kanarese Samagaras and Arya Samagaras. The latter spoke Marathi. The Sarala Jumadi pāddana refers to the street of Samagaras. Samagaras are referred to as those who manufactured leather chappals. The goldsmith, blacksmith, carpenter, cobbler and other craftsmen produced ornamental and consumable goods in different localities and these items were sold by these artisans in the local markets and fairs and consumed by the local populace. Thus these artisans performed immediate services.

The village carpenters, blacksmiths, masons and others supplied the simple needs of agriculturists and craftsmen to a large extent and were remunerated by grants of land, fees and perquisites. But industries such as dyeing, tanning, etc., which catered to a wider market were for the most part localised in certain towns and villages or groups of villages. A feature of Indian manufacturer which struck every foreign observer was the paucity and the simplicity, amounting often to crudeness, of the tools and equipments used. In fact all the artisans were in the habit of carrying their tools and other appliances as they moved from place to place. First among manufacturers came cotton textiles which were produced in large quantities throughout the country. Another major industry was iron making and smelting. The artisans produced their goods to cater to the needs of the local markets and fairs.

#### Oil Production

Production of oil was an important industrial activity that thrived in South Kanara. In the inscriptions there are references to gana, the machine used for extraction of oil. The gana could be run by hand as well as bullocks. The

Kotesvara inscription belonging to A.D.1377 refers to gana manenne. The Sankaranarayana inscription dated Saka 1302 records a grant of some land and an oil mill by the Mahapradhana Mallaya-Damnayaka for offerings and lamps to the god Sankaranarayanadeva of Kodagi. When there was competition for the production of oil the state took interest in protecting the local oil producers. In fact, the Keladi king Somashekhara Nayaka insisted that the Portuguese should not establish oil mills in Mangalore and Basrur. De Basrur kadata belonging to 1745 A.D. makes a specific reference to the existence of the artisans who produced oil. These ganigas are mentioned as being indebted to the rich merchants of the locality. In this kadata there is also reference to the shop owned by the son in law of Ganiga Venkatayya. This indicates that sometimes the producer also was the seller of his produce in the shops at the trade centres. The Bailuru kadata refers to ganada Appaya as being indebted to an important trading family of the region.

Tôdakukkinār pāddana refers to people who worked in the oil mill. In Koti Chennaya paddana there is reference to two kinds of oil mills: kai gāna (oil mill worked with hand) and hoi gana (oil mill worked with bull).<sup>118</sup> Here we find reference to the oil makers as one of the tenants of the land. Todakinara ordered eight tenants of the land, which included the oil makers, to build a motha there and they built one.<sup>119</sup> Koti and Chennaya went in search of one Sanku, the oil maker and asked: "Where is Sanku the oil maker? We have given him a kalase of oil-seeds. Where is one-fourth of maund of oil?"<sup>120</sup>

Sturrock wrote that Ganigas were the oil-pressers of Kanara. The Ganigas were subdivided into three sections. These sections were Hegganigas who yoke two oxen to a stone oil mill; Kiriganigas who made oil in the wooden mills; and Ontiyeddu Ganigas who yoke only one animal to the mill. They were said to have originally come from Mysore. Their guru was the head of the Vyasaraya math at Anequandi. 121

#### Workshops and large scale industrial production

An important aspect that is mentioned in the Basrur kadata<sup>122</sup> is the existence of workshops (kārkhanes) which indicates production of craft goods in comparatively large scale. There is reference to Yarakada Kārakhani, Nambiayya's kārakhani, kārakhani of Hosangadi. The last reference may

indicate that in Hosangadi there existed only one workshop. The reference to Nambiayya's Kārakhani means that individuals owned the workshops. Payment was made to these workshops in terms of gadyana and hana. There is reference to lābhakuli paid to the workshops. In one context lābhakuli is mentioned as 6 gadyanas and 1 hana, while in another context it is mentioned as 7 gadyanas and 3 hanas. It is possible that these workshops were large scale producing centres where, those who needed the goods gave order for production and artisans were employed by the moneyed class who gave wages to these artisans. Obviously the artisans themselves were not in a position to invest huge capital.

#### Conclusion

Thus there existed different artisan communities generally carrying out their respective professions. They produced not only for themselves, but also for the rulers and the ruled. Some of the artisans also owned land. Similarly some of the land owners took to craft production too. Sugar, jaggery and oil production depended on agriculture for raw materials. Textile and salt production were two major activities that flourished in the region. Wood, metal and leather works and pottery met the day to day requirements of the people. Thus what existed in South Kanara was a domestic industry that was localised in nature.

#### Endnotes

- <sup>3</sup> Vijaya Ramaswamy, Textiles and Weavers in Medieval South India, Delhi, 1985; Surendra Gopal, Commerce and Crafts in Gujarat, 16<sup>th</sup> and 17<sup>th</sup> Centuries: A Study of the Impact of European Expansion and Pre capitalist Economy, New Delhi, 1975; S. Jayasheela Stephen, The Coromandel Coast and Its Hinterland: Economy, Society and Political System, Delhi, 1997.
- <sup>2</sup> Sanjay Subrahmanyam, 'The Portuguese, the port of Basrur, and the rice trade 1600-50', in idem, (Ed.), Merchants, Markets and the State in Early Modern India, Delhi, 1990, p. 20. <sup>3</sup> Alexander I Tchitcherov, India Changing Economic Structure in the Sixteenth Eighteenth Centuries Outline History of Crafts and Trade, Delhi, 1998, P.25. (henceforth India Changing Economic Structure) After discussing the domestic industry he goes on to argue that due to gradual feudalisation of the economy there was the creation of the separate class of the artisans who emerged from the peasant community. See pp. 25-28. This argument may be applied in the case of South Kanara also.
- <sup>4</sup> K.N.Chaudhuri, Asia Before Europe: Economy and Civilization of the Indian Ocean from the Rise of Islam to 1750, Combridge, 1990, p.298.
- <sup>5</sup> Ibid P.301. Chaudhuri further says that "the distance scale of local production, even when

it was not confined to the immediate locality of a particular village, seldom exceeded one day's travel on foot or by slow-moving carts. Production for the inter-regional or transcontinental trade on the other hand involved much longer journeys and called for an elaborate commercial organisation." The craft production in South Kanara was a localised

- <sup>6</sup> Douglas E. Haynes and Tirthankar Roy, 'Conceiving mobility: Weaver's migrations in precolonial and colonial India' in Indian Economic and Social History Review (henceforth 1ESHR), XXXVI, Number 1, Jan-March 1999. p.36.
- <sup>7</sup> Ibid, p.43.
- <sup>8</sup> Ibid, p.55.
- Alexander I. Tchitcherov, India Changing Economic Structure, p.39.
- Annual Report of South Indian Epigraphy (henceforth ARSIE), 1916, No.69.
- Meera Abraham, Two Medieval Merchant Guilds of South India, Delhi, 1988, p. 117. <sup>12</sup> Keladi Gunda Jois, "Dharmasthaladalliruva Tamrashasana" (in Kannada), Lochana (Publication details are not available).
- <sup>13</sup> ARSIE, 1953-54, No.340.
- <sup>14</sup> See Kesavan Veluthat, Brahman Settlements in Kerala: Historical Studies, Calicut, 1978; Nagendra Rao, "The Historical Tradition of South Kanara and the Brahmanical Groups: A Study of Gramapaddhati and Sahyadrikhanda", Unpublished M.Phil. Thesis, Mangalare University, 1995, p. 22.
- 15 S. Arasaratnam, Maritime India in the Seventeenth Century, Delhi, 1997, p. 16.
- 16 lbid, p.225.
- <sup>17</sup> B.Vasantha Shetty, "Barakuru A Metropolitan City of Antiquity", Unpublished Ph.D. thesis, Mysore University, 1985, pp.137-139, (henceforth Barakuru)
- 18 ARSIE, 1931-32, No.282.
- 19 SII, Vol.VII, No.334.
- 20 B. Vasantha Shetty, Barakuru, p.401; B. Jagadish Shetty, "Agro-Economic Relations and Social Structure in Dakshina Kannado (A.D.1000-1600)" Unpublished Ph.D. thesis, Mangalore University, 1992, pp. 182-183. (henceforth Agro-Economic Relations)
- 21 Stt Vol. VII, No.377.
- 22 Ibid, No.330.
- <sup>23</sup> B.A.Vivek Rai, Tulu Jonapada Sahilya (in Kannada), Bangalore, 1985, pp.475-478.
- 24 SH, Vol. IX Part II, No.417.
- 25 K. V.Ramesh, 'No. 13-Kukke (Subrahmanya) Grant of Madhavaraja, Kali 4488 and Saka year 1309' in Epigraphia Indica, Vol. XII, 1975-76, p.121.
- 26 SII, Vol. VII, No.267.
- 27 Ibid, No.342.
- 28 Ibid, No.324.
- 29 Stl, Vol. IX Part II, No. 620.
- 30/bid, No.673.
- 31 Ibid, No.694
- 32 B.Jagodish Shetty, Agro-Economic Relations, p.117.
- 33 SII Vol. VII, Nos.324 and 390.
- 34 ARSIE 1929-30, No. 553.
- 35 Ibid, No.552.
- Alexander I. Tchitcherov, India Changing Economic Structure, p. 46.
   B. A. Vivek Rai, Tulu Janapada Sahitya, p. 178.
- 38 Indian Antiquary, Vol. XXIV, p. 151.
- <sup>39</sup> Unpublished kadata (undated) which I found in the house of Manjunath Shenoy, Gangolli. This kadata may be dated to late 18th century.
- 40 B. Vasanth Shetty, Barakuru, p.402.
- 41 Ibid, p.314.
- 42 There is reference to 'Barakura gadyana' in SII, Vol. VII, Nos. 223, 231. 'Mangulura gadyana' is referred in the same volume, Nos. 189, 223.

43 A.V.Narasimha Murthy, Vijayanagarada Nonya Sampattu (in Kannada), Mysore, 1996, p.20.

44 Ibid, pp. 20,52.

- 45 Y.Umanath Shenoy, Karkalada Sri Gomatesvara Charitre (in Kannada), Ujire, 1991, p. 38.
- 46 Ho.Na.Nilakantha Gowda and M.G.Manjunatha, 'Mudabidare Jaina Mathada Aprakatita Tamra Shasanagalu'(in Kannada), Itihasa Darshana, Vol.14, Bangalore, 1995, p.62.

<sup>47</sup> B.Vasanth Shetty,Barakuru, p.403.

- 48 Paltadi Ramakrishna Achar, Kalkudo Kallurti Samskriti Shodha (in Kannada), Puttur, 1998, pp.17-25. (henceforth Kalkuda)
- <sup>49</sup> For details on Jainism in South Kanara, see, P.N.Narasimha Murthy, "Jainism on the Kanara Coast", Unpublished Ph.D. thesis, Mysore University, 1983 (henceforth Jainism); K.G.Vasantha Madhaya, Religions in Coastal Karnataka 1500-1763, Delhi, 1985.

<sup>50</sup> Paltadi Ramakrishna Achar, Kalkuda, p.49.

- <sup>51</sup> Ibid, p.51.
- 52 Ibid, p.52.
- 53 Ibid, pp. 55-56.
- 54 Ibid, p.68.
- 55 Ibid, p.66.
- 56 Kenneth R. Hall, Trade and Statecraft in the Age of Cholos, New Delhi, 1980,

<sup>57</sup> P.N.Narasimha Murthy, Jainism, p.475.

58 One Mudabidre inscription mentions chinapatta, which means silk cloth. Stl, Vol. VII, No. 196.

<sup>59</sup> B. Vasantha Shetty, Barakuru , p.276.

40 Y.Umanath Shenoy, Karkalada Sri Gomateswara Charitre, pp.33, 38. (henceforth Charitre)

<sup>61</sup> S. Silva, Managlore, Ankola, 1956, p.16.

62 B. Lakshminarayana Upadhya, 'Pravasigara Tana Basruru Nagara Noda Banni' in, Hesorada Pattana Basaruru Ondu Adhyayana (in Kannada), Basrur, 1997, p.12. (henceforth Basaruru)

3 James M. Campbell, Gazetteer of the Bombay Presidency Vol., XV, Part 1, Kanara, Bombay, 1883, p.275.

- 64 K.G. Vasanthamadhava, 'Baindurina Eradu Shilashasanagala Adhyayana', (in Kannada) in Itihasa Dorshana, Vol. 14, Bangalore, 1995, pp.144-145.
- 65 Indian Antiquary Vol., XXIII, p.98; B.A. Saletore, Ancient Karnataka, Vol.1, History of Tuluva p.484. (henceforth Tuluva)

66 B.A. Saletore, Tuluva , p.485.

- <sup>67</sup> K.V.Ramesh, A History of South Kanoro, Dharwar, 1970, p.247.
- 68 Edward Gray, The Travels of Pietro Della Valle in India, Vol. II, New Delhi, Reprint, 1991, p.304. (henceforth Travels)
- 69 H. L. Nage Gowda, 'Pravasi Kanda Dakshina Kannada' (in Kannada), Adyanadka Krishna Bhalla (Ed.), Sudarshana, Mulki, 1977, p.89.

<sup>70</sup> Ibid, p.95.

7) Francis H. Buchanan, Journey From Madras Through the Countries of Mysore, Canara and Malabar, (in 3 Volumes) Vol. III, Madras, 1807, Reprint 1989, Volume III, p.4. (henceforth Journey)

<sup>72</sup> Ibid, pp. 59-60.

<sup>73</sup> John Sturrock, Madras District Manuals, South Kanara, Vol.1, Madras, 1894, p.166. (henceforth Manuals)

74 Ibid, p. 167.

<sup>75</sup> SII, Vol. VII, Nos. 359, 360, SII, Vol. IX, Part II, No. 409.

76 Ibid, Nos. 295, 261.

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<sup>37</sup> Ibid, Vol. IX Part II, No.455.
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- 78 ARSIE, 1930-31, No. 250.
- <sup>79</sup> H. L. Nage Gowda, 'Pravasi Kanda Dakshina Kannada', p.94.
- <sup>80</sup> F.H. Buchanan, Journey, pp. 57-58.
- <sup>81</sup> Shaila Bai U, "Dakshina Kannada Jilleya Shasanagala Samskritika Adhyayana", (in Kannada) Unpublished Ph.D. thesis, Mangalore University, 1998, p.233. <sup>82</sup> SII, Vol. VII, No. 309.
- 83 B. Jagadish Shetty, Agro-Economic Relations, p.176.
- 84 SII, Vol. VII, No.340.
- 85 Y. Umanath Shenoy, Charitre, p.38.
- 86 K.G. Vasanthamadhava, 'Dakshina Kannado Jilleya ttihasa Samikshe', (in Kannado), in
- Adyanadka Krishna Bhatta,(ed.), Sudarshana, p.109.
- 87 F.H. Buchanan, Journey, pp. 43-44. <sup>88</sup> Edward Gray, Travels, p.303. Perhaps Della Valle called the blacksmiths as goldsmiths, because knives and scissors were mostly made out of iron and golden knives and scissors could not be very cheap.
- 89 H. L. Noge Gowda, 'Pravasi Kanda Dakshina Kannada', p.81.
- <sup>90</sup> B. Lakshminarayana Upadhya, Basaruru, pp. 11-12.
- Y. Umanath Shenoy, Charitre, p. 19.
   B. A. Vivek Rai, Tulu Janapada Sahitya, p. 180.
   ARSIE, 1954-55, No.7.
   Ibid, 1953-54, No.322.

- 95 K. G. Venkatesh Jois, Keladi Shosanagala Samskritiko Adhyayana, (in Kannada), Bangalore, 1996, pp. 181-182.
- <sup>96</sup> James M. Campbell, Gazetteer of the Bombay Presidency, Volume XV, Part 1, Kanara, Government Press, Bombay, 1885., p. 257 (henceforth Gazetteer)
- <sup>97</sup> John Sturrock, Manuals, p.165. 98 James M. Campbell, Gazetteer, p. 258.
- 99 John Sturrock, Manuals, p.166.
- 100 Ibid.
- <sup>101</sup> B. A. Saletore, Tuluva, pp. 485-488.
- <sup>102</sup> Indian Antiquary, Vol. XXV, p.221.
- <sup>103</sup> Ibid,XXIV, p.143.
- 154 Ibid.
- <sup>105</sup> B.A. Saletore, Tuluvo, pp. 491-493.

- B. S. Shastry, The Portuguese in Kanara 1498-1763, pp.107-108.
   K. G. Vasanthamadhava, 'Sea Trade in the Ports of Kasaragod (Kerala State) District in the Eighteenth Century', Unpublished paper presented in International Conference on
- Marine Archaeology, Thana, 1998, p.5.
  108 John Sturrock, Manuals, p.175.
- 109 B.A.Vivek Rai, Tulu Janapada Sohiiya, p.180.
- 110 A. Saradaraju, Economic Conditions in the Madras Presidency 1800-1850, Madras, 1941, p. 148.
- <sup>111</sup> Ibid, p. 147.
- <sup>112</sup> Ibid, p.196.
- <sup>113</sup> SII, Vol., VII, No.417.
- 114 ARSIE 1927-28, No.401.
- 115 J. F. J. Biker, Colleccao de Tratados e Concertos de Pazes, IV, Lisbon, 1884, p.192
- 116 Basrur kadata in the collections of K. G. Vasanthamadhava, Pavanje.
- 117 Bailuru kadata in the collections of Manjunath Sherioy, Gangalli.
- 118 B. A. Vivek Rai, Tulu Janapada Sahitya., p.203.
- Indian Antiquary, Vol. XXIII, p.99.
- <sup>121</sup> John Sturrock, Manuals, pp. 167-168.
- 122 Basrur kadato.