



# TRADE AND TRANSPORT IN SOUTH KANARA

Nagendra Rao\*

## Abstract

*Trade and transport were two closely related aspects in pre-modern period. In fact efficient transport system benefited furtherance of trade and commerce. Two broad categories of transport were land transport and water transport. In the land transport there was the use of human labour and packed animals. In the water transport there was the use of ships and boats. They were used both in internal, inter-regional and international trade. Realizing the financial benefits of providing protection to the traders the state tried to support their cause by constructing roads, rest houses, etc. According to many foreign travellers the roads were secure and they were impressed by the law and order situation in the state. However on the sea it was not an easy life for the traders since they had to fight against the sea pirates who tried to plunder their ships. In this article an attempt is made to cull evidences to reiterate the close relationship between trade and an effective transport system.*

## Significance of transport

Among the many factors that determined the fluctuations in trade, transport was an important one. In the trade network one can see the role of mode of

---

\* Dr. Nagendra Rao is a Lecturer in History in Goa University. Email: nagen27@yahoo.com

transport.<sup>1</sup> Faster and better means of transport and communication secured the furtherance of trade. Comparing the present day innovations in the modes of transport with the pre modern modes of transport one can see the enormous effect of transport on trade. Discussing the nature of Mauryan state Gerard Fussmann<sup>2</sup> goes to the extent of questioning the theses of centralization of Mauryan Empire as discussed by earlier scholars like R.K.Mookerjee and Romila Thapar<sup>3</sup>. Gerard Fussman argues that due to primitive means of transport absolute centralization was impossible during the pre modern times. Even during the medieval period the trader, both petty and big, had to depend on the mode of transport like packed animals, coolies, boats, ships, etc. Thus, it is very necessary not only to study the various aspects of trade like commodities traded, merchant communities, market systems and business cycles, but also to appreciate the importance of the mode and the quickness or slowness of transport as a determinant factor in business cycles.

## Geographical features

South Kanara was a region with abundant rainfall. It is situated on the coastal belt of western India. Here we find important ports like Mangalore, Basrur, Barkur, Baindur, Gangolli, Kumbbla, etc. Tradition claims that Lord Parasurama blessed the region with enough rainfall, fertility of soil and surplus agricultural production.<sup>4</sup> As a result we find the growth of various agricultural and horticultural settlements in this region.<sup>5</sup> Kerala, interior Karnataka and Goa surround this region. Here we find the rivers like Sita, Netravati and many other small rivers. They facilitated the internal trade within the region.

## Trade network

As a result of the existence of ports the traders used to bring goods from various parts of Karnataka, Kerala, Goa and Gujarat. These goods were both finished and raw materials. The ports of the region had trade contact with trade centres like Muscat, Congo and other west Asian ports. Due to this factor there was movement of goods and people into this region. We find the migration of Muslims from Arab countries, Gowda Saraswats from Goa, merchant communities from other parts of Karnataka, Kerala and other regions of South India. A study of the history of trade of South Kanara indicates that there existed vigorous trade contacts with many trade centres of India and international trade centres. During the medieval period the ports of South Kanara had evolved into entrepot trade centres and trans-shipment trade ports. This was facilitated by the existence of two categories of transport, namely, land transport and water transport. The

journeys of the merchants were not very comfortable due to the problems which they had to face while travelling from one region to the other. First problem was that the traders had to cross the frontiers of the empires and petty feudal principalities. When they entered any kingdom they were supposed to shell out a part of their profit as tax to the state. Second problem was that of robbers. Perhaps this forced the traders to move in a group. They might have hired militia to protect the merchants and merchandise from threatening robbers while moving in the no man's land. On the sea the traders faced the threat of sea pirates. Another problem which a trader had to face was the wreckage of ships on the sea. As a result there was a great risk involved in long distance trade.

During the medieval period the region emerged as an important trade centre. From the seventeenth century onwards some of internal trade centres below the ghats were Bantwal, Bangadi, Belthangadi and Pane Mangaluru. This is known from a record of 1642 A.D.<sup>6</sup> Kokkarne, Karkala, Someshwara, Gerusoppe were also prominent trade centres of varieties of agrarian products.<sup>7</sup> These were markets of agrarian and non-agrarian products such as grains, rice, paddy, arecanut, pepper, jaggery, oil, ghee, etc. Subsequently these towns became custom houses (*sunka thanes*)<sup>8</sup>, where custom duties were collected.

## Land transport

In order to transport goods from ghat regions to the ports there was the use of land routes which connected the production centres with distribution centres. In this regard we find the use of manual labour, packed animals, bullock carts, etc. When compared with river transport this mode of transport might have been expensive. In the inscriptions we find reference to the awareness regarding land transport. Mangalore had direct trade contacts with Banavara.<sup>9</sup> The inscriptions refer to a route called Barakanur ghat, which passed through the Hoysala Empire.<sup>10</sup> The state must have realized the importance of seas and the ports. The Mangalore inscription<sup>11</sup> belonging to saka year 1311 mentions the Vijayanagara king Harihararaya as lord of the east, west and southern seas. This shows the realization of the strategic importance of western coastal regions. The coastal belt with many rivers and ports on the seacoast facilitated transfer of goods and trade, both coastal and overseas. By controlling the coastal ports it was possible to control the trade routes. Thus all rulers, native or foreign aspired to control the districts of western coastal regions since they were the gateways through which the goods were imported and exported. The Mangalore inscription mentions *voladari* or short cut.<sup>12</sup> The inscriptions refer to ferry tolls and taxes on goods collected in certain land routes. These revenue collections indicate that there existed river and transport systems both in regional and inter-regional

trade. Vijayanagara inscriptions allude to highways, roads, lands and footpaths (*raja-bidi*, *bidi*, *hiriya heddari*, *nadeva-oni*, etc.). The Basrur record of A.D. 1455 is significant in this regard.<sup>13</sup> According to this record, the *halaru*<sup>14</sup> of Mudukeri of Basrur were obliged to set apart from the lands which they owned a stretch of land measuring 12 *kolu* in breadth for purposes of laying a road for the use of local citizens as well as outsiders. Further it is stipulated that in the matter of carrying offerings to the temple of Devi, the above road was to be utilised only by the *halaru* of Mudukeri and not by the *halaru* of Paduvakeri. The responsibility of relaying an old road of equal breadth in another part of Basrur fell on the *halaru* of Paduvakeri. On the sides of important roads mango trees were grown for shade and shelter.<sup>15</sup> This record shows that proper arrangements were made to construct roads to facilitate movement of people and goods. Patronage was given to certain trading communities by the local authorities.

There were different categories of roads. *Rajabidi* and *rajamarga* refer to main roads and *heddari* and *bidi* were also used to refer to the roads. *Oni* was a narrow path which could not be used for taking carts. *Anchu* was a raised path between the paddy fields. Besides serving as a boundary between the two plots of land, it was helpful as a path for the people who carried things on head or took the goods on the back of animals.<sup>16</sup>

There are references as to the import of bullocks to South Kanara from the upghat regions. They were sold in the periodic markets and fairs in Barkur and other regions. Commodities were brought from and taken to upghat regions by head loads and on bullocks. This proves the existence of well-developed trade routes between the coastal plains and the ghat regions.<sup>17</sup>

Usually the agrarian products were carried on the back of the bullocks or carts drawn by bullocks. The roads in the coastal region were fit for the movement of a large number of carts drawn by bullocks. The traders always moved in groups in these routes because they had to protect themselves from the attack of the robbers. It was always difficult for the traders to travel in the forests.<sup>18</sup> It is possible that the trade guilds hired the service of soldiers.

## State and transport

The State also gave protection to the traders. This is supported by the accounts of foreign travellers. Ibn Batuta explains in detail the land route from Goa to Malabar. According to him it took two months along the coast to reach Quilon from Goa. The road over the whole distance ran beneath the shade of trees, and at every half mile there was a wooden shed with benches on which all

travellers might sit. At each shed there was a well for drinking water and a person was in charge of it. He gave water to the travellers. At the halting places on this road there were houses belonging to Muslims, at which Muslim travellers alighted and bought all that they needed. No one travelled on an animal here and only the king possessed the horses. The principal vehicle of inhabitants was a palanquin carried on the shoulders of slaves or hired porters. Those who did not travel on palanquins, travelled on foot. Hired carriers transported baggage and merchandise, and a single merchant might have a hundred or more of such carriers to carry his goods. Ibn Batuta was impressed by the discipline of the people in the region. He says that "I have never seen a safer road than this, for they put to death anyone who steals a single nut, and if a fruit falls no one picks it up but the owner..."<sup>19</sup> This shows that the state had taken active interest in protecting the life and materials of the merchants and other travellers.

In 1516 Duarte Barbosa observed that the agrarian products such as rice, vegetables and sugar-cane produced in the interior regions were taken to coastal towns like Baidur, Basrur, Mangalore and Kumbala by means of *kavades*,<sup>20</sup> on head loads, pack horses, pack bullock carts and asses.<sup>21</sup> In 1522 Domingo Paes observed that the roads, which connected Vijayanagara with Goa, Bankapur, Banavasi, Honnavar and Bhatkal, were fit for the transport of agrarian products by means of carts and bullocks. From these roads agrarian products passed from one region to the other.<sup>22</sup> In 1623 A.D. there were roads that connected Ikkeri, Sagar and other interior towns.<sup>23</sup> Pietro Della Valle said that the highways of Venkatappa Nayaka's country were very secure. He says that, "the roads lay over pleasant peaks of hills and through woods and many great streams likewise occurring".<sup>24</sup> While travelling to Mangalore Della Valle stayed in a rest house, owned by a brahman, called *Bamanen Coppa* (Brahman's grove). The distance was described in terms of *gaus*, *kos* and leagues. One *gau* was equal to two *kos* and two Portuguese leagues. Della Valle travelled on his horse accompanied by a *pulia* (one of the lowest in the Indian social hierarchy) who carried the luggage on his back.<sup>25</sup> These details give an idea regarding the facilities available for the traders while participating in long distance trade.

According to an English traveller, Fryer, the roads in the coastal Karnataka were broad unlike the ones in Malabar.<sup>26</sup> The prominent ports in South Kanara were connected with hinterland by plain roads with four rows of trees.<sup>27</sup> According to Alexander Hamilton, the road from Basrur to Mangalore consisted of four rows of trees which made journey comfortable since the plants provided shelter to travellers. He says that there were huts built, where some old people stayed in the daytime with jars of fine clear water for the passenger to drink at the charge of the state. Barkur and Mulki lay between Basrur and Mangalore. Both Mangalore

and Basrur enjoyed the benefit of rivers to export large quantities of rice that their fields produced. Further, Hamilton stated that Mangalore was the greatest mart for trade in Kanara. It had the convenience of one river, which was connected by three other rivers from north, south and east. These rivers proceeded from the great rains and dews that fell from the mountains. These three rivers joined about a mile from the sea and at Mangalore formed a common receptor of rivers.<sup>28</sup>

The roads were used for transporting the agrarian products from hinterland to the ports. The roads which connected Bednur with the seaports in the reign of Keladi Basavappa Nayaka II (1739-1756) were very fine planted with trees and safe and no stranger was ever robbed or molested there. On such roads large number of bullock carts laden with agrarian products such as rice, paddy, arecanut, coconut, ragi, jowar, oil seeds, etc., used to travel from above and below the Sahyadri region as mentioned in the inscriptions.<sup>29</sup> Linschoten noted the distance between Honnavar, Basrur and Mangalore towns as follows: <sup>30</sup>

Honnavar _____	Basrur _____	5 miles
Basrur _____	Mangalore _____	9 miles.

In the eighteenth century, ports of Kumbla, Manjeshwar and Mangalore had contacts with western ghat region by means of roads. Several bullock carts carrying coconut, arecanut, sugar, ragi, jowar, rice, jaggery, etc., used to pass daily on these roads to the above roads.<sup>31</sup> The Keladi chiefs levied taxes on the goods passing through the roads known as *rahadari sunka*.<sup>32</sup> During the time of Basavappa Nayaka the roads were connected with the seaport.<sup>33</sup>

The communication between the district and the country above the ghats was maintained by means of seven well traced roads through passes in the western ghats, besides a number of paths and cattle tracks. Many of the main roads converged at Mangalore. These passes were at Sampaje ghat, Shiradi ghat, Bisli ghat and Charmadi ghat. The next pass was at Agumbe to the north of the Udupi taluk, and near Someshwar at the foot of the pass, roads branched off towards the ports of Kundapur, Barkur and Udupi, but the main road went on to Mangalore. The Hosangadi ghat from Bednore or Nagar had direct communication only with the river which led to the port of Kundapur. The number of broad estuaries and backwaters and the long stretches of sand near the coast made it impossible to have a thoroughly satisfactory coast road.<sup>34</sup> The above study implies that South Kanara was connected with different parts of Karnataka and South India in the pre-modern period. The transportation of goods particularly in the Western Ghats was relatively slower, difficult and it took several days to reach one's destination.

## River transport

There was a strong tradition of ship building in Kanara. Medium sized crafts were used in the coastal trade of Western India. The ship building centres had better access to high quality timber in the hinterland regions. Realising the financial benefits of shipbuilding, the kings and traders supported the shipbuilding activities.<sup>35</sup> Shipbuilding was one of the industrial activities which thrived in the region. Certain boats were common in the west coast. For instance, the *manche* (a small craft) was found all over the Malabar Coast up to Kanara.<sup>36</sup>

The Kanara coast consisted of numerous creeks and bays formed by the estuaries of rivers. These rivers ran from east to west and flowed into the Arabian Sea. All the rivers did not facilitate easy traffic. The Kundapur River was navigable by boats and small vessels. Large ships could not approach the shore here. The Netravati River near Mangalore was navigable for boats for many miles up to Bantwal. Arab vessels of 150 tons managed to get in at high springs but the larger ships, which brought horses from the Persian Gulf were compelled to lie out in the roadstead.<sup>37</sup>

Ships and large boats were used for the sea trade. Duarte Barbosa stated that in *Tulunadu* there were many rivers and towns where there was much sea faring and traffic in goods of different kinds. He noted the transportation of goods in small *zambuquos*.<sup>38</sup> Boats, large and small ships and rafts were used for coastal and sea trade. The rivers in South Kanara facilitated inland traffic. These rivers were relatively wider, deeper and more navigable as they approached the sea. The local traders had their own vessels manned by the local people like Mogers, Karvis, Mukkavars, Mapillas, etc. The Portuguese records like *Livro do Cartazes* and *Livro do Correspondencia do Canara* speak about the boats that left from Kanara to Goa. The native ships carried rice, pepper and coconut to Malabar, Arabia and Red Sea region.<sup>39</sup> In the beginning of the seventeenth century, Francois Pyrard noticed the vessels owned by the Kanarese in the Maldiv islands.<sup>40</sup> A few Kannada letters belonging to the first half of eighteenth century kept in Cochin archives state that the huge ships and rafts owned by the natives of Mangalore used to carry coconut and rice to the ports in Malabar and coastal Karnataka.<sup>41</sup> Muslims and the low caste Hindus manned the ships and the boats, which used to carry the agrarian products, though their owners and financiers were likely to be the local high caste Hindus.<sup>42</sup> The travellers on the sea sometimes had to go through horrible experiences. Pietro Della Valle described an incident, which occurred in Basrur coast where there was danger of their ships being broken when one ship hit a rock in the sea.<sup>43</sup> Della Valle described travel by boat. In Mangalore he engaged a boat in which there were three water men,

two of whom rowed at the prow and one at the poop, with a broad oar which served both as an oar and a helm.<sup>44</sup> This details on the one hand shows the technological levels reached by the people of the region and on the other proves that there existed both internal trade and international trade.

L.N.Swamy and G.V.Rajamanickam have classified the boats into five major categories, such as, *teppa*, *harigolu*, *doni*, *nave* and *hadagu*. The first two categories were not seaworthy crafts where as next three were seaworthy. The first two categories were used for river transportation. The above five categories were sometimes classified into four major groups, namely, rafts, skin boats, log boats and plank built boats. The *teppa* and *harigolu* came under rafts and skin boats respectively. Crafts that came under *doni* variety denoted log boats. *Nave* and *hadagu* came under the plank built boat class. The rivers of South India were not easily navigable. Hence boats and rafts were used only to cross the rivers wherever the bridges were not constructed. *Harigolu* was used only in inland transportation mainly for the purpose of crossing the rivers, fishing and to overcome the whirlpools, which were common in the rivers.<sup>45</sup>

## The Portuguese and changes in transport

Studies on the Portuguese commercial activities in Kanara have shown that porters and pack animals like horses, bullocks and asses were the usual means of transport on land. Boats and ships were the most important means of water transport. *Empalega catacoulo* and *calamute* were the smallest of local vessels. Larger than these were *parao*, *manchua*, *sanguicel*, *pinnacle*, *cathia*, *gundra*, *taurim*, *paquel* and *zambuco*. There were also large *taurim* and large *paquel* and *nau*, which were the largest local ships. These were the vessels that were common on the coasts of coastal Karnataka as well as Malabar in the sixteenth century.<sup>46</sup> Eighteenth century records mention that the *machwas*, *manchi*, *grubs*, *hai padagu*, and *hai doni* arrived from Arabia and Kochi to the port of Mangalore.<sup>47</sup> There is also reference to the vessels such as *almadia* (an Arabic word for large raft, but generally used for Indian canoe), *caravel* (a vessel of about 200 tons known for its speed), *pattamara* (a rigged ship with two or three masts), *paranguee* (a kind of cargo boat, perhaps an European ship), and *gallivat* (a boat having oars and triangular sail).<sup>48</sup> The Portuguese introduced certain innovations in shipping on the Kanara coast. Earlier the local ships did not have any provision for weapons to protect themselves from the attack of enemies or sea pirates. But it was the Portuguese who introduced the system of the merchant ships carrying guns and gun powder to fight against the pirates and enemies. There were also fleets of military ships which protected the merchant ships on the sea.<sup>49</sup>



## Transport in indigenous traditions

The folklore of South Kanara furnishes some details about river transport system. In the Jarandaya paddana it is mentioned that Jarandaya came to the Atrrel ferry. He ordered the ferryman, Kunya, to bring the ferryboat. But the ferryman said that the boat did not belong to him and that one Kote Bale Bermene had kept the boat for crossing the river on Tuesdays and Sundays. Then Jarandaya said, "No matter if the boat is kept by him for crossing the river, I will give you the proper fare. Bring the boat to this side". As soon as he had said this, the ferryman brought the boat.<sup>50</sup> The ferry owners controlled large villages and sometimes even a town. There were definite days for ferrying persons across rivers.<sup>51</sup> This shows the use of ferries in the internal trade.

The folklore mentions loads carried by man who acted as a beast of burden. The most popular vehicle carried on man's shoulder was a sort of hammock called in Tulu *mancil*.<sup>52</sup> The rivers had sometimes bridges of ropes built over them. On their way to Edamburu, Koti and Chennaya crossed a bridge of ropes.<sup>53</sup> The rest houses on roads gave shelter to travellers. Koti and Chennaya were given food and water by a brahman keeper of such a rest house. These rest houses were called *kattes*. There were three different kinds of drinking cups- one for giving water to aristocrats and princes, another a smaller one for brahmans and third one of a bell-metal for people of all castes.<sup>54</sup> The beasts of burden used in early times were the elephant, the horse, the ox and the camel. It is mentioned in the folklore that Perimele Ballala presented Sama Alva with a camel to carry the heavy load of liquor home.<sup>55</sup>

Above, we have come up with enough details that show the existence of both trade network as well as a transport system. Both the land transport and water transport played an important role in determining the volume and extent of trade during the pre-modern period.

## Endnotes

<sup>1</sup> For a detailed study of transport in pre-modern India see, Jean Deloche, *Transport and Communication in India prior to Steam Locomotion*, two volumes, Oxford University Press, 1993 and 1994.

- 2 Gerard Fussman, 'Central and Provincial Administration in Ancient India: the Problem of the Mauryan Empire', *Indian Historical Review*, 1987-8, XIV.
- 3 Romila Thapar, *Asoka and the Decline of the Mauryas*, Delhi, 1997.
- 4 Nagendra Rao, 'The Historical Tradition of South Kanara and the Brahmanical Groups: A Study of *Gramapaddhati* and *Sahyadri Khanda*', unpublished M.Phil theses, Mangalore University, 1995, p.32.
- 5 B. Jagadish Shetty, 'Agro-Economic Relations and Social Structure in Dakshina Kannada', unpublished Ph.D. thesis, Mangalore University, 1992, pp. 66-67.
- 6 Ganapati Rao Aigal, *Dakshina Kannada Jilleya Prachina Itihasa*, (in Kannada), Manjeshwara, 1923, p. 438. (henceforth *Prachina Itihasa*)
- 7 *Ibid*, Ap. No. 14; *Epigraphia Carnatica*, VII, No. 28.
- 8 K.G. Vasanthamadhava, *Western Karnataka Its Agrarian Relations 1500-1800*, New Delhi, 1991, p. 144.
- 9 Om Prakash Prasad, *Decay and Revival of Urban Centres in Medieval South India (C. A.D. 600-1200)*, Patna, 1989, p. 86.
- 10 *Indian Antiquary*, Vol. XVI, p. 31.
- 11 *South Indian Inscriptions* (henceforth *SII*), No. 190.
- 12 *Ibid*.
- 13 *SII*, Vol. IX, Part II, No. 457.
- 14 *Halaru* was an association of traders of Basrur.
- 15 K.V.Ramesh, *A History of South Kanara*, Dharwar, 1970, p. 281.
- 16 B. Vasanth Shetty, "Barakuru: A Metropolitan City of Antiquity", Unpublished Ph.D. thesis, Mysore University, 1985, p. 324.
- 17 *Ibid*, 321-323.
- 18 In ancient India, for instance, the Jataka stories consist of horrible experiences of traders while travelling in the forests. Motichandra, *Trade and Trade Routes in Ancient India*, New Delhi, 1997, p. 56.
- 19 H.A.R. Gibb, *Travels in Asia and Africa 1325-1354*, New Delhi, 1992, pp. 231-232. (henceforth *Asia*)
- 20 *Kavadas* meant big sticks taking loads hanging on each side and it was carried on shoulder.
- 21 Mansel Longworth Dames (ed.), *The Book of Duarte Barbosa*, Reprint, Madras, 1989, p. 181 and p. 197. (henceforth *Duarte Barbosa*)
- 22 Robert Sewell, *A Forgotten Empire Vijayanagara*, New Delhi, 1962, p. 119.
- 23 Edward Gray (ed.) *Travels of Pietro Della Valle*, Volume II, New Delhi, Reprint, 1991, p. 266. (henceforth *Travels*)

- <sup>24</sup> *Ibid*, p. 294.
- <sup>25</sup> *Ibid*, pp. 294-297.
- <sup>26</sup> *Calcutta Weekly English Man*, London, 1873, p. 224.
- <sup>27</sup> Alexander Hamilton, *A New Account of the East Indies 1688-1723*, Volume I, Reprint, Madras, 1995, p. 159.
- <sup>28</sup> *Ibid*, pp. 281-282.
- <sup>29</sup> *Epigraphia Carnatica* VII, Tirthahalli, Nos. 68, 69, 83, 92.
- <sup>30</sup> Arthur Coke Burnell (ed.), *The Voyage of John Huyghen Van Linschoten to the East Indies*, New Delhi, 1988, pp. 66-67.
- <sup>31</sup> K.G.Vasanthamadhava, 'Sea-faring activities in the Coastal Karnataka in the Eighteenth Century', *Eighteenth Century India*, Trivandrum, 1981, pp. 210-211.
- <sup>32</sup> Ganapati Rao Aigal, *Prachina Itihasa*, Appendix Numbers 14, 15.
- <sup>33</sup> B.L.Rice, *Mysore and Coorg From Inscriptions*, Volume II, London, 1909, p. 435.
- <sup>34</sup> Sturrock, *Madras District Manuals, South Kanara*, Volume I, Madras, 1894, pp. 14-15. (henceforth *District Manuals*)
- <sup>35</sup> S. Arasaratnam, *Maritime India in the Seventeenth Century*, Delhi, 1994, p. 255.
- <sup>36</sup> *Ibid*, p. 260.
- <sup>37</sup> Sturrock, *District Manuals*, pp. 3-8.
- <sup>38</sup> Mansel Longworth Dames (ed.), *Duarte Barbosa*, pp. 182-184.
- <sup>39</sup> M.N. Pearson, *Coastal Western India*, New Delhi, 1984, p. 77, p. 123 and p. 125.
- <sup>40</sup> Edward Gray, *The Voyage of Francois Pyrard of Laval*, two volumes, Haklyut, 1887-90, quoted in K.G.Vasanthamadhava, *Western Karnataka Its Agrarian Relations 1500-1800*, New Delhi, 1991, p. 147. (henceforth *Western Karnataka* )
- <sup>41</sup> K.G.Vasanthamadhava, 'A Note on Kannada Paper in Cochin Archives', *Indian Archives*, XXVII, 1978, No. 2, pp. 33-36.
- <sup>42</sup> K.G.Vasanthamadhava, *Western Karnataka*, p. 148.
- <sup>43</sup> Edward Gray, *Travels*, pp. 299-300.
- <sup>44</sup> *Ibid*, p. 305.
- <sup>45</sup> L.N.Swamy and Rajamanickam G.V., 'ships and Boats as gleaned from Kannada literature', S.R.Rao (ed.), *An Integrated Approach to Marine Archaeology*, (Proceedings of the fourth International conference on Marine Archaeology of Indian Ocean countries), Goa, 1997, pp. 59-60. (henceforth *Integrated*)
- <sup>46</sup> B.S.Shastry, ' Commercial Policy of the Portuguese in Coastal Karnataka', H.V.Shrinivasa Murthy, et.al., (ed.), *Essays in Indian History and Culture*, New Delhi, 1990, p. 119.

- <sup>47</sup> K.G.Vasanthamadhava, 'a Review of Indigenous Sources of Trans-Oceanic Activities of Coastal Karnataka A.D. 1000-1800', S.R.Rao (ed.), *Integrated*, p. 122.
- <sup>48</sup> K.G.Vasanthamadhava, 'Sea Trade in the Port of Kasaragod', unpublished paper presented in International Conference on Marine Archaeology', Thana, 1998, p. 3.
- <sup>49</sup> One danger that the traders had to encounter on the sea was that of sea pirates among whom the Mapillas of were well known. In one such incident, which took place near Mangalore, they resorted to confiscation of ships and their cargoes. Therefore the ships which sailed there in summer laid in their cargoes in six or eight days and departed from there as fast as possible. See R.N.Saletore, *Indian Pirates*, Delhi, 1978, p. 30. Ibn Batuta described one incident in which the pirates with twelve war ships attacked him and his associates and plundered their goods. See H.A.R. Gibb, *Asia*, p. 265.
- <sup>50</sup> *Indian Antiquary*, Volume XXIII, pp. 8-9.
- <sup>51</sup> B.A.Saleore, *Ancient Karnataka Volume I, History of Tuluva*, Poona, 1936, p. 517. (henceforth *Ancient Karnataka*)
- <sup>52</sup> *Indian Antiquary*, Volume XXIII, p. 82.
- <sup>53</sup> B.A.Saleore, *Ancient Karnataka*, p. 519.
- <sup>54</sup> *Ibid*, p. 521.
- <sup>55</sup> *Ibid*, pp. 522-523.