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# Timber Trade on the Malabar Coast, c. 1780–1840

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## ABSTRACT

State formation in south-west India at the end of the 18th century led to heavy exploitation of natural resources, particularly of the hardwood timbers of Travancore, Malabar, and Kanara. These were either used as articles for export or as building materials for the construction of ships at local port towns. Over centuries, the Malabarian timber merchants had developed trading structures that turned out to be resistant to any attempts to transform them according to the needs of a new ruler. In particular, from the 1790s onwards the British colonial regime tried hard to restructure the well-organised trading system. But ultimately the British failed, because they had neither the power nor the means to pursue such a policy in the long run. On the contrary, at the beginning of the 19th century the authorities in Bombay had to adapt to the social and economic realities in the Malabar province and the adjacent country. The Malabarian local ‘agency’ remained resistant to the British regime until at least the middle of the 19th century.

## KEY WORDS

Ship-building, forestry, timber merchants, Indian ‘agency’, colonial rule

## INTRODUCTION

Ship-building has a long tradition on the west coast of the Indian subcontinent. Especially on the Malabar Coast port towns like Calicut, Nileshtar, Ponnani and Cochin, to mention but a few, had been well known to Arab geographers since the 9th century. During the 15th century Cannanur became the principal harbour of the Mammalis, who traded in coastal regions and on the high seas,

sailing to Arabia and Egypt. Malabar ships were well known among Indian, Arabian and European contemporaries for their high standard.<sup>1</sup> From the 15th to the 17th century, places like Cochin and Baipur established their reputation as ship-building centres. European private traders and Indian shipwrights started joint ventures on the Coromandel and on the Malabar Coast around the middle of the 17th century.<sup>2</sup> Baipur, the former Vaypura, was the most famous harbour and wharf location in the kingdom of Calicut and was renowned for its superior quality vessels due to excellent local craftsmanship and the extraordinary timber resources of the hinterland. The harbour is situated on the estuary of the Chaliyar River ('Beypore River') the sources of which are located in the Nilgiri mountains and the Wainad Ghats. North of Baipur, the Chaliyar joins the river Kallai where the town of the same name was well reputed for its timber industry.<sup>3</sup> Generally, the Malabar Coast was acknowledged for the superior quality of its natural resources as well as for its diversified industry right up to the advent of the British in the late 18th century.

State formation in South India in the second half of the 18th century ended with the British victory over Tipu Sultan of Maisur. After the war of 1790–92, the British annexed Malabar and the decisive victory of 1799 at Srirangapatanam gave them Kanara. From Portuguese Goa to the independent kingdom of Travancore, the Company-state tried to establish internal control along the Malabar Coast.<sup>4</sup> A first survey of natural resources was undertaken by the Bengal-Bombay Joint Commission in 1792/3.<sup>5</sup> Their report gave a rather general and in some ways superficial impression of the Malabar Province.<sup>6</sup> Immediately after occupying Kanara, Francis Buchanan was sent out by Governor General Richard Wellesley in order to compile a summary report of the acquired territories on the west coast of India regarding their fiscal and economic utility.<sup>7</sup> Both reports briefly referred to the timber trade on the Malabar Coast.

There seems to have been a timber shortage in Europe following the end of the Seven Years War in 1763. To prevent a further decrease in the timber supply, scientific forestry was subsequently developed on the Continent. This was also regarded as a means of increasing state revenues.<sup>8</sup> In England, timber shortage reached dramatic dimensions in 1772, when London shipyard owners and the admiralty imposed a ban on the East India Company (EIC) against building large ships of the line (East Indiamen). The EIC immediately decided to build their ships for the 'country trade' in India.<sup>9</sup> To make things worse, in 1783 the independence of the New-England colonies further strained the timber supplies of the London dockyards, at least temporarily. Again in 1791, the admiralty was informed about an acute lack of timber.

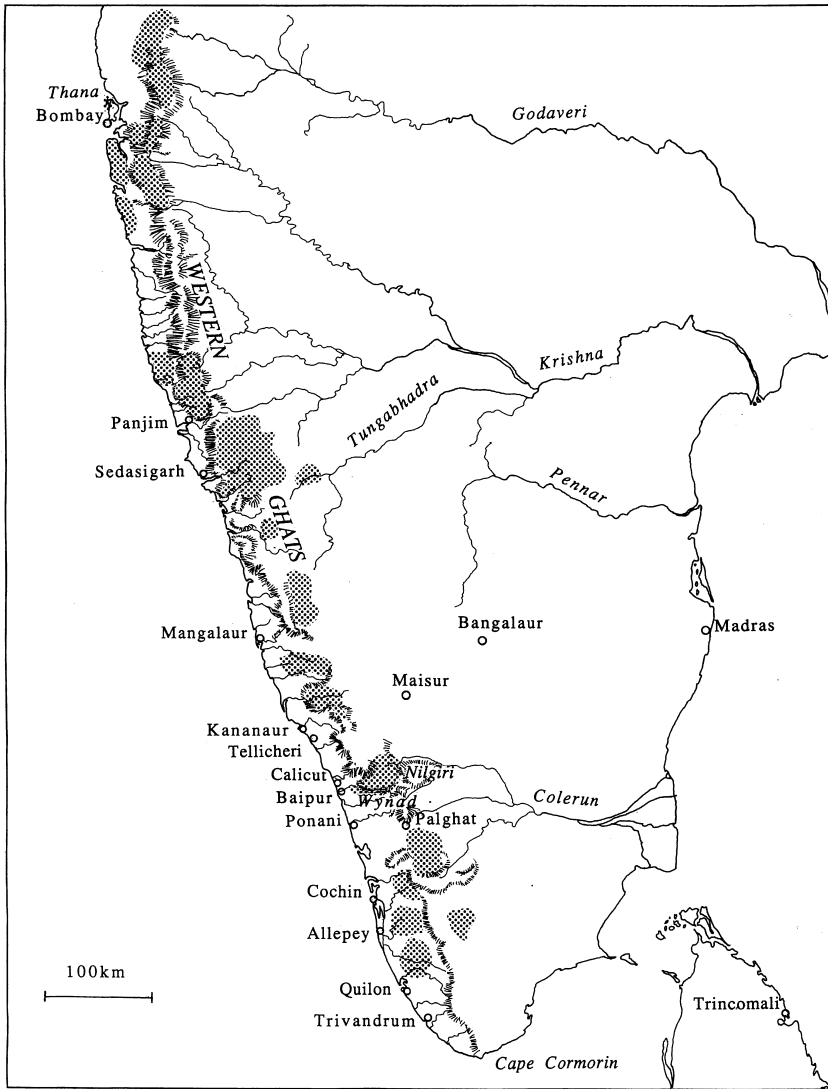


FIGURE 1. Teak forests on the west coast of India in the first half of the 19th century

Following the outbreak of the war against revolutionary France in 1793, Great Britain suffered a severe famine, which lasted well into the following year. As a result, the government asked the EIC to supply the British Isles with rice and wheat using India-built ships, in contradiction to the still valid Navigation Acts. The national state of emergency required extraordinary measures. In 1795, the first teak-constructed ship sailed up the Thames, and over the next few years several such ships appeared at the London docks.<sup>10</sup> When the Bombay Marine's frigate *Cornwallis* anchored on the Thames and impressed everyone with her solid construction, the admiralty immediately bought the ship. Above that, they decided to venture an 'experiment' and have a ship of the line (man of war) and a frigate built annually in the Bombay shipyards.<sup>11</sup>

It was against this background that the EIC tried to found a grand scale shipbuilding enterprise in Bombay. Accordingly, they had to secure the supply of naval stores, mainly timber. A crude kind of forest management was set up on the Malabar Coast in 1802, and in 1807 they proclaimed a timber monopoly over teak and other specified trees.<sup>12</sup> The remaining problems, as will be demonstrated in this article, were the sufficient supply of timber and the control of the local timber trade. The British tried hard to influence and to ultimately monopolise the timber trade. But they failed completely, as they had done before with the establishment of a monopoly on pepper, which had to be relinquished in 1793.<sup>13</sup> The well established and organised timber trade of the Malabarian merchants was resistant to British attempts to restructure the whole trading system according to their ideas and needs. In this paper, I shall discuss the timber trade as it was run by the Malabarians, the British attempts to get into the indigenous structures and finally, how they actually managed the timber trade and facilitated the supply of the Bombay dockyards until 1840.

## THE ORGANISATION OF THE MALABARIAN TIMBER TRADE

The forests of Malabar originally belonged to various possessors, e.g. *rajas*, *nayars* and *janmakkars*. With Haider Ali's and Tipu Sultan's territorial expansion in Malabar the new government wanted to terminate these rights and replace them by an overlordship. Commonly the forests were treated as royalty. Tipu Sultan, launching a quite ambitious shipbuilding enterprise from 1786 onwards, seems to have organised the timber trade through some kind of state agency, since government employed draught animals and forest workers.<sup>14</sup> Former forest owners were remunerated per felled *kanti*.<sup>15</sup> Private ownership obviously was still acknowledged. According to Mr Farmer, member of the Bombay Bengal Join Commission and Supervisor of Malabar, most forests were privately possessed.<sup>16</sup> What exactly Mr Farmer understood by private property can only be guessed, but he certainly did not have the mid-19th century European definition in mind.<sup>17</sup> The legal situation respecting property rights must have

become unclear and even confused in the course of the expansionist policy of the Maisurian Sultans and the British administrators. In any case, the exploitation of the forests depended on the lease of rights over such matters as selecting, marking, felling and transporting of the timber by local magnates. For example, the right to fell trees in the Nilambur area was auctioned by the reigning *raja*.<sup>18</sup> More generally, these rights were granted as a privilege to certain individuals.

In Travancore *raja* Kartika Tirunal Rama Varmma (reigned 1758–1798) treated the forests as royalty, but the usufruct was handled in a rather liberal way. Up to the 1760s, no duties were levied on teak, except those for export. When demand increased at the end of the 18th century, additional revenues were imposed on selected kinds of timber. *Raja* Rama Varmma privileged ‘farmers’ with specified rights to cut timber among the Travancorian forests, which did not include the exclusive right to fell indiscriminately. Similarly to the practice in Maisur-Malabar, timber traders negotiated contracts with the ‘farmers’ or directly with the owners of the forests, paying a fixed amount of money per felled tree to the local revenue collector, called the *kattikanam*.<sup>19</sup>

Thus, the forests in Travancore were supervised by the ‘farmers’ and owners, whilst the traders organised their business with the timber. This system worked well as long as these persons had direct control over the forests, the licences and the dues. It seems that exemptions from the latter occurred in some cases, to enlarge the margin of trade profits, which indicates an overall increase of the timber trade, probably partly as a result of British demand at the beginning of the 19th century. Falling prices for teak had reduced the income of the local traders and lower taxes compensated for that loss.<sup>20</sup>

The timber trade along the Malabar Coast was organised by two distinct groups, whom the British identified as ‘jungle merchants’ and ‘coast merchants’. The ‘jungle merchants’, mostly Mappilas, employed several contractors to conduct the different phases of timber procurement. Four main logistic levels can be distinguished. Firstly, in a certain area called *kup* by the locals, trees fit for cutting were marked by a master carpenter whenever an amount of trees or *kanties* had been ordered. In some cases the trees seem to have been girdled, i.e. the tree was cut round ‘from about the height of a man’s shoulders, the hatchet being more easily wielded at that height. [...] The trees are then allowed to remain in this half-cut state for a greater or less period, according as the merchant requires a fresh supply of timber to meet the demands.’<sup>21</sup> The tree was cut off from its roots and dried on the stem. This method of ‘wood-cutting’ has hitherto been regarded as limited to the Tenasserim Province in Burma, but, apparently, it has also been common on the Malabar Coast. Evidently forms of human behaviour develop in similar ways due to analogous environmental conditions and independent of geographical distance.

Secondly, the trees were cut on a special day with a ceremonial or, rather, consecrated saw.<sup>22</sup> The master carpenter attended the whole procedure because only he knew about the quantity of the trees, the quality of the timber and the

techniques of felling. For the latter business the 'Jungle Merchants' employed wood-cutters from the surrounding areas on daily wages. The wood-cutters went into the forests and sometimes settled there for months until the work was finished or the cutting season ended. Wages were paid out regularly to the families every week. In times of 'unemployment' the timber merchants provided the wood-cutters with advances, mostly in kind. If a larger number of wood-cutters was required the 'Jungle Merchants' used brokers to hire workers from more distant regions.

Thirdly, the transport of the logs was organised by the owners of draught animals such as elephants, buffaloes and bullocks. The service of the animals was offered independently and was based on a contract, again negotiated with the Mappilas.<sup>23</sup> The 'local chieftains' who controlled the trade in the Western Ghats determined the amount of timber to be transported and ultimately the price per log. Finally, when the logs had reached a nearby riverside, they were tied together and floated to market places such as the aforementioned Kallai. Sometimes hundreds of logs bound together with bamboos to increase buoyancy and for protection drifted down the rivers of the Malabar Coast. The floating people worked day and night and only stopped at previously arranged places. The remuneration of this group of workers consisted of kind rather than cash.<sup>24</sup> The last phase of the timber trade was performed by the 'Coast Merchants', who bought the logs from the timber depots and stored them for another one or two years before they distributed the timber to the shipwrights. Perhaps the majority of these merchants also belonged to the Mappilas who, along with the *rajās* of Malabar, already controlled the pepper trade of the province.<sup>25</sup>

They were definitely the most prominent group of merchants and traders involved in the timber trade on the Malabar Coast. The Mappilas originated from Arab settlers and the offspring of intermarriages dating from the 12th century, as well as from South Indian converts among, mostly low-caste, Hindus. But the early Syrian Christians as well as some Jews were also called Mappilas.<sup>26</sup> Traditionally the Mappilas worked as traders, particularly in the coastal areas. In the hinterland and the Ghats they were to some extent marginalised in the early modern period and reduced to the status of peddlars and landless labourers. Only during the last decade of the 18th century did they improve their situation, when the anti-*brahmin* and anti-*nayar* policy of Tipu Sultan during 1788–9 forced a great proportion of those landholders to leave the country and take refuge with the *raja* of Travancore.

A scarcely calculable number of Mappilas filled the gap that the high-caste *jenmis* had left, and thus improved their economic situation and social status. This resulted in fierce conflicts with the traditional landed elite, the *nyays*, especially in the Velatiri region after the British had annexed Malabar.<sup>27</sup> A reinstatement of the *jenmis* would not only have entailed resistance, but also disaffection and even open rebellion, by the *kanamdars* of south Malabar.<sup>28</sup> As long as the British were unable to control the intermediary 'class' or social

## TIMBER TRADE ON THE MALABAR COAST

stratum of merchants, traders and new landlords, they did not have the power to break the Mappilas' prominent economic position.<sup>29</sup>

## THE BRITISH IMPACT ON THE TIMBER TRADE

A few years after the annexation of Malabar the Scotsman Alexander Mackonochy wanted to set up a saw-mill at Baipur to provide the Bombay dockyards with planks, beams, and masts. Accordingly he asked for the assistance of the Bombay government, which initially refused any co-operation although the Superintendent of the province, William Farmer, had highly recommended Mackonochy's proposals.<sup>30</sup> In 1795, Mackonochy came to England and informed the Court of Directors in Leadenhall Street and the president of the Board of Control, Henry Dundas, of his plans. According to these, the EIC would save 400,000 pounds Sterling annually. For constructing the saw-mill Mackonochy required wind-driven machines, later to be replaced by steam-engines, and two mechanics.<sup>31</sup> A year later Mackonochy was back in India with a loan of £10,000. The Bombay government was instructed to give Mackonochy any support he needed and finally he received another loan of 10,000 *rupias*. A contract for delivering 7,000 *kanties* annually was signed for ten years, government being responsible for running the machines and for the recruitment of the mechanics.<sup>32</sup> Besides, the British Commissioners of South Malabar were asked to arrange additional timber supplies from local merchants to keep the saw-mill running smoothly.

Mackonochy suffered difficulties from the very beginning of his venture. He demanded further support from the Bombay government for purposes such as buying elephants for transportation and the purchase of the Baipur saw-mill's estate.<sup>33</sup> The envisaged advantages of the enterprise did not materialise. Nevertheless, the Bombay government complied because it had provided Mackonochy with the loan and in their depressed pecuniary situation the EIC could not afford a financial fiasco. To make things worse for the Scotsman, a certain Wadi Patar and his partner Pulateni Parambi offered the Bombay government 65,000 *rupias* for granting them the timber monopoly between Bombay and Calicut. Hesitantly, the EIC decided in favour of Mackonochy, after the Company's solicitor had stressed that Bombay was not in a position to overrule London's decisions.<sup>34</sup> After the death of the two mechanics in 1799, the whole venture was on the verge of collapse. In the meantime, the Bombay loan amounted to 100,000 *rupias*.<sup>35</sup> Despite the fact that London did send out two new specialists in the following year, Mackonochy's major problem remained: the sufficient supply of the saw-mill with timber.<sup>36</sup>

To establish a profitable timber trade the British had to get to know the timber resources of hardwoods like teak, deodar, poon and sal. In 1799 Mackonochy had already suggested to the Bombay officials the division of forest into two



major categories: 'Forests and Jungles properly so called, and those *Groves* and *Plantations*.'<sup>37</sup> The intention of the separation is quite clear: forests were marked out as economically valuable units and were to be treated as state property, whilst jungles comprised all sorts of non-valuable woodlands which might remain in private hands. Groves and plantations were usually located around villages and provided an additional food supply or marketable products. Both kinds of tree cultivation were to remain with their proprietors.

A first rough and ready survey from 1802 showed that Malabar was able to provide 4,500 *kanties*, whilst a mere 2,100 *kanties* could be brought forth annually from Kanara.<sup>38</sup> The figures more or less coincide with the amount of timber received by Tipu Sultan.<sup>39</sup> Unfortunately, this quantity of *kanties* was only sufficient to build a frigate as requested by the admiralty, while the construction of the much larger ship of the line was still out of the question under these circumstances. The preliminary survey of 1802 did not produce reliable results. In 1805 Franz von Wrede, a German resident of former Dutch Cochin, wrote a memorandum for the Bombay government.<sup>40</sup> Wrede heavily criticised the wind driven saw-mill of Mackonochoy, which must still have been under construction then. Less timber than envisaged and promised was available at Baipur and, contrary to all prior announcements, at a much higher price. Hand-sawn timber could be purchased at Baipur for 5 *rupias* per *kanti* whilst Mackonochoy offered a *kanti* at 9 *rupias*.<sup>41</sup>

Regarding the organisation of the timber trade, Wrede suggested that it should be vested with the agency of indigenous merchants, and he further recommended close co-operation with the local people. Management of the forests ought to remain with the state authorities and they should be run exclusively by trained Europeans. According to Wrede, the Company had to increase timber production within its territories to reduce prices. Because of the great demand for timber, free market conditions would be best suited to achieve the aim of maximum supply at minimum cost. Wrede proposed, in close conformity with contemporary European absolutist *Forstwissenschaften*,<sup>42</sup> the co-ordination of forest management and the timber trade. Thus it was essential to motivate the local population, to promote industry, and to increase trade, which would then ultimately increase revenue income.<sup>43</sup>

Access to the forests was to be restricted to the wood-cutters and other licensed persons. In opposition to the generally free timber market, the requirements of the state should have exclusive and absolute priority. In these circumstances the forest officers would have been responsible for selecting, felling, cutting, sawing and eventually transporting the trees.<sup>44</sup> Finally, prefabricated parts of the ships would come into Bombay for their final fitting. To launch a proper forest administration Wrede first of all demanded a detailed survey of all accessible timber resources. A Committee of Survey, led by Major William Atkins and Alexander Mackonochoy, took up this business in 1805.<sup>45</sup> Unfortu-

nately Alexander Mackonochy died, and with him his saw-mill project at Baipur. William Atkins retired owing to health problems. Nevertheless, surveying continued and the Committee concluded its preliminary investigation in 1810, having produced various reports of differing quality and reliability.

Since the British could not distinguish the proprietary rights of the local population, they imposed the 'right of the conqueror'. This included the annulment of existing rights and their re-introduction and confirmation by the new rulers. Apparently the British argued along the same lines as Tipu Sultan had done before. Interestingly enough, this was strongly emphasised by the British officials surveying the forests of the Western Ghats in Malabar and Kanara.<sup>46</sup> In any event, this procedure made it quite easy for the British to announce their teak monopoly on the Malabar Coast in 1807.<sup>47</sup> Joseph Watson, lately appointed to the new office of the 'Conservator of Forests', unified the provinces of Kanara and Malabar in the Forest Department newly created to facilitate the thus centralised timber trade, and announced a monopoly of teak.<sup>48</sup>

As Conservator of Forests, Watson was vested with 'a view more especially to the preservation and amelioration of the produce of Teak and other Timber adopted to Maritime Purposes the future Trade in which must therefore be conducted under his Inspection'.<sup>49</sup> Within a few months Watson extended the monopoly on felling particular trees to cover their transport, for which a certificate was henceforth needed. Soon the British officials realised that an overall monopoly was not viable. Forest management and the timber trade could not be kept under one administration and were separated again.<sup>50</sup>

The plan best calculated to bring the Timber resources of the Province of Canara and Malabar entirely into our power; to foster and to restore the Forests, and to reduce the price of the Timber to the lowest predictable rate, is to work the Forests by the Jungle Merchants under the Superintendance and Control of the Conservator of the Forests in each Province, affording them such necessary assistance, in Elephants and advances in cash, as may enable them Successfully to prosecute that undertaking.<sup>51</sup>

It was only in the following year that the governor of Bombay, Jonathan Duncan, came to the conclusion that the forests should be run by the 'Agency of the Forest Claimants'. On the one hand, the monopoly on certain trees remained valid, on the other hand, the timber trade was to be organised by the traditional groups, i.e. *nayars*, *rajas* and the 'Jungle Merchants', with their respective partners. Henceforth the timber was supposed to be delivered to the Company officials at fixed prices. For the moment, this seemed to be the only chance of getting hold of enough timber, although a monopoly was not ruled out totally by Duncan. But he would rather leave this to 'future experiments'.<sup>52</sup> In fact, the timber monopoly could not be controlled effectively and only the timber depots along the coast offered a slight chance of supervision.

## BRITISH TIMBER TRADE ON THE MALABAR COAST

Between 1805 and 1815 the British developed a system of timber supply which can be divided into three different categories. Firstly, the EIC organised the timber trade within their territories with more or less monopolistic Indian merchants; secondly, the timber supply from indigenous merchants in the neighbouring countries was to be arranged with the assistance of the residents at the courts of the relevant rulers; and thirdly, the private trade of British subjects was to be supported by the EIC giving priority to the interests of the former if they faced Indian competition.

*Monopolistic trade relations with Indian merchants*

To reduce the number of intermediary 'coast merchants', the British invested the well-known and firmly established wholesale trader Covakkaran Mussa with something similar to a monopoly for felling trees in a specified area within the Malabar Province for a period of twelve years.<sup>53</sup> Three weeks later the Conservator of Forests, Mr Watson, published a proclamation in which he announced the monopoly for Mussa and further stipulated that

Of all the Trees which the Merchants now have ready cut in the aforesaid districts and of those which they have dragged and brought to the Banks, and of those which are lying barked, a particular statement be formed specifying the number of trees, their dimension, and the Frames of the places where they are lying, which Statement must be delivered into a Cutcherry on or before the 1st of October next, and if failing herein, any person after that day says he has trees in any place, the affair will not be taken up.

All the trees which people now have ready cut and lying in the Jungles, must be brought on or before the 31st of January 1807 to Ponany, Beypore, Calicut or Ellatoor, after which period no person if he has Timber remaining in the Jungles must bring it down, the period being elapsed, the Kottee Kanum and the charges of felling and barking will be paid him, accordingly to the old Custom.<sup>54</sup>

With a single stroke of the pen, the Company seemed to have solved their problems in getting the timber trade organised. Existing rights or still valid contracts with other persons were to be treated 'on grounds of equity to them and of Justice to the Company'.<sup>55</sup> Ultimately, this was intended exclusively to serve state interests. For a short, but still long enough, time the British would maximise the timber output. Until the fixed date all cut and stored timber had to be delivered to the above mentioned places. This measure would not only enforce the monopoly but ought to have caused a fall of timber prices. Mussa would then have been forced to offer his timber at cheap rates, despite his privileged position.<sup>56</sup> But the intended effect did not take place because the price of 6 *rupias*

per *kanti* could not be realised. The Company allowed Mussa to cut more teak timber than they thought to be good for the forests. Quite a lot of voices were raised opposing such a policy, and the strongest opponents were within the Forest Department, but they were a vain cry in the – administrative – wilderness.<sup>57</sup>

To meet the demand for timber needed for ship-building in the Bombay dockyards, the British were forced to sign additional contracts with individual timber merchants. These contracts were more or less of the same pattern. A fixed amount of timber had to be furnished on a certain date to a specified place. As usual, the timber merchant employed the carpenters, the wood cutters and workers, the draught animals, and he undertook the transport of the logs. The Company guaranteed the purchase of the agreed quantity of timber and supported the merchants with advances, if requested.

The British realised that a mixture of privileges and limited monopolies would best support their needs. A certain Khumbi Kuru was given a contract for delivering 600 *kanties* to Baipur at 8 *rupias* until 31 December 1812. Additionally, 1000 teak curves were needed until the end of that same year. The Marine Board signed a treaty with the Parsi merchants Dadabhai and Rastomji Jijibhai for 150 special timbers per annum over the next three years.<sup>58</sup> In Calicut, the Company came to an agreement with the local timber merchant Paiangalat Chanja Pakki for furnishing 600 teak *kanties* per year, each at least 40 to 45 feet long. Above that, the British ordered 25,000 *guz*<sup>59</sup> of plank timbers.

Despite the Company's advances there appears to have been a constant shortage of workers which the Bombay government tried to counteract by employing seasonal contract labourers from Goa.<sup>60</sup> In regions with a low population density the migration of part of the people into the forests of Kanara and Malabar caused a shortage in the labour force during the agriculturally most productive months. Thomas Munro, the collector in Kanara at the time, pointed out the disadvantageous coincidence of the vast demand for labourers and the neglect in cultivating the soil. '[A]nd as the more substantial land-holders had usually sufficient influence to get their own [labourers] exempted, the weight fell wholly upon the lower class, who were often deprived of the assistance of their servants at the time they stood in greatest need of them.'<sup>61</sup> Munro was quite aware that this kind of social deprivation might become a reason for rural protest at some stage.

The British had to be very cautious with any form of direct involvement in the organisation of the timber trade. Short-term wage labour and migration of contract workers could easily become a source of discontent among landless and unemployed peasants. Under these circumstances rural upheavals or revolts were very likely. The imperative of British policy in India had always been the quelling of agrarian unrest, because peasants were the least controllable part of the population. The lesson of the vagrant peasants in Bengal in the aftermath of

the 1770–71 famine had been learned.<sup>62</sup> However, the immediate impact of the British on the Indian labour force seems to have been rather insignificant and they did well to leave the matter to the Malabarian ‘agency’.

*Trade relations with neighbouring countries*

In the adjoining states the British influenced the timber trade via their residents at the courts of the *rajās*. In this context Travancore is quite an outstanding example. In 1803, the EIC signed a treaty with the *raja* for the furnishing of teak timbers.<sup>63</sup> It soon became clear that the *raja* was not able or, more likely, was not willing to fulfil the contract. The minister of the *raja*, Ikanda Pannikar, let the resident of the EIC in Anjengo know that his sovereign Avittam Tirunal Rama Varmma (reigned 1798–1810) could not agree to the stipulated amount of timbers.<sup>64</sup> Finally, the *raja* promised the delivery of the fixed quantity of teak after the EIC had advanced a particular sum of money.<sup>65</sup> Three years later the British started another attempt to get into contact with the *raja* of Travancore concerning the extension of the timber trade, especially in teak, and Avittam Varmma offered to supply the British with the annual teak harvest of his country. The latter promised further advances in cash as stipulated in the old contract.<sup>66</sup>

The resident, Mr Handley, informed the Bombay government that this form of trading connection was the only viable course because no individual merchant could guarantee the large quantity and the high quality of the timbers. Besides, all forests were in the hands of the *raja*, so it was with him that the EIC had to negotiate their contracts.<sup>67</sup> To facilitate the timber trade, *raja* Avittam Varmma asked the British officials to survey his forests. Apparently, he became interested in his teak resources and his future prospects of revenue income. At the beginning of the year 1807 the British resident in Travancore was instructed to organise a survey and he informed the Forest Commission about the intention of the Bombay and the Travancore governments accordingly.<sup>68</sup> For the time being, the Company had found an ideal partner for their timber demand, but after 1814 the timber trade declined dramatically. Despite all efforts, a further slump in timber supplies could not be prevented, the value of timber extracted decreasing from 200,000 *rupias* in 1814 to a mere 10,000 *rupias* three years later.<sup>69</sup>

In May that year, the resident at Baroda received an invitation to prepare a survey of the teak resources and to settle the timber trade according to the demand of the Bombay shipyards.<sup>70</sup> In his report the resident (A. Walker) stressed the importance of the forests in Kathiawar which belonged to the *raja* of Andipur. Fortunately the *raja* was interested in the timber trade with the EIC and soon Walker made contact with the local trader, Mutaram. It soon turned out that Mutaram was in dire straits to fulfil his contract because his partners and the labourers in the forests were unable to provide him with the stipulated quantity of timber.<sup>71</sup> N. Cron, the Government Agent in Surat, investigated the areas south of the Narmada. Most of the forests belonged to the Bhils, who organised

the timber trade on their own. The *raja* of Ramnagar possessed large forests, including valuable teak trees. According to Cron's report the timber could be delivered to the ports of Surat, Balasur or Gandari. The only problem, he stated, were the Bhils, who did not show any interest in trading relations with the British.<sup>72</sup>

Within a year the situation regarding the timber trade had deteriorated along the entire west coast of India. The resident in Baroda informed the government in Bombay that the chances of timber supply from that region were rather low.<sup>73</sup> The resident in Surat pointed out that the possibility of any successful timber trade would be closely connected to the willingness of the Bhils to co-operate with the British, which was also fairly low. Nevertheless, the Bombay government insisted on further investigation along the northern coast and, despite all frustrating past experience, instructed the resident to establish relations with the Bhils, '[...] how far they would be cordially disposed to facilitate a regular survey of the Ramnaghur Forest, and of the River which might be found to communicate the most contiguously to it for the purpose of the Company's deriving such Timber supplies from that quarter, by the Channel of the rivers, and outlets reaching the sea at Balasaur as might be found practicable'.<sup>74</sup> No answer regarding the subject is recorded in the correspondence. Later on the Bhils turned out to be rather 'un-cordial' because they refrained from any contact with the British, and after the annexation of their territory at the end of the final Anglo-Maratha war in 1819 they became the prototype of the 'criminal tribe' in India, thus helping to sharpen early British racist concepts.<sup>75</sup>

Lieutenant Robert Campbell, Assistant to the Inspector of the Dharampur Forests, tried very hard to initiate trade relations with the local monopolistic merchant Qasim Hashem. Nothing else is known about this attempt and it seems very likely that the communication ended disappointingly for the British. The Forest Committee encouraged the residents to sign treaties with the local rulers of the hill areas north of the Narmada if possible.<sup>76</sup> But even in this case nothing can be traced further in the relevant correspondence. The influence of British rule did not reach very far into the hinterland, let alone into more remote regions. Without the help and support of the local agency the Company was still not able to conduct its trading business. It was only in the 1840s that the British colonial regime was able to get some hold of the Dharampur and Dangs forests by leasing out the timber trade to the collaborating Udesinh *raja* of Ghadhvi, Hasusinh *raja* of Amala, Ankus *raja* of Deher and Aundya *raja* of Vasurna amongst others.<sup>77</sup>

### *British versus Indian private trade*

As we have seen in the case of Alexander Mackonochy's Baipur venture, the Company officials, including legal advisers, indiscriminately supported any private British enterprise. Even the far better conditions of Indian merchants for furnishing the EIC with teak timber at Baipur were rejected in favour of a British

supply. A few other British obtained the Company's protection for their private interests in India. Murdock Brown, a close associate of William Farmer and most likely involved in Mackonochy's saw-mill project, had tried to prevent a state monopoly for pepper and had been rather successful in establishing a prominent position in the pepper trade of the Malabar province. According to Walter Ewer, a former director of the EIC, Brown was sometimes furnished with timber at a price of 70 to 80 *rupias*, which he sold at 700 to 800 *rupias*.<sup>78</sup> Besides, he dealt with ammunition and victuals for the French and even Tipu Sultan and, above that, he undertook his business in clear opposition to the Company's security interests as well as against their commercial policy. This may have been the reason why he was not granted the monopoly for the timber trade in Malabar. His going against British national interests and his rivalry with Covakkaran Mussa tipped the balance in favour of the latter just this once. The colonial regime had to be as opportunist as the individual Indian or British private merchant.

In Haiderabad a certain Roebuck ventured a teak business and settled at Coringa. The resident at the *darbar* of Haiderabad was duly instructed to give any support to Roebuck that he might request and 'to take measures for obtaining from the Court of Hyderabad such orders as might be deemed necessary for giving protection to Mr Roebuck in obtaining Timber from the Forests of Rajahmundry'.<sup>79</sup> In 1802, Roebuck had already received a *parwana* from the *nizam* for cutting 14,000 teak trees in the vicinity of the Godaveri. Thereupon Roebuck negotiated for possible co-operation with a local timber merchant. The business faltered in the long run and the British had to ask for official assistance from the Madras government. And at Calicut the British had signed a treaty with the already mentioned Paiangalat Chanja Pakki for supplying the Company with a particular amount and quality of timber. The commercial interests of the two English private merchants Crookenden and Gardener, dealing with timber in Calicut as well, were not to be restricted, even if the Malabarian trader was able to offer more advantageous conditions.

The protection of the British administration in India reached far beyond their actual and proper territories. Captain John Johnson who was on duty in south India surveying Kanara, and above that 'Conservator of Forests in Canara' was given the exclusive right for felling teak, poon and other valuable trees. Apparently the Company was eager to meet Bombay's timber demands under any circumstances. The strict management of resources and the exploitation of the forest were on the agenda of the day, in stark opposition to any ideas of sustainable yield and forest protection.

To maximise timber output, British officials tried to prevent any kind of local and 'illegal' monopoly. Thomas Thatcher, Inspector of the Forests of the Raja of Dharampur, was quite helpless when facing the machinations of local timber traders. He observed suspiciously the timber trade of village communities who delivered their timber exclusively to the master builder Jamsethji in Bombay.<sup>80</sup> The 'private' trading structures were firmly established between the Parsis at

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Bombay and the hinterland including the remotest areas. Even other Indian ship-builders had to obtain their resources from this syndicate, which regulated prices at their own discretion and kept them at a high level. For this reason Thatcher was unable to negotiate trade in timber with independent merchants.<sup>81</sup> Yet he tried to obstruct these practices, for as soon as he had found out that a village community had erected some kind of timber monopoly he asked the Bombay authorities to break up the structures – admittedly without any success. This proves the existence of an important and well organised timber trade along the coast north of Bombay up to Khambhat.<sup>82</sup>

The delivery of timber remained the central issue for the British authorities. After the *Minden* had been launched in 1810, the Bombay Marine planned the construction of more large ships of the line in accordance with the admiralty's 'experiment'. To ensure a sufficient supply of timber resources, Governor General Lord Moira forbade the export of teak from Malabar, Kanara and Travancore. Within a short time the revenue boards of Madras and Bombay realised that export duties were steadily decreasing. Consequently, the government relaxed the prohibition.<sup>83</sup> Two years later the British in India had to accept that the prohibition of the teak trade had failed completely. Smuggling on a grand scale had started after 1810, demonstrating the colonial authority's inability to control inland trade, not to mention the 2,000 kilometres of western Indian shores.<sup>84</sup>

T. H. Pearson, Judge and Magistrate of South Canara, pointed out to the Bombay officials the ludicrous practice of the monopoly.

Teak Wood moreover is held to be a Jungle Timber and liable to the import duty although no such tree is to be found in what is really the Forests, but is to be met within every garden in Malabar, and from its bearing a fruit which enormously forms a part of the food of the natives is assessed to the public Revenue [...] and that Teak Timber the growth of private Estates paying a Revenue to Government is cut down and appropriated to the use of the Honble Company and that Jungle Timber the growth of the Cultivated parts of the Country is equally liable to the Duty levied by the Conservator with that felled in the Forests [...].<sup>85</sup>

Despite all the contradictory and uneconomic regulations of the monopoly it was upheld until 1823. In his memorandum of 1822, Thomas Munro gave the final blow to the monopoly and the Forest Department in Bombay. He accused the Conservator of Forests of having developed a system of forest protection which now far exceeded its original intention of ensuring the delivery of sufficient timber for building ships of the line at Bombay. Instead, protection had turned into a restrictive monopoly extending over every single specified valuable Malabarian tree not used in the construction of ships. The monopoly had paralysed all commercial activities and, therefore, should be abolished.<sup>86</sup>

Similar criticism came from the Marine Board, where officials stressed that the Conservator of Forests was only eager to extract revenues and did not show



any particular interest in promotion of the timber trade.<sup>87</sup> Ultimately the Bombay administration abolished the post of Conservator of Forests and dissolved the Forest Department, transferring its functions to the Revenue Department.<sup>88</sup> Due to the lack of protection a rather fierce onslaught on the hardwoods in some areas of the Malabar forests then set in.<sup>89</sup>

The EIC had lost interest in forest management or any kind of forest conservation policy to facilitate the timber trade in the long run. Within a few years Bombay could not be supplied with the required amount of timber, and the Madras authorities, now responsible for the Malabar forests, were asked to frame more precise instructions and to secure private property rights as well as those of the government. Neither the Principal Collector of Malabar nor the Marine Board had the means to encourage the timber trade because the forest proprietors and the timber merchants were unwilling to sign contracts with a government agent. From the correspondence on the subject it becomes clear that they were likely to fulfil the contracts but that separate conditions would have to be inserted if the amount of timber was to be increased over the next years. Finally the Bombay government decided to continue the present system and to ensure additional deliveries from neighbouring Cochin and Travancore.<sup>90</sup>

The abolition of the timber monopoly had devastating consequences for the Malabar forests, as tropical hard woods were felled indiscriminately, irrespective of age and girth. Despite an enormous increase in the actual output and export, prices, too, did increase 25 percent between 1823 and 1833. In response to this rather undesirable development, the Bombay government helplessly asked the Collectors of Malabar and Canara to protect the government forests. No measures whatsoever were taken by state authorities to regulate the local timber trade and, therefore, the control of the forests as well as the timber trade remained in the hands of the local people.<sup>91</sup> Facing the timber shortage, Dr Nathaniel Wallich, the then director of the Botanical Gardens at Calcutta, highly recommended state protection of all hard-wood forests to facilitate the supply of timber (during his cross-examination by a parliamentary committee in 1832). Nevertheless, no further action was taken, neither by the London, nor by the Calcutta authorities.<sup>92</sup>

The situation changed only after 1837, when the British resident in Travancore reported on the illegal inroads being made by the timber merchants of that state and those of Nilambur and Rajamundry. Still, the Madras government remained paralysed by institutional inertia and lack of experience. The same is true of the Bombay administration. By 1838 the Admiralty were experiencing increasing difficulty in securing timber from the overworked forests of northern Europe and timber thus became overpriced. Hence the resurgence of the Malabar forests as supplier of timber on grounds of strategic importance. This immediately changed the attitude of the Marine Board at Bombay in respect to the timber trade. Additionally, government circles paid attention to the opinion of Dr Alexander Gibson, superintendent of the Botanical Gardens at Pune. It was he, and his

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assistant, Hugh Cleghorn, who became most influential regarding the forest policy and the organisation of the timber trade on the Malabar coast from 1840 onwards.<sup>93</sup>

## CONCLUSION

The Malabarian timber trade is only a small part of forest utilisation along the western coast of India. It has become evident that the tropical hardwood resources of Malabar and Kanara could not be exploited by the British as desired. They had to be satisfied with the amount of timber they were supplied with by the local merchants. At the end of the 18th century the British government in London asked the Portuguese to refrain from timber trade and ship-building in Goa and Daman in order to enable the EIC to fulfil the admiralty's ship-building scheme at Bombay. Dutch territories such as Cochin were annexed in 1796 to prevent any kind of trade in natural resources like pepper and timber.<sup>94</sup> Apparently, the British were more successful in controlling their European rivals than their Indian commercial competitors. British attempts to establish efficient rule on the Malabar Coast after 1790 failed from the very beginning. In 1796, despite all efforts of the British authorities at Bombay, state control was hardly visible. Over the next four decades the situation did not change very substantially.

After several initial attempts to assess the natural resources, especially that of timber, on the Malabar Coast, the British authorities refrained from any further detailed inquiry after 1810. It had become clear that they had neither the power nor the personnel to get more information about the internal conditions of Malabar.<sup>95</sup> Although the Admiralty in London, as well as the British government, induced the colonial administration to work out a plan to supply the Bombay dockyards with sufficient timber for ship-building for the Royal Navy, the Company was unable to comply with the order. Ship-building could be made viable at Bombay, but not on the basis of solid planning, elaborate forest management and the organisation of the timber trade.

British intentions to set up a timber monopoly run by the Company came to naught. The colonial authorities were unable to break up the indigenous trading structures. Just as the Forest Department had to be given up because of gross inefficiency, the control of the timber trade had to be abandoned owing to a lack of power to influence well-established trading patterns. Instead, the colonial regime had to rely on the local structures. Accordingly, the timber trade was partially organised with the help of large timber traders and, additionally, through individual contracts negotiated with smaller merchants. To further optimise the timber output, several British private merchants were given licences for felling trees. It was this mixture of private trade supported by official authorities which produced the prolific timber trade of the first two decades of the 19th century.

Pamela Nightingale has maintained that '[t]he period in which Bombay had exclusive control of Malabar suggests that the presidency's imperialism was the offspring of its private trade'.<sup>96</sup> It seems quite evident from the given example that private British interests were not dominating British politics and commerce in India at the beginning of the 19th century, as has hitherto been supposed. In the case of the timber trade the colonial regime's abilities to monopolise trade and to support British private commercial interests were rather limited. At best, the Company was able to attract some merchants by privileging them. Seen from the Malabarian merchant's perspective the Company was more or less forced to do so. In stark contrast to the pepper trade, which the Company state controlled to a large extent after the fall of Mahé, the new regime never got hold of the timber trade. Without doubt the thriving timber trade not only increased commercial activity on the Malabar coast but also produced a growth of profits in that branch of business. A few comments can be made on the effects of the increased commercialisation upon the local population of wood cutters, carpenters, and, more generally, people living in the forests. It seems very likely that the rights of all these people were curbed and partially restricted during the period under investigation. Furthermore, the price rises of the 1820s and '30s indicate fierce competition among the local timber merchants over scant resources which may have been the reason for an overall slight impoverishment of the forest labourers.

The superior quality of natural resources and the resistance of the diversified industry prevailed on the west coast of India during the first half of the 19th century. Only the emergence of iron ship construction dealt a severe blow to the 'traditional' ship-building industry of the Malabarian wharfs.<sup>97</sup> Timber trade and forest conservation would become the focus of the colonial regime once again following the introduction of modern means of communication such as railways and telegraphs. Demand for sleepers and poles resulted in the introduction of sustainable forest management and a reorganised timber trade.<sup>98</sup> During the last two decades of the 20th century, Baipur has again become a centre for ship-building, particularly in the construction of a variety of boats for Arab customers. The traditional craftsmen and labourers, the Odais and the Mappila Kalasis are still engaged in an industry that is thriving once again.<sup>99</sup> The timber trade is still run privately, restricted by the present forest regulations.

## NOTES

<sup>1</sup> K. K. N. Kurup, 'Indigenous navigation and ship-building on the Malabar Coast', in *Ship-building and Navigation in the Indian Ocean Region, AD 1400–1800*, ed. K. S. Mathew (New Delhi: Manoharlal, 1997), 20–2.

<sup>2</sup> Satpal Sangwan, 'The sinking ships: colonial policy and the decline of Indian shipping, 1735–1835', in K. S. Mathew, *op. cit.*, 139.

- <sup>3</sup> A. P. Greeshmalatha and G. Victor Rajamanickam, 'Ship-building technology: as practised in Bepur, Kerala', in K. S. Mathew, op. cit., 44.
- <sup>4</sup> Margret Frenz, *Vom Herrscher zum Untertan. Spannungsverhältnis zwischen lokaler Herrschaftsstruktur und der Kolonialverwaltung in Malabar zu Beginn der britischen Herrschaft, 1790–1805* (Stuttgart: Steiner-Verlag, 2000), 112–50.
- <sup>5</sup> For the Bengal government Jonathan Duncan and Charles Boddam, for the Bombay government William Farmer and Alexander Dow started their work in the commission.
- <sup>6</sup> *Reports of a Joint Commission from Bengal and Bombay, Appointed to Inspect into the State and Condition of the Province of Malabar, in the Years 1792 and 1793*, (reprint Madras 1862).
- <sup>7</sup> Francis Buchanan, *A Journey from Madras through the Countries of Mysore, Canara and Malabar, performed under the Orders of the Most Noble the Marquis of Wellesley, Governor General of India etc.*, 3 vols, (London 1807). See also Marika Vicziány, 'Imperialism, botany and statistics in early nineteenth century India: The survey of Francis Buchanan (1762–1829)', *Modern Asian Studies* 20 (1986), 625–60.
- <sup>8</sup> Ravi Rajan, 'Imperial environmentalism or environmental imperialism? European forestry, colonial foresters and the agendas of forest management in British India 1800–1900', in *Nature and the Orient. The Environmental History of South and Southeast Asia*, ed. Richard H. Grove, Vinita Damodaran, Satpal Sangwan (Delhi: Oxford University Press, 1998), 328–38.
- <sup>9</sup> Northcote C. Parkinson, *Trade in the Eastern Seas, 1793–1813* (London 1966), 331 and Anne Bulley, *The Bombay Country Ships, 1790–1833* (Richmond: Curzon Press, 2000), passim.
- <sup>10</sup> Ruttonjee A. Wadia, *The Bombay Dockyard and the Wadia Master Builder* (Bombay: Godrij Memorial Printing Press, 1957), 178–9.
- <sup>11</sup> Michael Mann, 'German expertise in India? Early forest management on the Malabar Coast, 1792–1805', in *Explorations in the History of South Asia. Eine Festschrift für Dietmar Rothermund zum 65. Geburtstag*, ed. Hermann Kulke and Jürgen Lütt, (Delhi: Manohar, 2001), 18–19.
- <sup>12</sup> Michael Mann, *Flottenbau und Forstbetrieb in Indien 1794–1824* (Stuttgart: Steiner-Verlag 1996), 107–39.
- <sup>13</sup> Pamela Nightingale, *Trade and Empire in Western India, 1784–1806* (Cambridge: Cambridge University Press, 1970), 91.
- <sup>14</sup> Mahmud Hussain, 'Regulations of Tipu Sultan's Navy', in *Resistance and Modernization under Haider Ali and Tipu Sultan*, ed. Irfan Habib (Delhi 1999), 174–81.
- <sup>15</sup> *Reports of a Joint Commission*, para. 445, 260. *A kanti* was about a third of a cubic metre.
- <sup>16</sup> *Ibid.*, para. 447, 261.
- <sup>17</sup> For William Farmer's illustrious career see Nightingale, *Trade and Empire*, 73–4.
- <sup>18</sup> Greeshmalatha and Rajamanickam, 'Ship-building technology', 49.
- <sup>19</sup> The British did not exactly understand the *kattikanam* remuneration system, see Survey of the Timber Forests, Bombay, 25 February 1807, para 233. Board's Collections, 221/4817 (Oriental and India Office Collection, British Library. All quotations from the Board's Collections refer to the OIOC, BL)
- <sup>20</sup> From the Political Resident in Travancore with Enclosure, G. A. Hughes, 17 December 1806. *Ibid.*, 221/4818.
- <sup>21</sup> The process of girdling the teak trees has been described by a certain Lieutenant Threshie at the beginning of the 19th century, quoted in Wadia, *Bombay Dockyards*, 222–3.

<sup>22</sup>The following paragraph is mainly based on the description as given in the Tamil palm leaf manuscripts *Navoi Sastram*, dated around 1500 A.D. (preserved in the Mackenzie Collection of the Tamil Nadu State Archives, Chennai), and the *Kappal Sastram* of Tarangambadi, dated around 1620 A.D. The two sources are presented in B. Arunchalam, 'Timber traditions in Indian boat technology', in Mathew (ed.), *op. cit.*, 13–4. In addition it is referred to the *Kulathurayyan Kappal Pattu*, a ballad dated around 1786 to 1790, describing the process of ship-building and the maritime trade along the west coast of India, *ibid.*, 13.

<sup>23</sup>Revenue Letter to Bombay, 28 August 1800, para. 28. Board's Collections 89/1843.

<sup>24</sup>Greeshmalatha and Rajamanickam, 'Ship-building technology', 49.

<sup>25</sup>Nightingale, *Trade and Empire*, 84;111.

<sup>26</sup>Myla Lyons, 'The Mappilas of Malabar and the Fara'idis of Bengal: Dynamics of separatism and submergence of Islamic identity in India', *Calcutta Historical Journal* 9 (1984), 44.

<sup>27</sup>William Logan, *Malabar*, vol. 1 (reprint New Delhi/Madras 1995, first publ. 1887), 191; 194–9; 484–5.

<sup>28</sup>Conrad Wood, 'The First Moplah Rebellion against British Rule in Malabar, *Modern Asian Studies* 10 (1976), 543–5.

<sup>29</sup>The British partly solved the problem and restored the *jenmis* for purposes of revenue collection which resulted in the mentioned conflicts. *Ibid.*, 546–7.

<sup>30</sup>Nightingale, *Trade and Empire*, 100.

<sup>31</sup>Home Misc. Series, vol. 210, 1–10 (OIOC, BL) and Wadia, *Bombay Dockyard*, 189.

<sup>32</sup>Extract of Court's Public Letter to Bombay, 28 April 1795, paras 27–9, and Reply to Mr Mackonocky's letter dated 13 January 1794, Board's Collections 39/965.

<sup>33</sup>Letter from Mr A. Mackonochy Extract Bombay Consultations, 16 Oct. 1796. Board's Collections 39/965.

<sup>34</sup>Letter from the Honble Company's Solicitor, H. Forster, Bombay 22 Feb. 1797, Extract Bombay Revenue Consultations, *ibid.*

<sup>35</sup>Nightingale, *Trade and Empire*, 101.

<sup>36</sup>The local ship-building industry did not expand under the East India Company due to Alexander Mackonochy's efforts, as Richard Grove suggests in 'Conserving Eden: The (European) East India Companies and their environmental politics on St Helena, Mauritius and in Western India, 1660–1854', in *Ecology, Climate and Empire. Colonialism and Global Environmental History, 1400–1940*, ed. Richard H. Grove (Cambridge: White Horse Press, 1997), 69.

<sup>37</sup>Letter from the 13th June 1799. Revenue Letter to Bombay, 28 August 1800, para. 25. Board's Collections 89/1843. Underlining in the manuscript.

<sup>38</sup>To W. T. Money, President etc. Forest Committee at Bombay; J. Johnson, Captain on Survey, Mangalore 15 May 1807, para. 3. Board's Collections 280/6428.

<sup>39</sup>*Reports of a Joint Commission*, para. 445, 260.

<sup>40</sup>For the biographical background of Franz von Wrede see Mann, 'German expertise', 20–1; 26–7.

<sup>41</sup>Public Letter to Bombay, 2 May 1806. Board's Collections 192/4316. The prices refer to 1803.

<sup>42</sup>Rajan, 'Imperial environmentalism', 328–34 and Mann, 'German expertise', 24–6.

<sup>43</sup>Memorial Francis Wrede 1805, paras 51 and 57. Board's Collections 182/3474.

<sup>44</sup>*Ibid.*, paras 75–6.

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- <sup>45</sup> Draft of the Instructions to be issued to the Committee of Survey, Bombay 2 April 1805. Ibid.
- <sup>46</sup> Proceedings relative to Saw Mills, paras 4; 6; 36–7. Board's Collections 89/1843.
- <sup>47</sup> Letter dated 24th December 1807, Relative to ascertain Regulation by the Conservator of the Forests in Malabar. Proclamation 25th April 1807, Ft. St. George. Ibid., 320/7298.
- <sup>48</sup> Survey of the Timber Forests. Letter from Bombay 25 Feb. 1807, para. 220. Ibid., 220/4817.
- <sup>49</sup> President's Minute, 7 November 1806, Board's Collections 221/4818.
- <sup>50</sup> Letter from the Forest Committee, with Enclosure. To W. T. Money, President etc. Forest Committee, Manjerry 5 March 1807, para. 21. Ibid., 280/6428.
- <sup>51</sup> Survey of the Timber Forests. Letter from Bombay, 25 Feb. 1807, para. 237. Ibid., 220/4817.
- <sup>52</sup> Resolution, 20 Feb. 1808. Ibid., 280/6428.
- <sup>53</sup> Letter from the Principal Collector in Malabar with Enclosures, Calicut 27 June 1806. Ibid., 220/4817. The privilege was valid from 1 April 1807 to 31 March 1819.
- <sup>54</sup> Report from the Forest Committee, Translate of a Proclamation, 13 July 1806, Bombay 13 February 1807. Ibid., 221/4818.
- <sup>55</sup> President's Minute, Bombay 7 November 1806 (Jonathan Duncan), para. 42. Ibid.
- <sup>56</sup> Covakkaran Mussa was already the principal supplier of pepper in Malabar. This demonstrates that the Malabarian 'agency' was better organised and much more competitive than their British counterparts or partners. It was Mussa who dominated the trade on the Malabar Coast at the beginning of the 19th century, not the EIC. For Mussa's role in the pepper trade Nightingale, *Trade and Empire*, 115–8.
- <sup>57</sup> To the Principal Collector in Malabar, Thomas Warden, Bombay, 10 November 1806. Board's Collections 221/4818.
- <sup>58</sup> Letter from Bombay, 2 April 1813, paras 44–7. Ibid., 429/10507.
- <sup>59</sup> One *guz* is equivalent to 18 inches or 45.72 centimetres.
- <sup>60</sup> To the Committee Superintending the Research into the Timber Resources of the Province of Malabar and Canara, Bombay 19 December 1806, paras 2–3. Board's Collections 221/4818.
- <sup>61</sup> Extract from Report of Principal Collector of Canara; dated 9 November 1800, in *The Fifth Report from the Select Committee of the House of Commons on the Affairs of the East India Company, 28th July 1812*, ed. Walter K. Firminger, (3 vols, reprint New York: Augustus Kelly, 1969), vol. III, 317.
- <sup>62</sup> Aditee Nag Choudhury-Zilly, *The Vagrant Peasant. Agrarian distress and desertion in Bengal 1770 to 1830* (Wiesbaden: Steiner-Verlag, 1982), 62–76.
- <sup>63</sup> Extract of Agreement with the Rajah of Travancore, 28 January 1803. Board's Collections 220/4817.
- <sup>64</sup> Report from the Commercial Resident at Anjengo, and in Malabar, with Enclosures, recd Bombay 22 February 1803. Ibid., 192/4316.
- <sup>65</sup> Ibid., para. 6.
- <sup>66</sup> Letter from the Resident at Anjengo, A. W. Handley, 17 March 1806. Ibid., 220/4817.
- <sup>67</sup> Ibid.
- <sup>68</sup> Letter from Bombay, 22 February 1807, para. 220. Ibid., 192/4316.
- <sup>69</sup> John Edye, 'Description of the Sea Port on the Coast of Malabar of the Facilities they afford for building Vessels of different Descriptions, and of Produce of the adjacent Forests', *Journal of the Royal Asiatic Society* 2 (1835), 331.

<sup>70</sup> Letter to Bombay, 2 May 1806. Letter from Bombay, 22 February 1807, para. 220. Board's Collections 192/4316.

<sup>71</sup> To W. T. Money, President, John Smee and Captain Brookes, Members of the Committee for the Purpose of Superintending the Researches into the Timber Resources of India, Baroda 24 July 1806; A. Walker, Resident, paras 2,3,5. *Ibid.*, 220/4817.

<sup>72</sup> Letter from the Forest Committee with Enclosures. Committee for investigation Timber Resources of the Western side of India, Surat 31 May 1806. *Ibid.*, 221/4818.

<sup>73</sup> Survey of Timber Forests, Public Letter, Bombay 25 February 1807, para. 222. *Ibid.*, 220/4817.

<sup>74</sup> Paras 226 and 230. *Ibid.*

<sup>75</sup> Stewart Gordon, *Marathas, Marauders, and State Formation in Eighteenth Century India* (Delhi etc.: Oxford University Press, 1994), 151–62.

<sup>76</sup> Letter from the Forest Committee with Enclosures, Bombay 5 August 1806, para. 2. Board's Collections, 220/4817.

<sup>77</sup> Ajay Skaria, *Hybrid Histories. Forests, Frontiers and Wildness in Western India* (Delhi etc.: Oxford University Press, 1999), 179. For the organisation of the Bhil timber trade in Dangs at the beginning of the 18th century, *ibid.*, 179–80. Valuable contributions on the hill people of western India are provided by Sumit Guha, 'Forest Policies and Agrarian Empires: The Khandesh Bhils, c. 1700–1850', *Indian Economic and Social History Review* 33 (1996), 133–53, and David Hardiman, 'Power in the Forest: The Dangs 1820–1940', in *Subaltern Studies*, vol. VIII, ed. David Arnold and Ranajit Guha (Delhi: Oxford University Press, 1994), 85–113.

<sup>78</sup> Nightingale, *Trade and Empire*, 101.

<sup>79</sup> Mr Roebuck to be afforded encouragement for procuring Timber from the Teak Forests in the Nizam's Dominions. Letter from Ft St George, 6 March 1807, paras 138–9. Board's Collections, 222/4873.

<sup>80</sup> Asiya Siddiqi, 'The business world of Jamsedji Jeejeebhoy', *Indian Economic and Social History Review* 19 (1983), 301–24.

<sup>81</sup> To William Money, Chicklee, 1 November 1807, Thos Thatcher, para. 5. Board's Collections, 280/6428.

<sup>82</sup> Letter from the Superintendent of the Marine with Enclosures: To W. T. Money, Chicklee, 5 December 1807, Thomas Thatcher. *Ibid.* and Report from the Surveyor General in the State of the Timber Produce from Bassein to the Narbudda, Baroche, 15 August 1811, Monier Williams, para. 32. *Ibid.*, 348/8156.

<sup>83</sup> To His Excellency Sir Samuel Hood, Vice Admiral of the Blue and Commander in Chief of His Majesty's Ships and Vessels employed in the East Indies, Fort William, 22 October 1813. *Ibid.*, 432/10543.

<sup>84</sup> Letter from Bombay, 2 April 1813, para. 40. *Ibid.*, 429/10507.

<sup>85</sup> Letter from the Judge and Magistrate in South Canara, T. H. Pearson. To the Secretary to Government, Judicial Department, 27 July 1813. *Ibid.*, 524/12513.

<sup>86</sup> From Thomas Munro to the Honble Mr Elphinstone, Governor in Council at Bombay. Fort St George Revenue Consultations, 6 December 1822. *Ibid.*, 777/21016.

<sup>87</sup> Marine Letter from Bombay, 31 May 1823. *Ibid.*, No. 145.

<sup>88</sup> Proceedings of the Board of Revenue at Fort St George, see correspondence and proceedings between 30 April and 14 May 1823. *Ibid.*

<sup>89</sup> Principal Collector T. Harris, Cutcherry Mangalore 10 July 1823, *ibid.*, 21 July 1823. *Ibid.*

## TIMBER TRADE ON THE MALABAR COAST

<sup>90</sup> Correspondence relative to the Supply of Timber from the Coast of Malabar for the Use at the Dockyard at Bombay (1827), Board's Collections 959/27255.

<sup>91</sup> Memorandum by Lieutenant Colonel Cullen, Military Auditor General, 23rd July 1833, Extract Fort St. George, Military Consultations of 20th December 1833; Letter From Fort St. George, Military Department, dated 17th January 1834, para 45. *Ibid.*, 1465/57561.

<sup>92</sup> Richard H. Grove, *Green Imperialism. Colonial Expansion, Tropical Edens and the Origins of Environmentalism, 1600–1860* (Cambridge: Cambridge University Press, 1995), 410–18.

<sup>93</sup> *Ibid.*, 421–8.

<sup>94</sup> Richard G. Albion, *Forests and Sea Power* (Cambridge/Mass., 1926), 366 and Edge, *Description of Sea-Ports*, 324.

<sup>95</sup> Mann, *Flottenbau und Forstbetrieb*, 77–8.

<sup>96</sup> Nightingale, *Trade and Empire*, 88.

<sup>97</sup> Sangwan, 'The sinking ships', 144.

<sup>98</sup> See the brief summary Berthold Ribbentrop, *Forestry in British India* (1900, reprint New Delhi: Indus Publishing Company, 1989), 11–2; 68–77. For the administration of the Nilgiri forests until the introduction of the 1882 Forest Act see W. Francis, *The Nilgiris. Madras District Gazetteers* (Madras 1908, reprint Madras/New Delhi 1994), 210–1.

<sup>99</sup> Kurup, 'Indigenous navigation and ship-building', 24. V. Kunhali, 'Timber industry related to ship building in Kerala' in *History of Traditional Navigation*, ed. Victor Rajamanikam and Y. Subbarayalu ((Thanjavur 1988), 157–64.