

# THE INDIAN ECONOMIC AND SOCIAL HISTORY REVIEW

Vol. V No. 2

June 1968

## C O N T E N T S

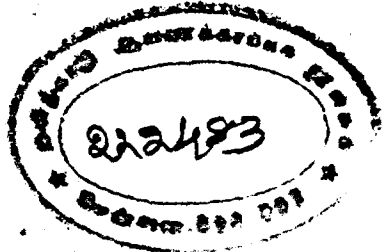
|                                                                                                                                                                      | Page |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|
| <b>Dev Raj Chanana</b>                                                                                                                                               | iii  |
| Colonisation of Assam : Years of Transitional Crisis (1825-40)<br><span style="float: right;"><i>by Amalendu Guha</i></span>                                         | 125  |
| Trading Activities of Indians in Russia in the Eighteenth Century<br><span style="float: right;"><i>by Surendra Gopal</i></span>                                     | 141  |
| Shipbuilding in the Mughal Empire during the Seventeenth Century<br><span style="float: right;"><i>by A. Jan Qaisar</i></span>                                       | 149  |
| The Breast-Cloth Controversy : Caste Consciousness and Social Change in Southern Travancore<br><span style="float: right;"><i>by Robert L. Hardgrave, Jr.</i></span> | 171  |
| <br><b>BOOK REVIEWS :—</b>                                                                                                                                           |      |
| Sh. 'Abdur Rashid Ed. : Inshā'-i-Māhru (Letters of 'Ayn-ud-dīn' Ain-ul-Mulk 'Abdullah bin Māhru)<br><span style="float: right;"><i>by Simon Digby</i></span>         | 189  |
| Kushwant Singh-Arun Joshi : Sri Ram—a Biography<br><span style="float: right;"><i>by P. Chatterjee</i></span>                                                        | 193  |
| Sir Perceival Griffiths : The History of the Indian Tea Industry<br><span style="float: right;"><i>by Amalendu Guha</i></span>                                       | 195  |
| H. K. Sherwani : Muhammad-Quli Qutb Shah, founder of Haidrabad<br><span style="float: right;"><i>by Om Prakash</i></span>                                            | 198  |

## INDIAN ECONOMIC AND SOCIAL HISTORY REVIEW

1. Place of Publication                      Delhi
2. Periodicity of Publication              Quartely
3. Printer's name                              K.A. Naqvi  
Nationality                                      Indian  
Address                                          Delhi School of Economics  
University of Delhi  
Delhi-7
4. Publisher's name                          K. A. Naqvi  
Nationality                                      Indian  
Address                                          As in item 3
5. Editor's name                              T. Raychaudhuri  
Nationality                                      Indian  
Address                                          Delhi School of Economics  
University of Delhi  
Delhi-7
6. Names and addresses of individuals who own the newspaper and partners or shareholders holding more than one per cent of the total capital                      Indian Economic and Social History Association

I, K. A. Naqvi, hereby declare that the particulars given above are true to the best of my knowledge and belief.

Dated: 1. 8. 1968



Sd/- K. A. NAQVI

## DEVRAJ CHANANA

The death of Dr. Devraj Chanana has been more than a loss not merely to Sanskrit studies. It has meant the loss of a brilliant mind in the entire field of classical and ancient Indian studies.

Dr. Chanana had an enviable academic record and trained as an Orientalist at Lahore which in pre-partition days was one of the more important centres of Indology, particularly the study of classical languages. In the mid-fifties he won a scholarship which took him to France where at the Sorbonne he wrote his first major thesis—a study of slavery in ancient India. This brought him into contact not only with the French school of Indology, but also with the intellectually far more stimulating French approach to the social sciences. This was the outcome of both an academic utilisation of Marxism as well as intensive analysis into socio-economic history as typified in the works of Bloch or the group centred around *Annales*. For a receptive mind such as his, this was a most meaningful contact, particularly as he had, even prior to his visit to the Sorbonne, begun to see the relevance of these kinds of analyses to the early Indian past.

His contact with the French school of Indology had its own advantage in that the French Indologists have always had traditions different from those of the British or German. The ideological context of the latter hardly applies to the former. Dr. Chanana was well aware of this and on his return from France spent part of his time translating the more important works of French Indologists, which he felt were in themselves valuable but which had little impact on Indian scholars since so few could read them in the original French. Such works included Filliozat's *The Classical Doctrine of Indian Medicine*, Renou's *The Destiny of the Veda in India* and his *Grammatical Terminology of Sanskrit* and Jules Bloch's *Application of the Principles of Cartography to I-A languages*.

Dr. Chanana's work was largely of two categories. Trained as he was in Sanskrit some of his writing was on themes related to the analysis of language. In one of his papers he dealt with the significance of certain selected words. In another paper he dealt with the statistical distribution of some key words in the *Ramāyana*. The words selected were *gana*, *jana* and *samgha*, all of which are more frequently associated with Buddhist literature. A more technical investigation in linguistics was a discussion of the comparative frequency of Indo-Aryan consonants as initials. Even as a linguist, he was primarily concerned with the social context of words and language.

But his larger interest was in the study of the society and economy of ancient India. It was in this area that he made his most important contribution and it was again in this area that his next major work was expected. *slavery in Ancient India* in many ways typifies Dr. Chanana's approach. The subject was by no means new to the socio-economic study of ancient India but had in the past, either been glossed over by references to the excellent treatment meted out to slaves in ancient India as compared to other classical cultures such as ancient Greece, or else, it was described as a separate social category which somehow did not play an important role in Indian society. Dr. Chanana's was the first study which faced the subject squarely with no apologies for the existence of slavery and which proceeded from this point to explain why and how slavery had been an integral part of the Indian social and economic system. What distinguishes this study is not merely the use of new evidence, particularly archeological evidence, or the attempt to introduce a systematic study of the social institutions of that period but the overall understanding of the functioning of society during the early period.

A short monograph on *The Development of Agriculture in Northern India*, examined the possibility of studying the *Ramāyana* on the basis of its various episodes and the agricultural technology of the society relevant to each episode. Dr. Chanana attempted to chart the various stages at which the episodes were put together in the text. It is a technique which could well be used for a variety of similar undated texts. These interests took him into a more detailed study of the spread and development of agriculture in ancient

India, which studies would have been of considerable importance had he lived to complete them.

Another significant subject on which Dr. Chanana had begun to work was the use of evidence on social conditions in mediaeval India from Sanskrit sources. Inhibitions resulting from periodisation are so obsessive among many Indian historians that it is assumed that Persian sources are almost the only legitimate material on mediaeval India. The utilisation of Sanskrit sources could provide both a relevant and a new perspective on the social history of the mediaeval period. A preliminary investigation of this question is available in some of his papers and it is to be hoped that these will be collected and published as he was intending them to be fairly soon.

The relevance of Dr. Chanana's studies was not merely that they were of the highest scholarly quality but also that they came from a person extremely sensitive to the contemporary scene in India and who saw the interconnections between the past and the present. The past was not something impassive and neutral, but was of immediate concern to the present. Consequently it was essential to comprehend in depth the form and functioning of the past. Perhaps his most striking quality as an intellectual and an academician was his ability to integrate in a relevant way knowledge from a variety of sources.

The death of Devraj Chanana has deprived the world of Indology and ancient history of a reputable scholar. For Delhi University it has also meant the loss of a popular and respected member of the University community.

R. T.

## Colonisation of Assam : Years of Transitional Crisis (1825-40)\*

AMALENDU GUHA

*Gokhale Institute of Politics and Economics, Poona*

Assam Proper—i.e. the five districts of Kamrup, Darrang, Nowgong, Sibsagar and Lakhimpur, together comprising an area of about 20,000 sq. miles—came under British occupation in 1825. By 1840, direct British administration was uniformly introduced and stabilised over this entire territory. The purpose of this paper is to examine the economic conditions prevailing there immediately before the successful establishment of the tea industry. The contemporary accounts of Welsh (1794), Buchanon-Hamilton (1807-14), Dhekial-Phukkan (1829) and Robinson (1841) yield much relevant information which is collated and summarised below.<sup>1</sup>

### 1. Crops, Technology, Trade

*Crops* : At the close of the eighteenth century, the country was in a precariously depopulated state. A series of civil wars had ravaged it since 1769. Later the Burmese occupation (1817-25) further worsened the situation. Even so it was then exporting to Bengal in trouble-free years raw cotton, lac, mustard-seeds, *mooga* silk, ivory and gold in considerable quantities; *munjit* (a kind of vegetable dye—a forest product), ginger, wax, long-pepper, bell-metal vessels and timber in some quantities; and rhino and buffalo

---

\*This paper was presented to the Staff Seminar of Gokhale Institute of Politics and Economics, Poona, in July 1967.

1. "Assam—An interesting account of the ancient system of government in Assam". Manuscript record, Foreign Political Consultations, 24 February 1794, No. 13 A (National Archives)

Francis Buchanon-Hamilton, *An Account of Assam First Compiled in 1807-1814* (S. K. Bhuyan ed., Gauhati, 1940) pp. 58-63.

Haliram Dhekial-Phukkan, *Assam Buranji* (in Bengali, Calcutta 1829; J. Bhattacharya ed reprint, Gauhati, 1962) pp. 104-11.

William Robinson, *A Descriptive Account of Assam* (London/Calcutta, 1841) pp. 65-91.

horns in trifling quantities. Betel-nuts, although raised on a wide scale had already ceased to be an export to Bengal. Rice was produced in 'very great abundance' and Welsh asserted that 'a scarcity had never been known to happen from natural causes'. Next to rice, the most considerable crop was mustard. The most common pulse was *mas* (*phaseolus max*). *Arhar* (*citrus cajan*) was formerly cultivated only for rearing the lac insect. But later—says Buchanon-Hamilton—it was preserved for its pulse. *Mung* and *khesari* were also cultivated, but on a small scale. *Masur* (fine pulse) was generally imported.

Of all warm seasonings which were locally produced, the most common were black-pepper, long-pepper, turmeric, chillies (*capsicum*), onions and garlic. Black pepper was cultivated mostly in Kamrup, Darrang and the southern part of Sibsagar district. In the early nineteenth century it had almost ceased to be an export to Bengal, and its production for local consumption also very much decreased. The decline may be attributed to availability of cheaper pepper in Bengal from Kerala.

Betel-nuts, betel-vine and sugarcane were widely cultivated all over Assam for home consumption. According to both Buchanon-Hamilton and Dhekial-Phukkan, no refined sugar other than *gur* was produced in Assam except, of course, for the royal house in its days. Some quantities of *gur* from Lakhimpur (Mattak) were imported into other districts. The cultivation of tobacco was more conspicuous in western than in eastern Assam in Welsh's times. But by 1840 its cultivation, though still marginal, had a wider spread. Occasionally rotated with sugarcane, tobacco was raised on rich spots near homesteads.

Cotton was mostly grown by the tribal people in the submontane and hilly tracts. With handlooms and spinning wheels in every household—Brahmins' and the nobility's not excluded—the demand for raw cotton was decentralised and diffused all over the country. Imports from neighbouring hills and the local production of the plains together yielded a surplus of cotton for export to Bengal. Similarly, some quantity of cotton cloth found its way to the hills. The cotton of Lakhimpur district (Mattak) commanded a higher price—Rs. 4 per md. around 1840—because of its superiority, and

was much demanded in Kamrup.<sup>2</sup> The indigeneous *rheea* (*Boehmeria nivea*) plant, cultivated mainly by the fishermen, yielded material for making ropes and threads for their fishing nets. Other fibres of marginal importance were jute and *mesta*. Jute, unlike today, was grown on small patches on high grounds near homesteads.

Mustard was almost the sole oilseed and its oil the only edible and lighting oil. The other oilseed, sesamum, was grown in a small quantity. No or little oil was extracted from castor-seeds, although castor plants were cultivated for silk-rearing. As local consumption of oil was extremely limited because of dietary habits and an inefficient technique of oil-pressing, much of the mustard-seeds were available for export.

Sericulture with its several varieties of silk had a broad social base. The production of mulberry silk (*pat*) was extremely limited. The *mooga* silk, fed on the *sum* trees, had a good and rising demand, presumably from the embroidery industries of Murshidabad and Dacca in Bengal. By 1840 traders used to pay advance for its guaranteed supply. The *endi* silk, fed on castor plants, had a large market in Bhutan, Tibet and the neighbouring hills. For sericulture as well as for the lac industry, there were plantations of suitable trees, generally on homestead sites. But *mooga* and lac culture were carried on also in temporarily cleared patches of natural forests—in eastern Assam particularly. Long-pepper, *munjit*, *gathian* (a kind of fragrant root), wax, honey, aloes-wood and incense were generally forest products, collected for the market. Wild rubber trees are not known to have been tapped before the forties.

The poppy, unknown before 1770, was already a luxuriant crop in most parts of western Assam by Welsh's times. By the 1830's it was so all over Assam, and eighty per cent of the Assamese population were believed to be opium addicts.<sup>3</sup> Opium was sold in the form of a piece of cloth, saturated in the juice of poppy and lightly rolled-up. Poppy was the only crop which was regularly watered on the fields. Indigo and maize were extremely limited in cultiva-

2. S. O. Hannay in *Journal of Asiatic Society of Bengal*, VII (August, 1838) p. 677.

Robinson, n. 1, pp. 67 and 330.

3. G. Lamb to J. Hutchinson, Secy. Medical Board dated Dacca, 30 March 1831, Foreign Political Proceedings, 15 April 1831, No. 93 A.

tion. Barley, wheat and millets were rare. The potato, introduced during 1825-29, was firmly established as a new garden crop by 1840.

*Technology* : The numerous brine wells of eastern Assam were regularly worked till 1839 with crude implements. But in the last few years hardly an estimated 3000 maunds could annually be procured in this way.<sup>4</sup> Some quantity of rocksalt was imported from Bhutan, but the bulk of the consumption was met from Bengal trade. The traditional iron-smelting industry of eastern Assam had almost died out by 1840. So had the craft of washing river sands for gold. Potters were fairly wide-spread, but a section of them, representing a particular caste, did not use the wheel at all. Stone-cutters made plates, cups and grinding stones. Brick-makers, brick-layers and carpenters were few. Except in Kamrup, *ghee* or butter was not produced anywhere. Wheeled carts, newly introduced under British rule, were yet a rare sight. Peasants carried their surplus to markets with loads on their bodies and in canoes where possible.

Cotton was marketed unginned, thus shifting the burden of processing to the final consumer. Except in Kamrup, there were generally no professional oil-pressers or oilmen's caste : oil was mostly pressed in individual households through a crude, manual process. Rice was marketed, more often than not, in husk. In fact, all processing techniques, implements associated therewith and available services in Assam were very primitive indeed, in contrast with the average Indian standard of the day. With only a little exaggeration, David Scott described Assam in 1831 as a country

"where boats continue to be made from the trunks of trees, where the use of a saw, a wheel or carriage is unknown, where the native cannot make marketable butter, sugar or oil and where half the surface of a rich soil ... lies waste and is considered absolutely worthless from the ignorance of the means of making use of it."<sup>5</sup>

4. F. Jenkins to the Secy. to the Government, 30 Chait 1759 Saka, Foreign Political Proceedings, 16 May 1838 No. 53, gives actual production figures for some of the wells.

5. Quote from Scott to Swinton, 18 May 1831, Foreign Political Proceedings, 10 June 1831, No. 50, paragraph 48. It may be noted that a great number of artisans had been carried away as slaves by the Burmese.

Also see John M'Cosh, *Topography of Assam* (Calcutta, 1837) pp. 28 and 63.

However, it should be remembered that Assam's population was already reduced to an estimated third of what it had been sixty years ago. A large number of artisans had also been carried away as slaves by the Burmese.

*Trade* : No quantitative data of agricultural production can be expected for this period. However, we are fortunate to have some statistics of the approximate volume and value of Assam's trade with Bengal for the year 1808-09 and again for the years 1833-34 and 1834-35. These are presented in an abridged form in our Tables 1 and 2 for the purpose of analysis. The Bengal trade probably represented less than half of Assam's total external trade during the period 1800-35. We are told that the annual trade between Assam and Bhutan alone was estimated at Rs. 2 lakhs in Buchanon-Hamilton's days.<sup>6</sup> Assam bartered lac, dried fish, *mooga* and *endi* silk for Bhutan's woollens, gold dust, salt, musk, ponies, yak's tails and Chinese silk. Similarly trade was carried on with Tibet and, to some extent, with Upper Burma. Assam received a part of her supply of bullion from these sources, which was partly used to pay for her trade deficit with Bengal.

The Bengal trade was mostly limited to bartering a single import, salt, for assorted products of Assam. The trading capital and initiative were in the hands of outsiders, except in the trade in mustard-seeds. The former customs check-post with its oppressive tariff rates continued in existence at the border until it was abolished in April 1835. Tables 1 and 2, based on the customs returns, show not only the relative importance of certain export products and their average values, but also the trend in terms of trade.

## 2. Pangs of Transition : The Money Drain

The early years of British administration (1825-40) were years of painful and difficult transition. The old *khet* system of revenue settlement based on periodic service and/or in kind payment was gradually replaced during these years by a new proprietary system involving payment of ryots' dues to the Government in cash. This

6. Buchanon-Hamilton, n. 1, p. 74.

7. For an account of this system refer to my article "Land rights and social classes in medieval Assam", *The Indian Economic and Social History Review*, III, 3, September, 1966.

itself, other things remaining the same, would have put Assam's barter-oriented, money-short economy under severe strains. In fact, the situation was made far worse. The mint of the Assam Rajah—the immediate source of local currency—was put out of operation. But British Indian currency did not flow in sufficient quantities. Even the surplus of exports over imports in the thirties, if any, could hardly help in such a situation. For scarcely was any money used in procuring export goods. Such goods were generally bartered for salt. So ultimately the favourable trade surplus, when there was one, accrued to the salt traders of non-indigenous origin in the form of a surplus held mostly outside Assam. This was not in any case available in the form of increased money circulation in Assam. In all probability, the trade surplus, as it appears from Tables 1 and 2, was not a regular feature. Taking into consideration the fact that a part of the export value in 1834-35 represents the value of goods received by the Government in lieu of land revenue dues, we conclude that the apparent trade surplus to that extent was not a real one. It was a one-way remittance to Calcutta.

The Government's revenue collection in local currency was annually remitted to Calcutta for recoinage. But there was practically no flow-back, as the remittance represented a surplus of revenue over local disbursements. This one-way traffic, which went on for at least a decade, involved the withdrawal of a considerable quantity of circulating media (Table 3). Thus the economy was caught into a situation of acute money-shortage. The situation improved in Lower Assam after 1835, but continued to be as bad or even worse till the end of the thirties in Upper Assam. An annual tribute of Rs. 50,000 was exacted from the latter, which had the status of a native state during the period 1834-38.

The surplus realised from revenue was itself questionable. In former times, the existing network of road-cum-dams, so essential for Assam's wet-rice cultivation, used to be constructed and maintained at public cost. In other words, a considerable proportion of the state revenue, collected in the form of so many labour units, was spent on the public works. But during 1825-40 no such public works or even repairs thereof were undertaken, presumably much to the detriment of agricultural production. Even a modest public works policy would have otherwise helped disbursement of new Calcutta-

minted coins, which were declared sole legal tender in 1835.

Another difficulty was rooted in the very composition of the government personnel. "Of the public money that has gone to defray the establishments—civil and military (all foreigners with scarce an exception)"—admitted Francis Jenkins in his report on Assam (1833), "at least one half has been remitted out of the province, whilst all surplus revenue, above these expenses has been withdrawn to the treasuries of the Government".<sup>8</sup>

The resultant money-crisis made it difficult for the peasant to pay off his dues to the Government. Spurious coins and multiplicity of currency in circulation—*Rajmohari*, *Narayani*, *Sicca* and *Feracca-bad* coins with their fluctuating and conflicting *batta*—further aggravated the crisis. It is in this situation that a part of the fortunes of the non-indigenous trading community was invested in usury. The rate of interest charged could be as high as 10 per cent per mensem.<sup>9</sup>

Prices appear to have been abnormally low in 1830. In that year it is recorded that a revenue defaulter's stock of paddy, on sale at a public auction, fetched only Rs. 12 per 100 mds., i.e. 12 paise per md.<sup>10</sup> Our Table 2 shows that the value of paddy at the border customs-point was uniformly calculated at approximately 6 annas per md. for three successive years till 1834-35. It sold at 5 annas in Darrang in 1835 (Table 4). The normal price of paddy during the thirties may, therefore, be taken as 5 annas to 6 annas per md. In the interior it was cheaper, but fluctuated widely from place to place. For example, paddy sold at 4 mds. per rupee and salt, at 4 seers per rupee in the interior-most district of Lakhimpur in 1838. Cleaned rice was valued at 12 annas to 14 annas at the export point during 1832-35. It sold at 12 annas per md. in Darrang in 1835. But in distant Mattak in Lakhimpur, it was sold at Re. 1 per md. to the soldiers in 1838.<sup>11</sup> However, the average

8. F. Jenkins to Secy. of the Government at Fort William, 22 July 1833, Foreign Political Proceedings, 11 February 1835, No. 90.

9. Scott to Swinton, Chief Secy. to Government, 17 April 1830. Foreign Political Proceedings, 7 May 1830, No. 51.

10. *Ibid.*

11. For 1838 prices, Jenkins to the Secy. n. 4. For Darrang prices, see our Table 4.

According to *Bengal Commercial Reports*, common rice in Bengal sold at the rate of Rs. 1—12 as. per md. in 1832. See A. Tripathi, *Trade and Finance in Bengal Presidency 1793-1833* (Calcutta, 1956) pp. 264-5.

price of cleaned rice during the thirties may be taken at 12 annas, approximately. It is to be noted that the export of rice in some years was rather exceptional, and that there was also little market demand for home consumption.

Compared to 1808-9, the prices of lac and *mooga* silk in the thirties had increased no doubt, but those of mustard and cotton recorded a slight fall. The export earnings did not help meet the requirements of a monetised revenue system under the peculiar local circumstances, explained above. Consumption of imported salt, which was slightly cheaper than in 1808-9 in terms of *mooga* and lac, but not mustard, did actually fall during the thirties. This indicates that either the consumers were worse off than in 1808-9, or their number had further decreased meanwhile. The average prices of export goods as derived from Tables 1 and 2 do not reflect the prices received by the actual producers. Non-indigenous middlemen were in complete control of the internal and external trade—except that of mustard—during the thirties. A farmer in Darrang district used to receive in 1833 only some 38 to 56 per cent of the export value of lac, mustard and *mooga* silk, as is evident from Table 4.

The general shortage of cash forced the administration to receive the revenue dues in kind “of such articles as command a certain market and are not of a perishable nature as gold, ivory, *mooga*, silk, *munjit* and cotton cloth...” in many places. “Cloths of certain fixed dimensions, salt, iron-hoes and other articles in general use” circulated as money and were accepted in settlement of land revenue demand. These were, later, put on sale to traders.<sup>12</sup> This arrangement, however, could not be a general and regular one. The defaulting farmers therefore fled their homesteads in hundreds in order to squat on waste lands in remote areas and thus evade taxation. In many cases, they sold themselves and their children into slavery for a trifle. The early administrative reports of British officers are full of such stories of migrations causing depopulation in the erstwhile populous villages. Slavery—finally abolished by Act V, 1843—was “daily obtaining a greater hold in Assam”, wrote

12. Quotations, respectively, from Neufville to Scott on Upper Assam, 29 April 1830, Foreign Political Proceedings, 10, June 1831, No. 58; and Scott to Swinton, 17 April 1830, n. 8.

Rutherford in 1833.<sup>13</sup> Such a plight was but natural under the disturbed circumstances and a groping administration. “Whilst commerce is almost dormant; whilst the Government assessments have in their realisation proved to be excessive imposts and every surplus rupee thus raised besides a large proportion of the salaries of the whole of the establishments is drained out of the province”, wrote Jenkins, “it would be preposterous to expect that its prosperity should not be on the decline”.<sup>14</sup>

These circumstances of the transitional phase, the outbreak of cholera epidemics in 1827-8 and again in 1835-36, and an alarming increase in opium addiction—all these lead us to believe that the population censused at 7 to 8 lakhs around 1826 remained almost stationary till 1840 (Table 5).

### 3. Roads to Growth : A Resource-based Scheme

Both David Scott (1825-31) as well as Francis Jenkins (1834-66)—the latter had first come to Assam in 1831 on a special survey duty—were men of enlightenment, ability and wide outlook. Both had a deep understanding of the problems on the spot. According to both, the ultimate solution of the problems lay in developing as fast as possible the export potential of the region. Only then, they argued, would it be possible to get out of the situation of which the money crisis was but one aspect. However, the practical policies, as recommended by these stalwarts, represented altogether different approaches. Their recommendations which came for consideration of the Company's Government, one after another, are examined below.

While pointing out, in 1830, the disastrous impact of the annual drain of the province's surplus revenue to the Presidency in the form of withdrawn coins, Scott suggested that at least a part thereof be invested in purchase of local opium for export on Government

13. Quotation from Rutherford to Jenkins, 28 March 1833, Bengal Political Consultations, 6 June 1833. For an account of the effects of transition see R. M. Lahiri, *The Annexation of Assam* (Calcutta, 1954) pp. 225-238.

Also see Jenkins to the Secy. 30 Chait, 1759, *saka*. n. 4, for comment on depopulation of villages.

14. Jenkins to the Secy. 22 July 1833, n. 7.

account and in establishing sericultural demonstration farms.<sup>15</sup> Indigenous opium was not yet available in a standard form. But he asserted that the poppy cultivators could be induced, through a scheme of Government advances to them, to produce opium in the standard form and to sell it at a price of about Rs. 4½ (*Sicca*) per *seer* to the Government. Although this price was slightly higher than that of Bihar opium, he urged upon the Company's Government to treat Assam as a special case in allowing her a share of the opium monopoly. He also hinted that, through such first steps alone, the surplus produced of this injurious drug could at least be partially siphoned away from local consumption.

Sericulture was the other lever in Scott's scheme of uplifting the economy. He suggested that both mulberry and *mooga* silk might be prepared in large quantities, and of a superior quality. This would be possible only if the Government came forward with "that preliminary interference which can alone prove effectual in the existing state of society in Assam." Export of bulky commodities like rice had no future on a commercial scale because of difficult river transport. The only policy left to the Government therefore was, he said, to encourage the production of more costly articles such as opium, *mooga* and mulberry silk. There was already a market for *mooga* silk in Bengal, while markets for the other two were yet to be created. Presumably Scott had the then profitable raw silk and opium markets of Europe and China, respectively, in his view.

In Scott's scheme of things, improvements were to be tried on the basis of available local resources and skills. Such improvements would have then benefitted not a handful of specialised groups but the bulk of the population. Thereby they would have generated diffused cash incomes, thus helping the farmers to pay off their tax dues. The soil and climate of Assam were noted to be well-adapted to the production of sugar, indigo and cotton. But Scott excluded them from consideration because their development would have involved "continued European Superintendence". He pointed out that opium, *mooga* and mulberry silk, which were already being

15. This section is based on Scott's letter to Swinton, 17 April 1830, n. 8. All quotations and references in the following paragraphs relate to this source, unless indicated otherwise.

cultivated by individual households all over Assam, could be further developed without involving a European-managed plantation system. Although the cultivation of mulberry silk had shrunk to an insignificant level by 1830, Scott was optimistic about its revival. For in his times the mulberry silk of Bengal already enjoyed a good market in Europe.<sup>16</sup> But also convincing for him was the fact that sericulture had a widely-diffused base in Assam. Because "the inhabitants of Assam are already so universally acquainted with the analogous operation of winding the silk called *Moogah*", he observed, "there is every reason to think that they would soon become competent to prepare the ordinary raw silk in a manner superior to what can be expected from the cotton-clothed native of Bengal".

In contrast to the people of Bengal, the Assamese people clothed themselves not in cotton alone, but also in varieties of home-spun silk. Naturally therefore sericulture like weaving was universally a general household occupation for them. Of the different varieties, the *endi* silk did not involve any reeling, but was spun off by hand. Reeling of *mooga*, which was done with crude indigenous implements, would not fit into the standard filatures of the day. So immediate modernisation was possible only in the case of mulberry silk.<sup>17</sup> In country-wound form, this silk had no more any foreign market prospects. A new technique of filature-winding, imported from Europe, had already been slowly but successfully diffused in Bengal during 1770-1823. By 1823, the Company's raw silk exports to Europe consisted entirely of filature wound silk<sup>18</sup>. So the future of Assam silk lay in its modernisation in this respect.

Scott was convinced that modern reelers—he overlooked the cost aspect—suited the genius of the Assamese farmers. For any

16. Quantity of raw silk exports from Bengal to England exceeded 12 lakh lbs. in 1826—the highest ever till then. Despite falling prices, the Company's total export of raw silk increased from 6141 bales in 1826 to 7014 bales in 1828. See Tripathi, n. 10, pp. 226 and 254. Also H. R. Ghosal, *The Economic Transition of Bengal Presidency 1793-1833* (2nd Ed., Calcutta, 1966) p. 288 for Bengal raw silk exports during 1813-26.

17. In fact, Scott suggested trial of modern reelers by *mooga*-producers as well. The administration report of the province of Assam for 1901-2, however observes: "As regards the *muga* cocoon, no method of reeling it has yet been introduced which will enable it to be sold at remunerative prices"—*An Account of the Province of Assam and its Administration* (Shillong, 1903) p. 31.

18. S. Bhattacharya, "Cultural and social constraints on technological innovation" in *The Indian Economic and Social History Review*, 111, 3 (September 1966) pp. 242-46.

person acquainted with the indigenous mode of winding "is competent with a little practice", he argued, "to perform the same operation on the other". Accordingly, he put forward a well-thought out project for the Government's consideration. This was as follows.

(i) A number of Government's sponsored mulberry plantations were to be established at favourable sites to demonstrate to the inhabitants a better mode of cultivating the plant and to furnish cuttings for the use of native cultivators. (ii) Reels "of a proper description" were to be distributed amongst the natives and a "sufficient number of skilful Bengal spinners entertained to instruct" the villagers in the operation of winding. (iii) A Commercial Residency on a small scale was to be established at Gauhati in order to create a steady demand for Assam silk, to look after the continuous perfection of its processing and for "keeping up the knowledge of this art amongst the inhabitants".

The whole cost of initially planting a tract of some 330 acres and of free distribution of 500 modern reels was estimated at 12000 to 15000 *Sicca* rupees—not a big sum in the context of the recurring annual revenue drain. In his eagerness to have the project sanctioned, Scott assured that the proposed demonstration farms were expected ultimately to be sold or let "at a rate sufficient to indemnify Government for all expenses incurred". The outlay was expected to produce "a much more than proportionate return in the increase of the revenue resources and general prosperity of the country". Even so, if the Government did not feel encouraged, he was prepared to finance the experiment by an extra cess levied upon the inhabitants. Scott's emphasis on raw silk can be traced as far back as 1826 in his letter to Swinton, dated 18 September.

In yet another letter to the Government, Scott recommended a policy of encouraging technical training in preference to the literary education which was then being imparted through a network of Government-aided traditional schools. He represented to the Government that an amount be spent from the provincial revenue for imparting lessons in arts and crafts such as carpentry and husbandry. The development of industry and technical skills could be left to evolutionary forces—he said—only "in the ordinary state of political societies". But "when a Government is placed so very far in advance of its subjects in point of information as in our case in

Assam", it should not—said he—wait for the introduction of improvements "by chance" or "in the ordinary progress of events" but should expedite such improvements "with certainty and at once".<sup>19</sup>

We have quoted Scott at length throughout this paper to show that even as far back as 1825-31 he had a coherent set of ideas for making the transition of an underdeveloped region least painful. His idea of erecting western techniques on the basis of existing manual processes, his selection of a single broad-based commodity like silk as the lever of diffusing skill and additional incomes, his advocacy of the Government's entrepreneurial or pioneering role under the given circumstances—all these have a halo of sense and modernity around them even in today's context. However, the authorities turned down his proposal as a doubtful experiment. Undaunted, he commenced a 12-acre mulberry plantation in Darrang in 1831, through the utilisation of convict labour. He brought expert reelers from Rangpur (in Bengal) to teach the people of Darrang and Nowgong the improved methods of winding silk. After his premature death towards the end of the same year, his successor Robertson (1831-34) had to bring the experiment to a close in December 1832.<sup>20</sup>

#### 4. Roads to Growth : A Scheme of Colonisation

That "preliminary interference" invoked so urgently by Scott, in favour of a line of resource-based development but refused by the Government was, however, not lacking in support of the alternative line recommended by Jenkins, three years later.<sup>21</sup> His scheme of colonisation received the prompt consideration of the Government even before the feasibility of tea culture in Assam

19. This paragraph is based on Scott's letter to Swinton, 18 May 1831, n.5, paragraph 49.

20. Capt. Mathie to Jenkins, 15 February 1835 (transcript in the files of Department of Historical and Antiquarian Studies, Government of Assam).

Thomas Hugon, "Remarks on the silk worms and silks of Assam" *Journal of Asiatic Society of Bengal*, VI (January 1837) p. 23.

H. K. Barpujari, *Assam in the days of the Company 1826-1858* (Gauhati, 1963) pp. 59 and 233-34.

21. This alternative line is contained in Jenkin's letter to Secy., 22 July 1833, n. 7. All quotations and references in the following paragraphs relate to this source, unless indicated otherwise.

was firmly established. By then, the charter of 1833, which marked the final ascendancy of British industrial interests over the mercantile interests, had become the unmistakable water-shed between his approach and that of Jenkins. The charter for the first time allowed Europeans, on a large scale, to hold land in India on long-term lease or with freehold rights and thus paved the path of colonial capitalism there.

In his report of 1833, Jenkins pointed out the necessity of undertaking some public works as an immediate measure to generate a flow of cash into the money-short economy. At the same time, he suggested :

... the settlement of Englishmen of capital on the wastes of these frontiers seems to me to offer a better prospect for the speedy realisation of improvements than any measures that could be adopted in the present ignorant and demoralised state of native inhabitants.

Jenkins appears to have discouraged any halt in the process of monetisation of the revenue system and in the move towards the creation of absolute property rights in land. "To obtain the full advantages that could accrue from European settlers it appears to me that the grants"—said he—"must be altogether free-hold, subject to no other condition than the payment of a fixed and unalterable rate of rent and absolutely unincumbered with any stipulations in regard to ryots or subtenants".

The whole idea was to attract a class of European planters along with their capital to Assam's wastelands which were suitable for the production of sugarcane, indigo and such other commercial crops. Jenkins would not mind even the displacement of local ryots from their lands by favoured colonists through the operation of a discriminatory land revenue policy, in the so-believed long-run interests of the former. He was afraid that "if the government assessments upon the natives were generalised and not heavy", they would not be available as tenant-cultivators under European planters. In that case, introduction of cash crop farming would be inhibited. On the other hand, if ordinary cultivation were heavily taxed, the ryots would be forced to leave their farms and work for cash crop-

oriented capitalist farmers. In that case, the difference between what used to be paid by the ryots towards land revenue and the lower average to be paid by the colonists would first appear to be a loss to the state, no doubt. But the large quantities of wastelands brought under tillage and other improvements—said Jenkins—would soon cover this loss. The two premises of this colonisation thesis were : (i) that a large number of local people had no means to provide for themselves ploughs, seed-grain and cattle and (ii) that the colonists would be able to make necessary advances to the former growing export-oriented cash crops. Jenkins was of the opinion that the ryots, in the new set-up, would be sufficiently protected by the interest of the colonists in keeping their land cultivated and, as such, did not require any Government interference in this sphere.

This idea of introducing foreign enterprise, capital and skill in agriculture caught the imagination of the Board of Revenue and the Governor of Bengal.<sup>22</sup> Meanwhile the growing prospects of tea culture in Assam—the formation of the Tea Committee in early 1834, the starting of the Government Experimental Tea Garden in 1836 and the first successful manufacture of Assam tea in December 1837—all these made Jenkins' scheme of colonisation all the more acceptable. To make the wastelands available for cultivation of special crops, a set of rules were framed.<sup>1</sup> These in their final shape were known as the Wastelands Rules of 1838 until their revision in 1854 (Table 6). These rules, providing for long-term lease of land to applicants, did not discriminate against indigenous inhabitants as such but were apparently framed in such manner as to exclude them from all concessional grants in practice. No grant for agricultural purpose could be made of an extent less than 100 acres and to any applicant who was not in possession of capital or stock worth at least Rs. 3 per acre. Under these conditions, only Europeans could avail of the concessions.<sup>23</sup>

Under the provisions of Charter of 1833, the East India Company ceased to function as a commercial interest. As the local government, its mission was henceforth to facilitate the importation of British private capital into India. With the increasing prospect

22. *Revenue and Judicial letters from India and Bengal*, 14 March 1837, No. 5, referred to by Barpujari, n. 19, p. 212.

23. *Ibid*, n. 19, pp. 213-14.

of tea-growing there, the opening up of Assam naturally came up on its agenda.

At the initiative of the famous Agency House of Carr, Tagore and Co., a joint enterprise of European and Indian capitalists of Calcutta, known as the Bengal Tea Association was formed in 1838. Almost simultaneous attempts were made by leading capitalists of London to avail of the situation. Ultimately, as a result of successful negotiations between Calcutta and London, the two parallel moves underwent a merger, leading to the formation of the Assam Company in 1839.<sup>24</sup>

The transitional period of 1825-40 was then a period of all-round stagnation. Nevertheless, it saw the sowing of seeds that were sure to germinate in due course. Western education had its beginnings with the establishment of the first English school in 1835. But more important for the economy, a start was made with the tea industry. In 1840, two-thirds of the Government Experimental Tea Gardens were transferred to the Assam Company, free of rent for at least the first ten years. The first year's crop of 10,202 lbs. from 264 acres under mature plants was sold at an average price of 3 shillings (Re. 1-8 as.) per lb. in London. All developments in subsequent years centred round tea and the Assam Company. But the idea of British farmers permanently setting down in Assam did not materialise because of a hostile climate. However, the role of the American Baptist Mission was no less in the cultural field.

24. On the role of Dwarkanath Tagore (1794-1846) and his Carr, Tagore and Co., see B.B. Kling, "The Origin of the Managing Agency System in India", *Journal of Asian Studies*, XXVI, No. 1 (November, 1966) pp. 37-48.

For information on early tea cultivation, see H. A. Antrobus, *A History of the Assam Company 1839-1953* (Edinburgh, 1957).

TABLE I  
Assam's Trade Statistics, 1808-9 (estimated at Goalpara,  
opposite Hadira Chowki)

| Exports            | Quantity<br>in mds. | Value in<br>Rs. (sicca) | Average<br>price (per<br>md.) Rs. | Imports                                           | Quantity<br>(in mds.) | Value in<br>Rs. (sicca) |
|--------------------|---------------------|-------------------------|-----------------------------------|---------------------------------------------------|-----------------------|-------------------------|
| (1)                | (2)                 | (3)                     | (4)                               | (5)                                               | (6)                   | (7)                     |
| Pepper             | 50                  | 500                     | 10.00                             | Salt                                              | 35000                 | 192500                  |
| Mustard            | 15000               | 20000                   | 1.33*                             | Fine Pulse                                        | —                     | 800                     |
| Long-pepper        | 50                  | 300                     |                                   | Ghee                                              | 1000                  | 1000                    |
| Munjeet            | —                   | 500                     |                                   | Sugar                                             | —                     | 1000                    |
| Elephant-tusk      | —                   | 6500                    |                                   | Stone-beads, corals,<br>jewel and pearls          | —                     | 8000                    |
| Mooga thread       | 65                  | 11350                   | 499.00                            | Cutlery and Glassware<br>(European)               | —                     | 500                     |
| Mooga cloth        | 75                  | 17500                   |                                   | Muslin                                            | —                     | 10000                   |
| Cotton (with seed) | 7000                | 35000                   | 5.00                              | Taffeta, Kinkhap, Satin and<br>other luxury cloth | —                     | 4500                    |
| Lac                | 10000               | 35000                   | 3.05                              | Woollens (European)                               | —                     | 2000                    |
| Bell-metal vessels | —                   | 1500                    |                                   | Copper                                            | —                     | 4800                    |
| Iron-hoes          | —                   | 600                     |                                   |                                                   |                       |                         |
| Thailkol fruit     | 50                  | 150                     |                                   |                                                   |                       |                         |
| Slaves             | 100 (No.)           | 2000                    |                                   |                                                   |                       |                         |

Table 2 (Continued)

| (1)           | (2)   | (3)   | (4)  | (5)   | (6)    | (7)   | (8)   | (9)    | (10)  |
|---------------|-------|-------|------|-------|--------|-------|-------|--------|-------|
|               | Mds.  | Rs.   | Rs.  | Rs.   | Rs.    | Rs.   | Mds.  | Rs.    | Rs.   |
| Imports :     |       |       |      |       |        |       |       |        |       |
| 1. Pepper     | 81    | 143   | 4.48 | 78    | 885    | 11.40 | 91    | 1361   | 14.92 |
| 2. Salts      | 10646 | 43914 | 4.12 | 31008 | 155037 | 5.00  | 31223 | 140502 | 4.50  |
| 3. Sundries   |       | 14950 |      |       | 88133  |       |       | 105530 |       |
| Total Imports |       | 59007 |      |       | 244055 |       |       | 247393 |       |

Note : (a) Two kinds of *munjeeet*, shown together.

(b) 37 mds. of lac valued Rs. 367 in 1833-34 and 638 mds. of lac valued Rs. 6529 in 1834-35 were known to have been smuggled out. Figures in the Table do not include these amounts. There was no attempt to smuggle out *moeega*, cotton, mustard and paddy as there were no duties on these.

(c) Average price of elephant-tusk varied from Rs. 30 per md. for inferior ones to Rs. 120 per md. of superior ivory. So the average in the Table is not meaningful.

(?) The figure obviously involves a printing mistake.

[Source : Capt. Davidson, Principal Assistant to Governor-General's Agent in Assam. Reproduced with slight adaptation from R.B. Pemberton, *The Report on the Eastern Frontier of British India* (Calcutta, 1835) Tables 12-14.]

TABLE 3  
Revenue Receipts and Disbursements : Assam Proper

| Assam              | Receipts<br>Rs. (Sicca)                                    | Disbursements<br>Rs. (Sicca)                                    | Revenue Surplus<br>Rs. (Sicca) |
|--------------------|------------------------------------------------------------|-----------------------------------------------------------------|--------------------------------|
| <b>Lower Assam</b> |                                                            |                                                                 |                                |
| 1824-25            | 118723                                                     | 29538                                                           | 89185                          |
| 1825-26            | 202061                                                     | 92513                                                           | 109548                         |
| 1826-27            | 178686                                                     | 125015                                                          | 53671                          |
| 1832-33            | 183196                                                     | n.a.                                                            | n.a.                           |
| <b>Upper Assam</b> |                                                            |                                                                 |                                |
| 1825-26            | 28058                                                      | 27834                                                           | 224                            |
| 1826-27            | 46073                                                      | 40731                                                           | 5342                           |
| 1827-28*           | 38835                                                      | 61695                                                           | 22860                          |
| 1828-29            | 78452                                                      | 36166                                                           | 42286                          |
| 1829-30            | 90060                                                      | 53922                                                           | 36138                          |
| 1830-31            | 89465                                                      | 54883                                                           | 34582                          |
| 1831-32            | 72136                                                      | n.a.                                                            |                                |
| 1832-33            | 99928                                                      | n.a.                                                            |                                |
|                    | Revenue Receipts<br>under Raja<br>Purandar's<br>Management | Tribute Trans-<br>ferred to<br>British North-<br>Eastern Agency |                                |
| 1833-34+           | 69450                                                      | 50000                                                           |                                |
| 1834-35            | 70150                                                      | 50000                                                           |                                |
| 1835-36*           | 64254                                                      | 34000                                                           |                                |
| 1836-37            | 54449                                                      | 28000                                                           |                                |
| 1837-38            | 42216                                                      | —                                                               |                                |

\*Cholera epidemic year explains the deficit.

+Naduar, yielding Rs. 10,000 had been transferred in this year to Lower Assam. This accounts for the fall in revenue in Upper Assam under the Raja's management.

[Source : For 1831-32 and 1833-34 Jenkins to the Sec., 30 *Chait* 1759 *Saka*, n. 4; also Mills, *Report on the Province of Assam* (Calcutta, 1894) Appendix A. For the rest, Barpujari, n. 19, pp. 37 and 110.]



TABLE 4  
Prices in Darrang District

| 1833 <sup>a</sup>     |                           |                           | 1835 <sup>b</sup>   |              |                       |
|-----------------------|---------------------------|---------------------------|---------------------|--------------|-----------------------|
| Commodity             | Price received by farmers | Price received by hawkers | Export value        | Commodity    | Local price (per md.) |
|                       | Rs. As.                   | Rs. As.                   | Rs. As.             |              | Rs. As.               |
| *Lac (per md.)        | { 3—0<br>to<br>5—8        | { 4—6<br>to<br>7—0        | { 8—0<br>to<br>10—0 | Paddy        | 0—5                   |
|                       |                           |                           |                     | Rice         | 0—12                  |
| Mustard (per md.)     | { 0—8<br>to<br>1—0        | —                         | { 1—6<br>to<br>1—14 | Mustard      | 0—8                   |
|                       |                           |                           |                     | Tobacco      | 3—8                   |
| Mooga Silk (per seer) | { 2—12<br>to<br>3—8       | { 3—10<br>to<br>4—9       | { 5—0<br>to<br>6—8  | Mustard oil  | 5—0                   |
|                       |                           |                           |                     | Black pepper | 20—0                  |

\*At the close of the thirties, the estimated annual export of lac was about 20,000 mds., and its value varied from Rs. 5 to Rs. 9 per md. according to Robinson. see n. 1, p. 239.

[SOURCES (a) For 1833, T. Hugon in *Bengal Political Consultations*, 30 May 1833, No. 82.

(b) Mathie to Jenkins, 15 February 1835, see n. 19].

TABLE 5  
Population of Assam Proper

|           | 1826 <sup>a</sup> | 1853 <sup>b</sup> | 1872    |
|-----------|-------------------|-------------------|---------|
| Kamrup    | 300000            | 387775            | 561681  |
| Darrang   | 89519             | 185569            | 235720  |
| Nowgong   | 90000             | 241300            | 260238  |
| Sibsagar  | about<br>250000   | 159573            | 317799  |
| Lakhimpur |                   | 85296             | 121267  |
| Total     | 7 to 8 lacs       | 1061513           | 1496705 |

Note: Territorial adjustments made between districts from time to time affected their respective populations only marginally, except in the case of Nowgong between 1826 and 1853.

A portion of the erstwhile kingdom of Jaintia—Dantipur—with an estimated population of 15000 was added to Nowgong in 1835. By 1853 a portion of the Naga Hills also came under its jurisdiction.

[SOURCES: (a) Dhekial-Phukkan, n. 1, pp. 74-75 and M'Cosh, n. 5, pp. 128-29.

It appears that a house-to-house census was carried on in 1826 to ascertain the population. But the coverage was not complete. For example, the actual census figure was 243317 for Kamrup. But as it was obviously an under-statement, the district population was estimated officially at 3 lacs. In the Raja's territory (Sibsagar and Lakhimpur minus Mattak and Sadiya) only men were counted to which the estimated female population was added. For Mattak and Sadiya, only an estimate was made.

(b) A.J.M. Mills, *Report of the Province of Assam* (Calcutta, 1854) Appendix A].

TABLE 6  
Wastelands Settlement Rules : Revenue Rates

| Rules, 6 March, 1838 <sup>a</sup>              |                                    |                         |                          | Rules, 23 October, 1854                        |       |
|------------------------------------------------|------------------------------------|-------------------------|--------------------------|------------------------------------------------|-------|
| Three categories of wastelands                 |                                    |                         |                          | Irrespective of categories of wastelands       |       |
| (1)<br>Under<br>Grass                          | (2)<br>Under Reeds<br>& High Grass | (3)<br>Under<br>Forests | Land Revenue<br>per acre | Land<br>Revenue<br>per acre                    |       |
| First 5 yrs.                                   | First 10 yrs.                      | First 20 yrs.           | Nil                      | First 15 yrs.                                  | Nil   |
| 6-8th yrs.                                     | 11-13th yrs.                       | 21-23rd yrs.            | 9 as.                    | 16-25th yrs.                                   | 3 as. |
| 9-30th yrs.                                    | 14-35th yrs.                       | 24-45th yrs.            | Re. 1-2 as.              | 26-99th yrs.                                   | 6 as. |
| One-fourth of grant revenue-free in perpetuity |                                    |                         |                          | One-fourth of grant revenue-free in perpetuity |       |

[SOURCE : Tabulated from information in B.H. Baden-Powell, *The Land Systems of British India*, III (London, 1895) pp. 410-15.]

## Trading Activities of Indians in Russia in the Eighteenth Century

SURENDRA GOPAL

At the turn of the eighteenth century a flourishing Indian trading community already existed at Astrakhan, the city at the mouth of Volga where the river falls into the Caspian Sea. The Indian traders specialised in importing not only Indian goods but also Eastern goods in general from Persia and central Asia into Russia. To Persia they exported not only Russian goods but also Western European goods purchased from Russian or European merchants. However, the Russians protested against the excessive profits earned by the Indians and so the Russian government asked all the eastern traders (excluding the Armenians) not to indulge in retail business and confine their operations in the city of Astrakhan only. Thus when the eighteenth century dawned the Indian trading community in Russia was concentrated in the city of Astrakhan.<sup>1</sup>

In the eighteenth century although the above policy was not formally repudiated yet we find loosening of restrictions on the Indians. The contemporary Russian documents describe them as going to different Russian cities. They carried Eastern goods mainly of Persian origin from Astrakhan to Moscow<sup>2</sup> and they purchased European goods in Moscow to be sent to Astrakhan.<sup>3</sup> The Indian merchants living in Moscow stood guarantee for incoming Indian traders and undertook to pay any dues and debts contracted during their stay in Moscow.<sup>4</sup> The Indian merchants from

1. For details regarding the activities of Indian traders in Russia in the 17th century see my paper, "Indian Traders in Russia in the 17th Century", submitted to the Indian History Congress, Mysore, 1966.

2. *Russko-Indiiskiy Otnosheniya v XVIIIv.*, (R.I.O.), Moskva, 1965, Doc. Nos. 1, 2, 29, 35, 87, 102.

3. *Ibid.*, Nos. 27, 87.

4. *Ibid.*, Nos. 6, 32, 43.

Astrakhan went to the cities of Derbent,<sup>5</sup> Kracnoyar<sup>6</sup>, Kizilyar,<sup>7</sup> Tsaritsini<sup>8</sup> and other cities for purchasing and selling goods. In the cities of Derbent and Kizilyar some Indian merchants lived more or less on a permanent basis and had acquired landed property there<sup>9</sup>. They sometimes had their relations among the Indian merchants living in Astrakhan<sup>10</sup> or sometimes they were merely agents or servants of Indian merchants of Astrakhan. Similarly the documents refer to Indian merchants visiting the important Makarevsky fair to make purchases.<sup>11</sup>

The Indian share in export to internal cities of Russia was considerable as is evident from the following figures. In 1724 the Indians exported goods worth 97.7 thousand Rubles while the Russian merchants sent goods worth 43.3 thousand Rubles. Next year the Russians surpassed the Indians. The share of the Indians slumped to 38.6 thousand Rubles while that of the Russians went up to 63.3 thousand Rubles. Other merchants of Astrakhan shared with Indians this decline. They could send goods worth only 17.6 thousand Rubles.<sup>12</sup> The participation of Indian traders in the internal trade of Russia appears to have been the result of Peter the Great's policy of encouraging commerce and crafts within his empire. However as the Russians gathered experience the Indians along with other eastern merchants lost this trade. This is evident from the fact that in 1750 the Indian merchants applied to the Czar for permission to trade in the cities of Russia.<sup>13</sup> The demand was occasioned by the loss of Persian trade of the Indians of Astrakhan which had been so far the mainstay of their profits.<sup>14</sup>

5. *Ibid.*, Nos. 41, 49.

6. *Ibid.*, No. 73.

7. *Ibid.*, Nos. 84, 103, 133, 140.

8. *Ibid.*, No. 144.

9. *Ibid.*, Nos. 55, 84, 96, 140, 192-93. This again contradicts Kemp's contention that Indians did not invest in land. Quoted in Baikova's *Rol sredney Azii v Russko-indiiskikh torgovykh svyazakh*, Tashkent, 1964, p. 167.

10. *Ibid.*, No. 133.

11. *Ibid.*, No. 56.

12. *Ibid.*, No. 194.

13. *Ibid.*, No. 134.

14. *Ibid.*

Apparently the request of the Indian merchants was not considered favourably for we find them adopting expedients to circumvent the restrictions and keep the trade going. The Indians started employing Russian citizens, Tatars<sup>15</sup> and Kalmuks<sup>16</sup>, Agrizhanets<sup>16a</sup> and Armenians<sup>17</sup> who were not forbidden like other eastern merchants by the Czar from selling goods in Russian cities to carry merchandise on their behalf to Russian cities. Sometimes the above mentioned persons carried the articles merely as servants of the Indian merchants. On other occasions the profit was to be shared in certain proportion. In some cases it was stipulated that in case of loss, the carrier of the goods would not be held responsible. The Indian merchants also advanced monetary loans and the carriers purchased goods out of this sum from Indian merchants for sale in the cities of the Russian Empire. After the goods had been sold, either interest or a share in profits was to be paid to the Indian traders. The money advanced by the Indian merchants was also used by the agents to purchase goods in Russian cities. When such persons returned, the Indian merchants reserved the option to purchase from them outright at prevailing market prices, or to purchase a part of the goods and direct how the rest was to be disposed of in the Astrakhan market.<sup>18</sup>

Thus despite the ban imposed by the Russian authorities on the activities of the Indian merchants, the Indians were able to bypass them in practice by hiring agents. This shows the flexibility of the Indian mercantile community and their capacity to adjust to new situations.

As in the previous century, the trade with Persia was an essential ingredient of the activities of the Indian trading community in Astrakhan but in this century the nature of this trade underwent certain modifications as a result of the growth of new factors.

The Russians stimulated by the policies of Peter the Great wanted to control as much as possible the import and export trade

15. *Ibid.*, Nos. 133, 191.

16. *Ibid.*, No. 191.

16a. *Ibid.*, No. 44 [Agrizhanets were those persons who were born out of wedlock between an Indian father and a Tatar mother Baikova, p. 4].

17. *Ibid.*, No. 82.

18. *Ibid.*, No. 41.

of Persia. On the one hand they tried to encourage the indigenous commerce by concluding various alliances with the Persians on different occasions and utilised their success in some wars with Persia to extort trading concessions.<sup>19</sup> They started employing extra-mercantile methods to eliminate their trade-rivals. In 1745 the Indians in Astrakhan were forbidden to write to Persia uncensored letters, a step which drew instant protests from the Indians.<sup>20</sup> The Russian authorities asked their Consul in Resht to be careful about the nationalities of traders coming from Persia to Astrakhan. Indians should not be allowed to come in garb of Tatars or Persians.<sup>21</sup> Moreover other objective conditions in Persia also hampered the trade of the Indians.

After the fall of the Safavid dynasty anarchy overtook Persia. She faced a series of foreign invasions, mounted by her two neighbours Russia and Turkey.<sup>22</sup> From the north-east, Uzbeks and from the east, Afghan tribes began to hammer at Persian frontiers.<sup>23</sup> The Persian capital Isfahan fell into the hands of the invaders in 1722 and the rule of the Safavids came to an end.<sup>24</sup> Even when Nadir Shah succeeded in establishing his authority over the whole of the country, it was so devastated that some invader appeared to have run over the territory.<sup>25</sup> Due to political instability economic activities in the country had been dislocated. The land-route from India had become completely unsafe.<sup>26</sup> The sea route was seething with pirates. The Imam of Muscat had declared war against Persia.

19. *Ibid.*, No. 54, 60.

20. *Ibid.*, No. 126.

21. *Ibid.*, No. 77.

22. Sykes, Percy, A History of Persia, Vol. II, pp. 233, 237, 238, 239, 251-53.

23. In 1696 an Englishman from Meshed reported that there had been no caravans either to or from India due to disturbed conditions. Lockhart, Lawrence, *The Fall of the Safavi Dynasty and the Afghan Occupation of Persia*, Cambridge, 1958, p. 289; In 1751 reports said that between Balkh, Afghanistan and eastern Persia there was a terrible anarchy. R.I.O., Doc. No. 180; In 1739 Tabriz reported complete absence of any business. R.I.O. Doc. No. 80; In 1792 Indian merchants in Astrakhan could not obtain any supply of Indian goods from Indian merchants in Persia as the trade of Bandar Abbas and Basra with India had been completely dislocated. R.I.O., Doc. No. 199. In 1800 again Orenburg reported that it had no goods from India as Bukhara which supplied it with Indian goods did not have any. R.I.O., Doc. No. 213.

24. Sykes, Vol. II, p. 229.

25. R.I.O., Doc. No. 134.

26. *Ibid.*, 180.

His navy kept on attacking the Persian mainland and intercepted ships visiting the Persian ports. As a result the sea-trade from India had considerably declined.<sup>27</sup> Naturally the Indian traders in Astrakhan, who drew supplies of Indian goods from their Persian based countrymen were starved of the same. Hence the Indian traders in Astrakhan concentrated their attention on Russian and Persian goods.

The Indian traders were again successful in adapting themselves to the new conditions. The table given below shows that after the Armenians (who had always enjoyed a privileged position both in Russia and Persia) the Indians commanded the second place and they closely competed with Russians, whose trade with Persia surpassed that of the Astrakhan Indians only in certain years. The Indians also fared better than the Persians.

| Years | Exports to Persia in Rubles |           |          |          | Imports from Persia in Rubles |           |          |          |
|-------|-----------------------------|-----------|----------|----------|-------------------------------|-----------|----------|----------|
|       | Indians                     | Armenians | Russians | Persians | Indians                       | Armenians | Russians | Persians |
| 1737  | 25324                       | 24807     | 22202    | —        | 90943                         | 92387     | 76570    | —        |
| 1738  | 21312                       | 332700    | 14707    | 23912    | 57034                         | 54892     | 42597    | 49257    |
| 1739  | 24834                       | 241220    | 52686    | 42198    | 186878                        | 179140    | 94007    | 131291   |
| 1740  | 87404                       | 254379    | 55100    | 40854    | 109201                        | 221212    | 53864    | 136411   |
| 1741  | 53809                       | 362655    | 45108    | 19359    | 72823                         | 201194    | 43439    | 30054    |
| 1742  | 20935                       | 261044    | 47685    | 11665    | 15726                         | 18632     | 69889    | 7574     |
| 1743  | 53384                       | 433564    | 25331    | 13024    | 64297                         | 356281    | 17095    | 40118    |
| 1744  | 24739                       | 464315    | 61856    | 22002    | 64173                         | 467192    | 175004   | 65689    |

NOTE. The table has been compiled on the basis of R.I.O., Doc. No. 114.

To keep up their trade with Persia the Indians in Astrakhan had to take recourse to several expedients. They employed agents of Bukharan,<sup>28</sup> Persian, Armenian<sup>29</sup> and Tatar<sup>30</sup> extractions. These carried goods to Persia on behalf of Indian merchants sometimes on the basis of a share in the expected profit or sometimes as mere

27. Lockhart, pp. 391, 392, 398, 403, 446.

28. R.I.O., Doc. No. 191.

29. *Ibid.*, Nos. 42, 53.

30. *Ibid.*, Nos. 44, 49, 94.

servants.<sup>31</sup> The Armenians were the most important agents employed by the Indians of Astrakhan to prosecute their Persian trade.

The trade of the Indians with and in Persia was suffering because of local chaotic conditions. In 1740 the Russian Consul at Gilan reported that a Tatar agent of Indian traders in Astrakhan was arrested and his goods seized by the local Persian authorities. He was not beaten only because of the timely intervention by the Russian Consul, who now advised the governor of Astrakhan that in future Indians should not be sent to Persia for there was no trade.<sup>32</sup>

It is in the above context we find Indian traders migrating from Persia to Russia. In 1741 eighteen Indian merchants from Persia arrived in Baku<sup>33</sup> and in the same year seventeen Indians from Gilan arrived in Astrakhan.<sup>34</sup> These Indians were of Multani, Lahori and Marwari origin.<sup>35</sup> This loss of trade in Persia impelled the Indians to seek imperial permission to trade freely in the internal cities of Russia.<sup>36</sup> The Indians contended that after the death of Nadir Shah the Indians were being killed in Persia and all sorts of restrictions were imposed on them which made it difficult for them to carry on their trading activities.<sup>37</sup> Indeed we have to marvel at the ingenuity of the Indian traders who despite tremendous odds continued to carry on their business without political support from any quarter.

The Russian authorities became deeply concerned at the disruption of the Persian trade because it cut off the supplies of Indian goods. They started making determined efforts to find an alternative route to India from Russia via central Asia, i.e. via Khiva and Bukhara. The Russian rulers and the Russian authorities repeatedly sent embassies and missions to establish the new route, which

31. *Ibid.*, No. 44.

32. *Ibid.*, No. 94.

33. *Ibid.*, No. 95.

34. *Ibid.*, No. 98.

35. *Ibid.*

36. *Ibid.*, No. 134.

37. *Ibid.*

would be safer and dependable.<sup>38</sup> The Russian task was facilitated as well as this urge was strengthened because they had by 1735 captured the Kazakh steppe, which bordered on the central Asian khanates<sup>39</sup>. To give concrete shape to Russian ambitions Orenburg was established in 1735 to act as a forwardpost on the road to India via central Asia<sup>40</sup>. The Russian authorities adopted measures to lure Indian and other eastern traders of Astrakhan and central Asia to Astrakhan in the hope that this would help in the establishment of direct trade between Russia and India.

An Indian trader of Astrakhan who is named as Marwari Baraev in Russian documents was initially consulted in this connection by the Russian Empress<sup>41</sup>. He testified to the fact that disturbed conditions in Persia had adversely affected the coming of Indian merchants to Astrakhan from Persia. In Bukhara the Indians had numbered about 300 persons but they had left for Kabul and other places owing to attacks by the Khan of Kokand. Marwari Baraev promised to bring back the Indians if the security of their persons and property was guaranteed.<sup>42</sup> Marwari Baraev was granted 1,000 Rubles by the Russian authorities for establishing a Company in Orenburg to trade with India<sup>43</sup>. The Russians were serious about this project. The tax returns show that the value of goods coming from or going to Orenburg was mentioned both in Rupees and Rubles.<sup>44</sup> Presumably on this basis Kemp states that Orenburg replaced Astrakhan as a focal point for the activities of Indian merchants in Russia.<sup>45</sup>

But Mrs. Kemp's contention seems to be doubtful.<sup>46</sup> Conditions in north and north-western India were not favourable for

38. *Ibid.*, Nos. 137, 165-169, 179-183, 200-203.

39. Wheeler, Geoffrey, *The Modern History of Soviet Central Asia*, London, 1964, p. 29.

40. Baikova, p. 177.

41. R.I.O., Doc. Nos. 72, 74.

42. *Ibid.*, No. 74.

43. *Ibid.*, No. 75.

44. Lyusternik, E. Ya. *Russka-Indiiskie Ekonomicheskiye Svyazi*, v. XIX veke, Moskva, 1958, p. 12.

45. Kemp, P.M. *Bharat-Rus*, Delhi, 1958, pp. 104, 106.

46. Baikova supports Kemp. Baikova, pp. 180, 181. However, Baikova like Kemp fails to adduce sufficient proof in favour of her statement.

expansion of land trade and the long route through Khiva and Bukhara was also not safe because of internal strife between the khanates and the constant incursion of the nomad tribesmen. Astrakhan continued to be the chief centre of the activities of Indian merchants in Russia although henceforward not trade but usury became the prime occupation of the Indians.<sup>47</sup> But the establishment of Orenburg marks a definite progress in Russian attempts towards finding a direct trade route to the central Asian markets and India and is the culmination of a century of sustained efforts in this direction.

47. The extensive money-lending activities of Indians in Russia should be described in a separate paper.

## *Shipbuilding in the Mughal Empire during the Seventeenth Century*

A. JAN QAISAR

*Aligarh Muslim University, Aligarh*

The Indian subcontinent has a very long coast-line, extending from Sind to Bengal, and encircling the southern Peninsula, and also a vast network of rivers, especially in Northern India. It was thus natural that Indians should engage in maritime activities, and sea-borne trade and oversea colonisation were marked features of different periods of ancient Indian history. Interest in maritime commerce continued in medieval India. As the foundation of such commerce, shipbuilding has been one of the oldest engineering arts in the country.

The pioneering work on Indian shipping was produced by R. K. Mookerji in 1912 covering the ancient and medieval periods<sup>1</sup>. The next attempt at a description of the Indian shipping and ship-building industry was made by W. H. Moreland in his two major works on the economic history of Mughal India.<sup>2</sup> The third noteworthy effort was that of Brij Narain who challenged many of the inferences or conclusions drawn by Moreland.<sup>3</sup>

In this paper, it is proposed mainly to examine those aspects of ship-building which have been either dealt with inadequately or not touched upon at all by these scholars. Our survey is generally confined to the limits of the Mughal Empire in the seventeenth century.

It is unfortunate that references to the methods of ship-construction in the contemporary Persian sources are extremely scanty. While the European sources shed some light on certain aspects, they too are not often as detailed or comprehensive as one would

1. R. K. Mookerji, *A History of Indian Shipping*, Longmans, 1912.

2. Moreland, *India at the Death of Akbar and From Akbar to Aurangzeb*.

3. Brij Narain, *Indian Economic Life*, Chap. IV, Lahore, 1929.

have desired. Notwithstanding this paucity of information, a close scrutiny of such evidence as we have does enable us to get essential information on some very important points.

The foreign travellers and observers appear to have been alert in marking those features of the indigenous ship-building craft which distinguished it from the craft as practised in European countries; and they often comment on its comparative merits and demerits. The most striking difference noticed by them was that while the Indian shipwrights constructed their vessels by the method of "rabbeting", the Europeans did so by "caulking"<sup>4</sup>. On this a few words of explanation seem called for. In medieval times, practically the whole vessel, from its keel to hull, was made of wood. The greatest problem for the ship-builders was to make it leakproof. The timber or planks could be joined by various methods used in carpentry,<sup>5</sup> and "rabbeting"<sup>6</sup> was one of them. Fundamentally, rabbeting is based on the tongue-and-groove principle by making a "groove or cut made in the edge of one plank, etc. so that another, similarly cut, may fit into it."<sup>7</sup>

On the other hand, caulking<sup>8</sup> was a method to make the lines of junction or seams between the edges of planks tight or leakproof by squeezing in some material between them.<sup>9</sup> The materials for caulking (caulkage) were oakum, loose fibre or hemp, which was first driven into the fissures or seams, and pitch, resin or tar, which when hot, was poured on afterwards, so that, mixing with the oakum, and becoming hard on cooling, it prevented leakage from the seams.

Caulking was therefore only a secondary step in making the plank-joints tight and leakproof. At any rate, the primary task, after the procurement of timber and rigging materials, was to join

4. For the earliest evidence in the 16th century, see *Travels of Varthema*, ed. G. P. Badger (Hakluyt Society), pp. 152 ff. Cf. *English Factories* (hereafter E. F.), ed. Foster, 1646-50, p. 90 and 1668-69, p. 79.

5. Methods mentioned by Falconer in 1776 (*Dictionary of Marine Assembler*) "to unite the several pieces of a ship" as by "rabbeting, scarfing, scoring, tenanting etc." (quoted in *The Oxford English Dictionary*, Vol. VIII, 1933, s.v.).

6. For its varying spellings e.g. rabbit, rabat, or rabbit etc. cf. *O.E.D.*, Vol. VIII, s.v. In 1647, the English factors spelled it as "rabited" (*E.F.*, 1646-50, p. 90).

7. *Ibid.*, Vol. VIII, s.v.

8. *O.E.D.*, Vol. II, s.v.

9. Crispin, *Dictionary of Technical Term*, s.v.

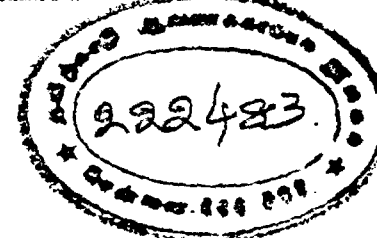
the planks of various sizes so skilfully as to leave the minimum of fissures between their edges. Thus, in the first instance it will not be reasonable to accept the line of distinction drawn so sharply between the indigenous and European methods of ship-building by the simple formula of rabbeting vs. caulking, unless two points are conceded: (a) that the Indian carpentry was of such an excellence that seams between the planks did not appear and therefore any further attempt to make the vessel leakproof was simply redundant. (This would suggest that the Indian carpenters performed at one stroke, what was done at two by their European counterparts), and (b) that rabbeting was not done in the European vessels. Both these propositions are not wholly true. In Europe, as stated above, rabbeting was one of the methods used in ship-building. This fell into disuse in Europe completely only by the end of the first half of the nineteenth century.<sup>10</sup> On the other hand, the Indian ship-builders always took measures to stop up the seams by using various chemicals.<sup>11</sup> At the most what could be conceded is that rabbeting, for unknown reasons, was perhaps disfavoured in European bottoms; or that at least, the major part of the ship was not rabbeted.<sup>12</sup> The Indian vessels, we may suppose, were, on the contrary, for the most part rabbeted. But in both the cases it is quite safe to conclude that a variety of methods for joining the numerous planks would be employed, as one method alone would not suffice for every part of the ship. Therefore, perhaps the problem cannot be posed as rabbeting vs. caulking; it will be more appropriate to pose it as caulking vs. the indigenous way of making vessels leakproof. Even here, Marco Polo for one, describes the Indian "course of boards as well calked with ocam..."<sup>13</sup> Other writers are, however, quite emphatic in making contrary statements. Varthema in the sixteenth century definitely states (about Calicut) that "when they build the said vessels they do not put any oakum between one plank and an-

10. Sir E. Reed, *Shipbuilding*, III, p. 48, quoted in the *O.E.D.* Vol., VIII, s.v.

11. See *infra*.

12. Cf. *E.F.*, 1646-50; p. 90. A ship of European build brought for prince Dara Shukoh by the "Shawbunder of Tutta" was rejected by the "governor of Thutlah" "for being (as the *Supply*) major part calked work and not rabbited, which building is only known to these people."

13. *Purchas his Pilgrimes*, XL, p. 291.



other in any way whatever."<sup>14</sup> Again, the English factors from Bombay in 1668 wrote that the Indian ship-building craft "admits of noe caulking . . ."<sup>15</sup> Perhaps, we would do best to suppose that caulking, though not commonly resorted to, was probably not entirely unknown to the Indians and might have been resorted to in some parts or localities of India.<sup>16</sup> Materials for caulking were well known—hemp, cotton, husk, cordage—and pitch and tar made in the indigenous manner.<sup>17</sup> But the emphatic statements of the foreign observers in the seventeenth century must carry some weight. Caulking in India must have been in disuse by then, or not generally adopted by the ship-builders, so much so that its absence could be regarded by foreigners as the distinctive feature of Indian shipbuilding.

As a matter of fact, it must go to the credit of the Indian carpenters that they joined the planks so skilfully as to dispense with the necessity of caulking as such, and thus won admiration from the foreign observers. Varthema, while commenting on the absence of the use of oakum, says: "but they join the planks so well that they keep out the water most excellently."<sup>18</sup> The English factors at Bombay (1668) urged their superiors to get their ships built near Bombay because "the carpenters wrought very cheape, substantial, and strong, of planke let into each other. . . . this is to our knowledge very lasting, and admits of noe caulking."<sup>19</sup> This was often done by letting the planks into each other and making them tight by applying a poultice of tarred cotton beforehand,<sup>20</sup> probably to those parts of the rabbeted sides of the planks which still showed some looseness in joining. After this, the planks were nailed or spiked—"What is called rivetting worke."<sup>21</sup>

14. *Travels of Varthema*, pp. 152ff.

15. *E.F.*, 1668-69, p. 79 and 1646-50, p. 90.

16. Caulking must have been done in vessels whose planks were sewn by ropes. Cf. Fryer, *A New Account of East India C.*, ed. Crooke, Hakluyt Society, I, p. 103.

17. Thus Varthema: "Do not imagine, however, that they have not any oakum, for it comes there in great abundance from other countries, but they are not accustomed to use it for ships."

18. Varthema, *op. cit.*, p. 152.

19. *E.F.* 1668-69, p. 79.

20. *Ibid.*

21. *Ibid.*

Apart from wooden nails or pins, iron nails were extensively used in ship-building in India.<sup>22</sup> But this should not lead us to suppose that all the vessels were necessarily nailed with iron. Very often, in smaller sea-coasting and river vessels, cords and ropes were used to join the planks securely.<sup>23</sup>

The next step was to smear the planks with indigenous pitch or tar, and lime, with the double purpose of stopping up any seams and of preserving the timber. Pitch in the "Eastern parts" was made by mixing two-thirds of *dammar* and one-third of oil well boiled together, which in the opinion of Bowrey, was "not inferiour to the best we use for our shippinge in England."<sup>24</sup> Oil extracted from fish and probably mixed with other ingredients was also used in daubing the planks.<sup>25</sup> Lime (Chuna) was applied at least once a year, "which is done in one spring (tide) . . ."<sup>26</sup> (The Indian word *chuna* got anglicised into "chenam" and "chynaming" in this period). This practise was accepted by the Europeans in India.<sup>27</sup> Lime was used as protection for wood against seaworms, especially in the gulf of Cambay, whose seaworms had attained special notoriety for the damage they caused.<sup>28</sup> As a further protection, the vessels were sheathed, i.e. another course of planks

22. As early as the 14th century Marco Polo testifies to this. (*Purchas*, XL, p. 291). Varthema in the 16th century speaks of the use of "an immense quantity of iron nails" in the ships, (Varthema, p. 152).

23. Thus Babur: "Cord for sewing boat-seams are heard of as made from these husks"—i.e. husks derived from the coconut palm trees. (*Baburnama*, tr. Beveridge, II, p. 509). Writing about "a fleet of small vessels" that came from Bengal to Masulipatam (of 20 tons burthen) in 1618, Methwold observes that "the planks (are) only sowne together with cairo (a kinde of cord made of the rinds of coconuts) and no iron in about them." (*Relations of Golconda*, ed. Moreland, p. 40).

For the Coromandel coast, see Fryer, *op. cit.* p. 103. Cf. Linschoten's observations about vessels built in Maldives in 1583 (*Purchas*, X, p. 299). For the absence of iron nails in ancient Indian ships, see Mookerji, *Indian Shipping*.

24. Bowrey, *A geographical Account of Countrie Round the Bay of Bengal*, ed. Temple, 1905, p. 293; Fryer, *op. cit.* p. 103. Marco Polo says that the Indian pitch was "but anointed with the Oile of a cartayne Tree mixed with Lime and Hemp beaten small, faster than pitch or Lime" (*Purchas*, XL, p. 292).

25. *Ain-i-Akbari*, (Text), B. & B. Indica, II, p. 556; Sujan Rai, *Khulasat-ut-Twarikh*, ed. Zafar Hasan, Delhi, 1918, p. 59.

26. *E. F.*, 1668-69, p. 79.

27. *Ibid.*, 1642-45, p. 248.

28. *Ibid.*, p. 248. Robert Boner in 1614: "I doe think that the Gulfe of Cambay is the worst place in all the Indies for wormes" (*Purchas*, IV, p. 159; Whittington, *Ibid.*, p. 171; Payton, *Ibid.*, p. 301); *E. F.*, 1661-64, p. 24.

over the existing ones was added so that "though the outermost sheathing be eaten like a Honey-combe with worms, yet the inner is nothing perished."<sup>29</sup> (Marco Polo states that the Indian ships were initially made of double courses of planks and after a year's usage they are sheathed again "so that they have three courses of boards."<sup>30</sup> But he perhaps exaggerates when he adds that this sheathing goes on in this manner and "sometimes till there be six courses, after which they breake them up"). The rudders were also greatly exposed to the worms whose eating off the edges "causeth great defect in the steering, not easily to be remedied beinge so deepe under water." This was prevented by sheathing the edges of the rudders with "thinne copper."<sup>31</sup>

Iron anchors had come to be used by the Indians in the seventeenth century,<sup>32</sup> these being manufactured in certain parts of the country.<sup>33</sup> Hamilton remarked that the iron anchors were not as good as those made in Europe.

Among materials for rigging, rope and cordage were also important. They were invariably made of coir.<sup>34</sup> Ropes were often pitched to make them strong.<sup>35</sup> But the English factors noted that Indian ropes were "neither so useful, durable, nor becoming English vessels."<sup>36</sup>

That the Indian artisans and ships' carpenters were not incapable of learning the new techniques of ship-building brought by the Europeans is attested to by the foreign observers.<sup>37</sup> They had indeed become so expert by their diligent observation of the European techniques that they could even convert an Indian-built ship outwardly "after the Christian manner" by fitting her properly.<sup>38</sup>

29. *Purchas*, IV, p. 301.

30. *Ibid.*, XL, p. 292.

31. *Purchas*, IV, p. 301.

32. For "anchors made of marble", see Varthema, p. 152.

33. Bowrey, p. 102 (at Madapallum); About Orissa, Hamilton, *A new Account of the East Indies*, ed. Foster 1930, I, p. 217.

34. *Baburnama*, II, p. 509; *Ain*, I, p. 79; *E. F.* 1637-41, p. 201.

35. Bowrey, p. 293.

36. *E. F.*, 1637-41, p. 201.

37. Cf. Bowrey, p. 102; *E. F.*, 1668-59, p. 80; Fryer, I, p. 267.

38. *E. F.*, 1642-45, p. 168.

Both the Persian and European sources furnish us a few names of vessels of different types or build. It need not be emphasised that these terms, even in the case of the same build, would vary from locality to locality. This makes our attempt at classification of the vessels a little difficult, more so when details about them are either sketchy or not available at all. Undoubtedly the purposes for which a vessel was employed, and the building traditions of the locality, would determine its typical build. Broadly speaking, the Indian vessels could be classified in a number of categories, such as whether they were sailing or rowing vessels; whether they were flat-bottomed or otherwise; whether they were fighting-vessels, pleasure-boats or merchantships, and so on and so forth.

Our Persian sources use three terms to describe vessels of different sizes and builds viz., *Kishti*<sup>39</sup>, *Jahaz*<sup>40</sup> and *Ghurab*. Though these terms have sometimes been used interchangeably<sup>41</sup>, they did have their own definite connotations. *Kishti* was a river boat, and *Jahaz* a sea-going ship; *Ghurab* connoted a river-boat larger than the *Kishti* and also vessels (larger than the river *ghurab*) on the seas, mainly plying along the coast.<sup>42</sup> It is interesting to note here the intrusion of a foreign word, "boat", in a Persian manuscript of early eighteenth century. The author defines it as midway between a big *ghurab* (*Ghurab-i-Kalan*) and a small ship (*Jahaz-i-Khurd*).<sup>43</sup>

As to the names of the vessels, the Persian source gives the following :

39. Originally spelt *Kashī*. In India, *Kishti*, cf. Tek Chand, *Bahari-i-ajam*, Nawal Kishore, 1916, s.v.; also Steingass, *Persian-English Dict.* s.v.

40. Also *Jihaz*; see Steingass, s.v.

41. Cf. Badauni, *Muntakhab-ut-Twarikh*, Bib-Indica, II, p. 172; Abdul Baqi Natawandi, *Maasir-i-Rahimi*, Bib. Ind., p. 611; Mir Tahir Muhammad Nisyanī, *Tarikh-i-Tahiri*, Br. Mus. Or. 1685 (Rotograph in the Dept. of History, A.M.U.), p. 96.

42. For a *ghurab* constructed for sea, see Abul Fazl *Albarnama*, (A. N.) Bib-Indica, III, p. 728. That *ghurab* was used for lading and unlading ships near the ports see *Tuzak-i-Jahangiri*, ed. Saiyid Ahmad, 1863, p. 206. Jahangir says that *jahaz* anchored at Goga (near Khambayat) and the cargo, laded and unladed by *Ghurab*, were carried by them to Khambayat. Here the explicit use of terms, *jahaz* and *ghurab*, in different perspectives, is significant. For *ghurab* as river-vessels at Agra, see Nizamuddin, *Tabaqat-i-Akbari*, Bib. Ind., II, p. 724 and Badauni, II, p. 170.

43. Mulla Safiuddin Ardbali, *Anisul-hajjaj*, (Rieu. Vol. 3, p. 930) referred to in an article on this work by Shah Moinuddin Ahmad Nadvi, in *Maarif* (Azamgarh), January, 1964.

*Kosa*, *jalia*, *ghurāb*, *parendah*, *bajra*, *patīla*, *salb*, *patīl*, *bhar*, *balām*, *khatgiri*, *mahalgiri*, *pālwar*<sup>44</sup> and *tawari*.<sup>45</sup> The first thirteen types were mostly river-boats widely used in Assam, Bengal, Bihar and Orissa; the *tawari* usually plied along the western coast, especially in the gulf of Cambay. The big-sized *tawari* even went for high-sea navigation<sup>46</sup> and has been described as "a shippe without any deck, made to carry the greater quantity of goods."<sup>47</sup>

The *Kosa* and *Jalia*<sup>48</sup> were fighting vessels, mostly used on rivers, specially the *Kosa*.<sup>49</sup> The author of the *Fathiya-i-Ibriya*, while giving details of the Mughal *Nawara* (flotilla) in one campaign during Aurangzeb's reign in Bengal, mentions 48 *Jalias* and 159 *Kosas* out of a total of 323 vessels. They are also referred to by Manrique: "The naval forces of this monarchy are very weak, their greatest strength lying in vessels called gelias and cosas more suited for use on placid rivers than on the high-seas."<sup>50</sup> He further adds that they were rowing boats.<sup>51</sup>

Details about the other types of vessels mentioned above are lacking in the Persian sources; but for some these are available in European sources.

The following mainly served in Eastern India:

*Patila* (Patella; Patteloos)—They were large flat-bottomed vessels built strong "by reason of the most impetuous Eddies they meet with in some places, that force them many times upon one

44. Shihabuddin Talish, *Fathiya-i-Ibriya*, (Rotograph in the Dept. of History, A. M. U.), Bodl. or. 589, p. 26.

45. *Ain*, II, p. 486.

46. *Ain*, II, p. 486; Cf. *E. F.*, 1634-36, p. 30 "Heere arrived at this porte (Surat) a tawrin from Mocha."

47. *E. F.*, 1634-36, p. 30.

48. The word has been misread as *jalibisa*, see Mookerji, *Indian shipping*, pp. 227-28. That the correct reading should be *jalia* or *jelia* is corroborated by Manrique, *Travels*, II, p. 278 who writes "gelias and cosas."

49. *Tuzuk-i-Jahangiri*, op. cit. p. 272. Jahangir refers to two *Kishtis* presented to him by Ibrahim Khan, the governor of Bengal (14th R. Y.), which in Bengal were termed *Kosa*. One of them had a golden apartment (*nashimangāh*) and the other had a silver one. Perhaps this was a specially-built *Kosa*, turned into a pleasure boat. (The printed text misreads the word as "gosha").

50. Manrique, II, p. 278.

51. Cf. Schouten; "Jeliasses are very long and narrow boats, apparently constructed principally with a view to swiftness. Indeed they cover long distances on the rivers. They carry no sails, but they have as many as thirty-eight or forty oars." (quoted in Bowrey, p. 140, n. 2).

Shoale or other, soe that, were they not stronge and very flatt, they would be in greater peril of wringing to pieces or turning bottom up."<sup>52</sup> Their main route was on the Ganges between Patna and Hugli and could carry about "4, 5, or 6,000 Bengala mounds".<sup>53</sup> Their large size is shown by the fact that smaller boats could be put aboard them.<sup>54</sup>

*Bhar* (Boora, Bera etc.): They were large but "very floaty light boat" with 20 and 30 oars and probably "badly built". They usually plied between Hugli—Balasore and Hugli—Dacca and also acted as tow-boats for the ships "up or downe the River".<sup>55</sup>

*Palwar* (Palwar)—It was "a river boat of 12-13 tons".<sup>56</sup>

*Bajra* (Budgaroo)—Details are lacking, except to suggest that it was a sort of pleasure-boat. From a drawing made by Bowrey, it appears that it was a long boat with both ends a little elongated and tapering symmetrically, moderately above water. There was a shed or open cabin-like structure at one of the ends. It was a rowing boat.<sup>57</sup>

Bowrey gives two names which are difficult to identify with any of the Indian names described above. They are *Purgoo* and *Olocko*. *Purgoos* worked between Hugli, Pipli and Balasore, and seem to have served mainly as lading and unlading ships. Their characteristic was that they were "brought to anchor by the sterne".<sup>58</sup> Fitch refers to boats in Bengal called *Pericose* which most probably were same as the *Purgoo* of Bowrey.<sup>59</sup> He describes them as having 24 or

52. Bowrey, p. 225.

53. *Ibid.*, *E. F.*, 1655-60, p. 409.

54. Bowrey, p. 225, n. 3; Jourdain (*Journal*, ed. Foster, XVI, p. 162) refers to "great barges" of 4 and 5 hundred "tonns a peece" plying between Agra and Bengal. This description fits in with *Patila*. He adds that "The merchants have there tents sett up in the barge as in a field. These barges are very long and broad and very well made according to the manner." Also, Mundy, *Travels*, II, pp. 87-88. He says that their ends were extraordinarily high. (The peculiarity of their construction was that the planks forming the sides overlapped and did not join edge to edge. Cf. Grierson, *Bihar Peasant Life*, p. 42, quoted in Yule and Burnell, *Hobson-Jobson*, London, 1903, p. 6876, s.v. *Pattello*).

55. Bowrey, pp. 228-29 and n. 5; *Hobson-Jobson*, op. cit., s. v. *Bera*.

56. *E. F.*, 1668-69, p. 303; *Hobson-Jobson*, s. v. *Pulwah*, *Pulwar*.

57. Bowrey, p. 228, cf. plate XIII facing the page; *Hobson-Jobson*, s. v. *Budgerow*.

58. *Ibid.*, p. 228. See *Hobson-Jobson*, s. v. *Porgo*.

59. Fitch, ed. Ryley, pp. 114-115.

26 oars and of great "burthen", but having "no coverture" (i.e. shed or cabin). The *olacko* (*ulāk*) was a small narrow ferry-boat with 4 or 6 oarsmen".<sup>60</sup>

"Dingeess" were very small fishing-boats in Eastern India.<sup>61</sup> Tavernier refers to ferry-boats made of Osiers (a type of willow) and covered with ox-hide. They were so light that one or two men could carry them on their shoulders.<sup>62</sup> On the western coast (Broach), Pietro Della Valle names a type of Indian ship called *Patache*.<sup>63</sup>

At Lahore, Abul Fazl mentions a large *Kishtī* which could load more than 15 thousand *maunds* and could convey a big *jahāz* built upon it from Lahore to Lāhri Bandar.<sup>64</sup> Perhaps, it was a giant raft.

Hamilton's detailed account of river vessels called Kisties plying on the Indus is highly interesting and deserves to be quoted at length: "Their vessels are called Kisties, of several sizes. The largest can lade about 200 tons. They are flat-bottomed, and on each side, cabbins are built from stern to stern, that overhang about 2 foot; and, in each cabin, is a Kitchen and a place for exoneration which falls directly in water. Those cabbins are hired out to passengers, and the Hold, being made into separate Apartments, are let out to freighters, so that every one has a Lock on his own cabin and Apartment in hold . . . . And indeed in all my travels I never saw better conveniences of travelling by water. They have one mast of a good length, and a square-sail to use . . ."<sup>65</sup>

Broadly, the regions, coastal as well as inland, where ship-building was carried on in the seventeenth century in the Mughal Empire could be classified as follows:

- (a) West and North-west India. (Indus Valley region: Thatta, Lahore and Kashmir).

60. Bowrey, p. 227 and n. 2. See *Hobson-Jobson*, s.v. *woolock*. Bowrey gives two names of vessels along the Coromandel coast namely, *Massoola* and *Cattamaran* (pp. 42-43 and notes 2 on p. 43. cf. Fryer, I, p. 103)].

61. *E.F.*, 1668-69, p. 303.

62. Tavernier, *Travels in India*, ed. Crooke, 1925, I, pp. 8-9.

63. P. Della Valle, *Travels*, tr. Grey, 1892, I, pp. 61-62.

64. *Akbarnama*, III, p. 716.

65. Hamilton, *A New Account of the East Indies*, ed. Foster, I, 1930, pp. 75-76. Marco Polo also gives a description of cabins on ships, *op. cit.*

- (b) Western coast (Surat Area).  
(c) Bengal and Orissa.  
(d) Other inland centres of boat-building industry.

Thatta did not have shipyards worth the name owing to the non-availability of good timber in its immediate neighbourhood.<sup>66</sup> Not only river-vessels but ships as well were constructed at Lahore,<sup>67</sup> Srinagar,<sup>68</sup> Wazirabad<sup>69</sup> and other places where timber was easily available; these were then sent down the rivers towards Bhakkar, Thatta and Lāhri Bundar.<sup>70</sup> *Sāl* timber from the Chamba hills was brought down by the river to Wazirabad.<sup>71</sup>

Abul Fazl says that at first there were more than 30 thousand *Kishtīs* in Kashmir, though they were not goods ones.<sup>72</sup> Akbar personally ordered the construction of a sea-going *Ghurāb* near Srinagar, in his fortysecond R.Y.<sup>73</sup> Again, a *jahāz* was completed near Lahore under his direction in his fortyfirst R.Y.<sup>74</sup> Having built a strong fort at Attock Benaras, Akbar in his twentyseventh R.Y. ordered the nobles and troopers to build *Kishtīs* there as there were not many.<sup>75</sup> Also, at a village, Sultanpur, (under Khizrabad) near Bhira, he issued orders for constructing *Kishtīs*, and the nobles and officials also built their own vessels.<sup>76</sup>

Abul Fazl credits Akbar with imparting a fillip to this industry at Lahore and Allahabad.<sup>77</sup> Agra also appears to have been a good

66. Thus *E.F.*, 1636-40, p. 244: "In or about Tuttha groweth no timber fitt for aedifices, nor have they any but what is thus brought them."

67. *A.N.*, III, p. 716.

68. *Ibid.*, p. 728.

69. Sujan Rai Bhandari, *Khulasatut-Tawarikh*, ed. Zafar Hasan, Delhi, 1918, p. 77.

70. *A.N.*, III, p. 716; Sujan Rai, p. 77; *Ain*, II, p. 202.

71. Sujan Rai, p. 77.

72. *Ain*, II, p. 550.

73. *A.N.*, III, p. 728.

74. *Ibid.*, p. 716.

75. Nizamuddin Ahmad, *Tabaqat-i-Akbari*, Bib-Ind., II, p. 358. Perhaps this was done for strategic reasons. Cf. Sujan Rai, p. 78, who says that the River *Nilab* and many other streams from Kabul unite with the Indus Valley below Attock Benares.

76. *Tabaqat*, II, p. 338.

77. *Ain*, II, p. 212.

centre for boat-building activity in his reign.<sup>78</sup>

The construction of sea-going vessels at Lahore from where they had to be brought down to the sea was not trouble free. Since a *jahāz* had to be heavier than a river-vessel, it was difficult to steer her in rivers. Once such a difficulty arose at Lahore in Akbar's presence and the problem was solved by hauling the *jahāz* on to a large *Kishtī* or raft and in this manner she was brought to Lahri Bandar.<sup>79</sup>

On the Western Coast (around the gulf of Cambay), the industry flourished at many places, especially at Surat,<sup>80</sup> Goa,<sup>81</sup> Broach,<sup>82</sup> Diu,<sup>83</sup> Nosari,<sup>84</sup> Khambayat<sup>85</sup> and Gandevi.<sup>86</sup> The last town was well known for her teak timber which were exported to other places for ship-building.<sup>87</sup> Her timber was considered not only the best but also the cheapest available.<sup>88</sup> Ships built here had become so reputed that in 1621 the Dutch started buying ships there and claimed that they were the first (Europeans) to buy "native" ships.<sup>89</sup> Nosari exported timber,<sup>90</sup> while Broach imported it by the river-route from distant parts.<sup>91</sup> Good pitch, tar, ropes and iron nails do not seem to have been produced in this region; they were most probably imported from Kerala or Malabar.<sup>92</sup>

78. *Tabaqat*, II, pp. 274-75. Raja Todar Mal had collected one thousand *Kishtis* and *ghurabs* at Agra (Badauni II, p. 170). At Agra, Akbar, among others, had two boats constructed with figure heads of Lion and Crocodile (Badauni, II, p. 172).

79. *A.N.*, III, p. 716.

80. Abdur Rahim Khan-i-Khanan had three ships built at Surat. See *Maasir-i-Rahimi*, p. 611; *E. F.* 1661-64, p. 24.

81. *Purchas*, III, p. 296.

82. Mandelslo, *Travels*, ed. Commissariat, 1931; p. 14.

83. Aziz Koka had a ship built, i.e. *Jahāz-i-Ilahi* at Diu, cf. *A. N.*, III, p. 638 and Ali Muhammad Khan *Mirat-i-Ahmadi*, ed. Nawab Ali, I, p. 181.

84. *E. F.*, 1618-21, p. 119.

85. Lahori, *Padshahnama*, Bib. Ind., II, p. 606 (Ali Akbar Ispahani constructed a ship at Khambayat).

86. *Purchas*, III, p. 82.

87. Hamilton, I, p. 104.

88. *E. F.*, 1668-69, p. 65.

89. P. Van Den Broecke, Surat 'Diary' tr. Moreland, JIH, X, 1931, pp. 240, 242.

90. *E. F.*, 1618-21, p. 119; Mandelslo, *op. cit.*, p. 14.

91. *Ibid.*, 1661-64, pp. 24-25.

92. Hamilton, I, p. 183. For ropes and pitch from Malabar, cf. J. Van Twist, extracts tr. Moreland, J H, XVI, 1937, p. 76.

In Eastern India (Bihar, Bengal and Orissa), timber was extensively available, specially in Bengal<sup>93</sup>. In the *sarkar* of Bazuha, timber of long length, suitable for large ships, could be produced.<sup>94</sup> Chittagong afforded the best timber of all places in its neighbourhood.<sup>95</sup> Ship-building was very active in this region. On one occasion, Manrique found over two thousand rowing boats at Rajmahal.<sup>96</sup> Ships of 4, 5, or 600 'tons' were built at Hugli, Jessore, Pipli and Balasore.<sup>97</sup> Balasore could supply one of the best timbers, comparable to Gandevi's.<sup>98</sup> In Orissa, iron was procurable in plenty and anchors were cast in moulds, though these were thought to be a little inferior to those made in Europe.<sup>99</sup> Ship-building had developed on such a scale in this region that at many places, especially near Dacca, colonies of carpenters had grown up.<sup>100</sup> Ship-yards or naval arsenals with thatched roofs were called *nau sal*.<sup>101</sup> The *nau sal* at Khargaon had from 70 to 80 *Kishtis* at one time.

On the south eastern coast (i.e. Coromandel), Madapallam and Narsapur were highly praised by European observers for the construction as well as repairs of ships that were carried on there. Iron materials for ship-building such as spikes, bolts and anchors<sup>102</sup> were skilfully made by the Indian smiths. Bowrey praises the Indian mariners and shipwrights of this region who could launch as well as haul up a ship for sheathing and repairing her. At Narsapur, timber, iron and other materials were easily available and the worker's wages were low.<sup>103</sup> Ships up to 600 'tons' could be built, and repairs, including sheathing and careening carried out.<sup>104</sup> Europeans too had their ships built and repaired here.

What did it cost to build a vessel? This cannot be easily

93. Cf. *Ain*, II, p. 390.

94. Hamilton, II, p. 15.

95. Manrique, I, pp. 134-35.

96. Bowrey, pp. 161-63.

97. *E. F.*, 1668-69, p. 65.

98. Hamilton, I, p. 217.

99. Tavernier, I, p. 105.

100. Talish, pp. 26, 30.

101. Bowrey, p. 102.

102. *Relations of Golconda in the Seventeenth Century*, ed. and tr. Moreland, 1931, pp. 36, 63; Bowrey, pp. 98-99.

103. *Ibid.*, pp. 36, 80.

determined as the evidence is scarce. Nevertheless, a few data have come down to us which shed light on this question.

The English Company in 1634 bought a small frigate of 30 "tons" built in Bengal for 900 rupees.<sup>105</sup> This works out at Rs. 30 per ton. In 1639, the governor of Surat gave to the English factors there a small frigate of 30 to 40 tons as a present, but within a month he demanded 1,000 rupees for her. The factors remarked that "as she is new and well-fitted, the price is deemed very cheap."<sup>106</sup> On an average, the price in this case also roughly works out at Rs. 30 per ton. Again in 1616, a coasting vessel owned by one Kwaja Arab and used as a Victualler for supplying water-caskets (fresh water) to the English ships at Swally Marine was valued by the owner at 2,000 *mahmudis* or 800 rupees.<sup>107</sup> As it was a coasting vessel, it must have been between 20 to 30 tons.<sup>108</sup> This would give us a range of Rs. 27 to 40 per ton for its cost. Thus the difference between the cost at Bengal and Surat of vessels of the same tonnage was very slight and negligible. This then gives us a working cost of 30 rupees per ton for Indian shipping generally. As a comparison, one European-built ship (probably Dutch-built) of 250 tons (first purchased and later rejected by the Governor of Thatta in 1647)<sup>109</sup> was bought by the English Company for 13,500 rupees.<sup>110</sup> This price works out at 54 rupees per ton, a little less than double the Indian cost-rate. When expressed in English currency, 54 rupees per ton amount to £ 6 1s 6d.<sup>111</sup> In 1616, the building of an English merchantman of 250 tons cost £ 7 2s 6d. per ton.<sup>112</sup> It is no accident that the rates per ton of the two European-built vessels of the same tonnage (250) are so close; and if the

105. *E. F.*, 1634-36, p. 44.

106. *E. F.*, 1637-41, p. 211.

107. *A Supplementary Calender of Documents etc.*, 1600-1640, ed. Foster, 1928, p. 102. For the rate of a *mahmudi* to the rupee in this period, see Irfan Habib, *The Agrarian System of Mughal India*, 1963, p. 384.

108. Cf. *Relations of Golconda*, p. 40; also *E. F.*, 1634-36, p. 103.

109. See *supra*.

110. *E. F.* 1646-50, pp. 90-91.

111. Taking a rupee in this period equivalent to 2 sh. 3d., see Moreland, *From Akbar to Aurangzeb*, 1923, p. 329.

112. See Violet Barbour, "Dutch and English Merchant Shipping in the Seventeenth Century" in *Essays in Economic History*, ed. E. M. Carus-Wilson, London, 1958, p. 240.

former was a Dutch vessel, the rates are still closer, because the Dutch reputedly built their ships more cheaply than the English.<sup>113</sup> The Indian rate of thirty rupees per ton, being equal to £3 7s 6d. per ton, would be almost half the English rate. In 1776 a London merchant purchased a 200 ton 'flute' (a Dutch ship) at Saardam for 9,050 guilders or £4 10s per ton.<sup>114</sup> Thus it appears that the average Indian cost-rate was lower than the Dutch as well. A *Jahaz* built at Lahore under Akbar's direction (forty first R.Y.) cost Rs. 17,335<sup>115</sup> or £1950 10 sh. 6d. which compares well with the cost of a large ship built in England in 1669 of £2,400.<sup>116</sup> Its tonnage is not specified but it must have been above 500 tons, while the tonnage of the *jahaz* of Lahore was about 577 or 600 tons in round figures, derived by applying our flat cost-rate of 30 rupees per ton.

Before forming any idea of the comparatively cheap production of Indian vessels, a few points must be considered. The cost of a vessel reflects the cost of the materials that got into its making, e.g. timber, cordage, pitch, tar, lime, nails etc., and also the wages of the labour, etc. The English and Dutch could obtain good timber only from distant countries which being a costly affair inflated the cost of ship-building,<sup>117</sup> while timber in India was locally available in the hinterland of most of the ship-building centres. Besides, caulking was done away in Indian ships and this also reduced costs.<sup>118</sup>

The wages of the ships' carpenters were definitely lower in India in the seventeenth century than those of their counterparts in Amsterdam. In 1622, five carpenters were sent on contract from Broach to Surat by the English factors. The chief carpenter was to get one *mahmudi* (= 16 *dams*) per day, and the others three quarters of a *mahmudi* (= 12 *dams*) each per day.<sup>119</sup> In Amsterdam the ships'

113. *Ibid.*

114. Violet Barbour, p. 240.

115. *A. N.*, III, p. 716.

116. Barbour, p. 240.

117. *Ibid.*, p. 235. The cost of materials in England sometimes came to eight times the cost of labour in England.

118. Cf. *E. F.* 1668-69, p. 79 ("... this excuseth all caulking work ... with the expence of a many carpenters and caulkers").

119. *E. F.* 1622-23, p. 93.

carpenters in 1692 received 24 to 36 *stuyvers* a day according to the season, the summer wage being one third higher than the winter.<sup>120</sup> One *mahmudi* being equivalent to 10 *stuyvers*,<sup>121</sup> the wages of the four Broach carpenters amounted to 7½ and those of the chief to 10 *stuyvers* per day. In comparison to the Dutch wages, these work out roughly at 1 : 3 and 1 : 2 respectively.<sup>122</sup> In 1668 a higher wage was paid to the ships' carpenters in Bombay compared to Broach or Surat, i.e. 1s. 8d. ( =  $33\frac{19}{27}$  *dams* ) to the chief workmen, while labourers get only 3½d. ( =  $2\frac{2}{9}$  *dams* ).<sup>123</sup> A ships' carpenter earned more than a general carpenter engaged for house-building purposes whose wage was 7, 6, 4 and 3 *dams* per day, according to his grade.<sup>124</sup> A chief sawyer got 2 to 2½ *dams* (according to the species of wood) for sawing one cubit *gaz*, and 2 *dams* with food.<sup>125</sup> Ships' carpenters' wages were probably higher in Kashmir where, according to Abul Fazl, the boatmen and the carpenters had a hey-day.<sup>126</sup>

The sea-worthiness or durability of the Indian ships is difficult to estimate as we do not have the life history of any known Indian ship, i. e. the duration for which she actually served. Nevertheless an endeavour could be made in this direction if some latitude is permitted, that is, to add at the least 10 years to the total number of years a particular ship is traceable in the sources : five years to be added before her first appearance and another five after her last in the sources. Only three ships could be traced that are mentioned

120. Barbour, pp. 238-39, n. 33.

121. Cf. Pelsaert, 'Remonstrantie' tr. Moreland and Geyl, *Jahangir's India*, 1925, p. 42.

122. It must, however, be pointed out that the wages of the ships' carpenters in India and Holland, as shown above, could not be said to be exactly comparable, because the dates of the two data cited are quite widely apart (1622 for India and 1692 for Holland). Even if it is conceded that the wages in India in 1622 probably continued to be at the same level in 1650 also (see *infra*, note), the same could not be safely asserted for the second half of the 17th century. Still, the two data could be used for a rough comparison.

123. *E. F.*, 1665-69, p. 81.

124. Thus, *Ain*, I, p. 170. For corroboration of this rate in 1637-38, see Moreland, 'Some Side-lights on Life in Agra, 1637-39,' JUPHS, Dec. 1923, Vol. III, part I, pp. 159-60.

125. *Ain*, I, p. 170.

126. *Ibid.*, II, p. 563.

after two or three substantial intervals : They are *Ilahi*, *Salamati* and *Ganjawar*. The first reference to the *Jahaz-i-Ilahi* is in the 21st R.Y. of Akbar<sup>127</sup> and her next and the last is in the thirtieth R.Y.<sup>128</sup> Its total life according to the formula set by us would have been 27 years. *Salamati* (450 tons) is first noticed<sup>129</sup> in 1612; next in 1622<sup>130</sup> and lastly in 1644,<sup>131</sup> and that gives her a life of 42 years. Again, the *Ganjawar* is first mentioned in 1619<sup>132</sup> and then in 1650,<sup>133</sup> thus having a duration of 41 years. Unfortunately we could not get any comparable data about the European ships in this respect, except once when an English vessel was credited to have an abnormally long life of 70 years.<sup>134</sup>

Timbers (pine, fur) used in European bottoms were fragile and weak.<sup>135</sup> Even "oaken planks" were not good enough at least in the Indian climate and waters.<sup>136</sup> At the same time foreign observers have good words to say for the Indian timber, especially teak wood.<sup>137</sup>

Some foreign travellers have left for us a rough and ready description of the tonnage of a few (named) Indian ships mostly based on their traditional experience of such calculations. The largest tonnage mentioned is that of *Rahimi*, the 'Queens mother's ship',<sup>138</sup> which was somewhere between 1,000 and 1,500 tons.<sup>139</sup> The lowest

127. *A. N.*, III, p. 195, *Mirati-Ahmadi*, I, p. 181.

128. *A. N.*, III, p. 638.

129. Downton, *Purchas*, III, p. 287.

130. P. Van D. Broecke, *JH*, X, 1941, p. 249.

131. *E. F.* 1642-45, pp. 161.

132. *Ibid.*, 1618-26, p. 113.

133. *Ibid.*, 1646-50, p. 324.

134. Barbour, p. 240.

135. *Ibid.*

136. Cf. *E. F.*, 1668-69, p. 79 : 'our oaken planks, doth not agree so well in this parching country, but shrinkes and wats exceedingly.' Also, *E. F.*, 1642-45, p. 141 : 'The *Hind* and *Seaflower*, though good sea-ships, are altogether unsuitable for service in these parts.'

137. See *supra*.

138. Jourdain, Vol. XVI, p. 208.

139. For being 1500 tons see, *Letters Received*, Danvers, I, p. 164 and Downton in *Purchas*, III, pp. 287-88. Jourdain (XVI), p. 208 : 'one of 1000 tons or more'. John Saris took her measurements and put her 'at the least of Twelve hundred tons' (see, *Purchas* III, p. 399). John Hatch took her to be between 1200 to 1400 tons (Cf. *Purchas*, IV, p. 537).

tonnage given for a seagoing ship is that of *Mahmudi*, viz. 150 tons,<sup>140</sup> among ships in the Arabian and Red seas, while on the Eastern waters (between Sumatra and Batavia), the lowest tonnage recorded was 80<sup>141</sup>. At Goga, ships of 9, 12 or 15 hundred tonnage<sup>142</sup> and at Narsapur from 600 to 800 tons were built<sup>143</sup>. In Hugli, Jessore, Pipli and Balasore the tonnage of ships built was 400, 500 and 600 tons.<sup>144</sup> Ships of 1400 and 1600 tons were found serving between Surat and Mokha.<sup>145</sup> A tabulation of tonnage noted in foreign sources would indicate an overall average of not less than 300 to 400 hundred tons, especially for the ships sailing in the Red Sea zone.<sup>146</sup>

As to the measurements of the Indian ships we have only three examples. In 1612 John Saris, at Mokha, took measurements of two ships were *Rahimi* and *Mahmudi*. The former (1200-1500 tons) measured in length from stem to stern 153 feet, breadth 42 and depth 31 ft. The overall length of *Mahmudi* (150 tons) was 136, breadth 41 and depth 29½ feet.<sup>147</sup> The *Jahaz* built under Akbar's direction at Lahore (about 600 tons) was 37 *gaz*<sup>148</sup> in length (= 98.8 ft.).<sup>149</sup> To compare, a Dutch *fluit* of 500 tons measured 130 ft. long, 5 inches deep, and another type of Dutch vessel of 300 tons was 115 ft. long, 23 ft. 6 inches wide and 11 or 12 ft in depth.<sup>150</sup>

What was the Indian concept of shipping tonnage? The European term described the cargo-space of a ship and not the maximum weight of the cargo she could carry.<sup>151</sup> But the Indian ship-builders' idea of tonnage was apparently by weight and not space. Only one

140. *Purchas*, III, p. 288.

141. *Purchas*, II, p. 356.

142. *Ibid.*, II, p. 396.

143. *Relations*, p. 36, *E. F.* 1637-41, p. 80.

144. Bowrey, pp. 161-63.

145. Terry, *Purchas*, IX, p. 23.

146. Cf. Moreland, *India at the Death of Akbar*, p. 159. His average at the close of the 16th century is 200 tons for the sea-going ships.

147. *Purchas*, III, p. 396.

148. *A. N.*, III, p. 716.

149. Taking one *gaz* (*Ilāhī*) as equivalent to around 32.037 inches. See Irfan Habib, *op. cit.*, p. 362.

150. Barbour, p. 244.

151. For the tonnage, see Moreland, *'India at the Death of Akbar'* 1962, Appendix D, pp. 288-290. Also Balakrishna, *Commercial Relation between India and England*, London, 1924, pp. 243-46.

reference is available in the Persian sources on this point to establish our statement. In the 41st R. Y. of Akbar a *Jahaz* built at Lahore was brought to Lahori Bandar on a large river vessel which is stated to carry more than 15 thousands *maunds* of load.<sup>152</sup> A similar notion is found in Bowrey who, describing the capacity of some ships in Bengal, says that "each of them will bring down 4,5,6000 Bengala *maunds*."<sup>153</sup> That the Indians expressed the capacity of their vessel in terms of cargo-weight is further evidenced by the fact that the Persian sources invariably give only one linear measurement of the ships, i.e. the length.<sup>154</sup> In Europe, the tonnage was initially calculated by measuring the length, breadth and depth of the ship and later on for more exactitude deductions were made for the rake and curvatures. John Saris while giving the measurements of Indian ships (see *supra*) also gives the measurement of the rake.

While an exact formula for comparing the two concepts of tonnage can hardly be worked out, a rough idea could still be formed on the basis of one or two assumptions. Taking our cue from Abul Fazl who says that the large *Kishitī* (which carried on its body the *jahāz* built at Lahore to Lahri Bandar) could load more than 15,000 *maunds* of cargo, we may be allowed the guess that the *Jahāz* herself could have a loading capacity of, say, 12 thousand *maunds* at the most. Now, as we have already calculated her shipping tonnage (see *supra*) to be about 600 tons, the relation between the European and Indian tonnage would work out at 1 ton = 20 *maunds* (*Ilāhī*).

Moreland's adverse comments<sup>155</sup> on Indian ships and navigators have been refuted by Brij Narain, and any further effort to labour the theme is not needed. The latter has shown the piratical acts of the Europeans in the Asian waters to have been the bane of Indian shipping. Nevertheless, Indian shipping flourished unabated, despite European violence in the seventeenth century, especially in its mid-decades. By 1644 the number of Indian ships at Surat had increased

152. *A. N.*, III, p. 716.

153. Bowrey, p. 225.

154. Abul Fazl gives only the length of the *jahaz* of Lahore mentioned above, cf. *Fathiya-i-Ibriya*, p. 26, where only the lengths of the river-boats have been mentioned.

155. Moreland, *India at the Death of Akbar*, pp. 87-88.

to such an extent that it lowered the marine freight-quotations.<sup>156</sup> Lower freight was possible only if the cost of ship-building was cheap.<sup>157</sup> In 1660 it was reported that "in Surat ten years past there were 15 or 20, there is now 80 and the most part of great burthen",<sup>158</sup> thus registering a 400% increase within 10 years at Surat alone. Such expansion of Indian shipping in the second half of the seventeenth century appears to be an all-India feature. In 1662 we hear about the Coromandel coast that "our (English) trade of India is much decayed within this few years and the Moors do trade more then ever they did."<sup>159</sup> In 1660 yet another report mentions the decline of the English trade because of the growth of the carrying trade of Indians.<sup>160</sup> The same story is repeated at Mokha, in 1647, where "the Moors yearly increase in shipping."<sup>161</sup> In 1648 the English felt shy of selling their ships to the Indians for fear of their being 'undervallued' by the latter owing to the "great quantity of shipping these merchants are already possessed of."<sup>162</sup>

Undoubtedly the Indians had beaten the English in a peaceful competition. But this glut of Indian shipping greatly embarrassed them and their sole answer for salvaging their trade was violence.<sup>163</sup> And indeed it was here that the Indians proved to be extremely weak.

The Mughal Emperors did not have warships or men-of-war in the proper sense. It is by no means suggested that they wilfully neglected this aspect or that the merchantmen were not armed. As early as 1616, Terry refers to the ships going from Surat to Mokha having 'good ordnance'.<sup>164</sup> In 1613 Ralph Croft wrote that an Indian ship of 300 tons, which had come from Mokha to Surat, had 12 great

156. *E. F.*, 1642-45, p. 142.

157. Barbour, p. 232. For a different view see Moreland, *From Akbar to Aurangzeb*, p. 87.

158. *E. F.*, 1655-60, p. 301.

159. *E. F.*, 1661-64, p. 179.

160. *Ibid.*, 1655-66, p. 347.

161. *Ibid.*, 1646-50, p. 87.

162. *Ibid.*, p. 190.

163. Cf. *E. F.* 1655-60, 347 and also *Ibid.*, 1661-64, p. 179 where definite proposals were put by the Factors for coercive measures.

164. *Purchas*, IX, p. 23.

pieces of artillery on each side.<sup>165</sup> Van Twist in 1638 noted that the ships from Surat to Mokha carried guns.<sup>166</sup> The Dutch in 1654 had a vessel built on the western coast which had thirty guns.<sup>167</sup> Fryer in 1680 reported that some Indian ships carried 30 or 40 pieces of cannon.<sup>168</sup> Aurangzeb's biggest ship, *Ganj-i-Sawāi* was armed with eighty cannon and had 400 matchlocks.<sup>169</sup> Out of the traditional 12-man crew in a ship, one used to be a gunner (*topandāz*).<sup>170</sup> The Mughals maintained a *nawara*, specially in Bengal. Small cannon which could fire cannon-balls of 9 seers by weight were mounted on the fighting boats in Bengal.<sup>171</sup> Lachhmi Narain, the Rajah of Kooch, possessed 1000 fighting vessels.<sup>172</sup> Under Akbar, attempts were made to build strong boats for use in capturing fortresses.<sup>173</sup> Shahjahan developed the Bengal *nawara* which consisted of 70,000 personnel, besides soldiers.<sup>174</sup>

All said and done, what was their effective power? The Mughal *nawara* was no match to that of the Arakanese (Maghs) in Bengal who also had their fighting vessels armed with guns and cannon.<sup>175</sup> And despite the efforts of Shaista Khan in Bengal, his *nawara* fought shy of facing the Arakanese and tried to flee away without giving them any battle even though they overwhelmingly outnumbered them.<sup>176</sup> The foreign travellers clearly point out that despite their guns the Indian ships 'cannot well defend themselves'.<sup>177</sup> Van Twist

165. Thomas Best, *Voyages*, ed. Foster, p. 234.

166. J. Van Twist, 'A General Description of India', extracts tr. Moreland, *JH*, XVI, 1937, pp. 74-75.

167. *E. F.*, 1651-54, pp. 223.

168. Fryer, *A New Account of East Asia etc.*, ed. Crooke, (Hakluyt Society), I, p. 267.

169. Abul Fazl Ma'muri, *Tarikh-i-Alamgiri*, (continuation of Sadiq Khan's *Tarikh-i-Shah Jahani*), Br. Mus. Or. 1671. (Rotograph in the Dept. of History, A. M. U.), f. 188a.

170. *Ain*, II, pp. 202-3.

171. *Fathiyati-Ibriya*, p. 14.

172. *A. N.*, III, p. 716.

173. *Ain*, II, p. 202.

174. *Lahori*, I, p. 471.

175. *Fath.*, *Ibr.*, p. 23.

176. *Ibid.*, pp. 124-25. For Prince Shujas's neglect of the Bengal *nawara*, cf. *ibid.*, p., 113.

177. *Purchas*, IX, p. 23.

commented that 'though they carry many guns, they are not protected by them, for (the guns) are on the top orlop without defence'.<sup>178</sup> He adds that the Indians 'do not know (how) to handle them'. This is significant. Handling guns and cannon for wars on land is quite different from doing the same on ships. European sailors had gained experiences in naval warfare in their waters, while the Indians had little or none to show. The ease with which the Portuguese, at one sweep, captured and tried to burn ten great ships (including the *Rahimi*) and 120 coasting vessels at Gogo in 1614 is almost incredible.<sup>179</sup> Similarly, Aurangzeb's biggest ship, *Ganj-i-Sawai*, fell an easy prey to the English without being able to enter into even a proper engagement.<sup>180</sup>

Analysing the weakness of the Indian 'Navy', Fryer tells us of the Indian resignation to their inferiority as a sea power. 'And if the King's fleet be but ordinary, considering so great a Monarch and these Advantages, it is because he minds it not, he contenting himself on the enjoyment of the Continent and styles the Christian Lions of the sea, saying that God has allotted that unstable elements for their Rule.'<sup>181</sup>

178. Twist, pp. 74-75.

179. *Purchas*, IV, pp. 225-26.

180. Abul Fazl Ma'muri, *op. cit.*, f. 187b. Khafi Khan adds that the English ship, which captured the *Ganj-i-Sawai* (in 1694), was much smaller in size and had less than 1/3 or 1/4 of the arms and ammunition. On the Mughal ship: see *Muntakhab-ul-Lubab*, Vol. II, Part II, Bib. Ind., p. 422.

181. Fryer, I, p. 302.

## *The Breast-Cloth Controversy : Caste Consciousness and Social Change in Southern Travancore*

ROBERT L. HARDGRAVE, JR.  
University of Texas, U.S.A.

The Nadars, in one hundred and fifty years of change, have moved from the lower rungs of the ritual hierarchy to a position of status and power in contemporary Tamilnad.<sup>1</sup> In their rise, the Nadars experienced a series of escalating confrontations with other communities which served to weld the caste into a community with a high degree of self-consciousness and solidarity. The first movement of this awakening self-consciousness was the "breast-cloth controversy".

At the beginning of the nineteenth century, the Nadars-or Shanars, as they were then known—were almost entirely engaged in the cultivation and climbing of the palmyra palm for the extraction of toddy and the manufacture of jaggery. They were concentrated geographically in the southeastern portion of Tinnevely District in Madras and in southern Travancore, now Kanyakumari. Here, and particularly in the land of their traditional origin, the palmyra forests of Tiruchendur, the community was overwhelmingly dominant in numbers. The Nadars, however, were divided among themselves by geographic isolation, the endogamy of sub-castes, and the class barrier which separated the aristocratic Nadan landowners from the palmyra climbing tappers. In the regions controlled by the Nadars, the villages were divided into client groups, as each Nadan-or "lord of the land"—commanded the allegiance of those climbers economically dependent upon him. The plight of the

1. For a discussion of the changes within the Nadar community see: Robert L. Hardgrave, Jr. "Varieties of Political Behavior Among the Nadars of Tamilnad," *Asian Survey*, November, 1966, pp. 614-21.

climbers on the lands of the high caste was even more severe. The toddy-tappers, defiled by their ritually impure calling, suffered the social disabilities of a low—almost untouchable—community. There was no consciousness of a Nadar community, no sense of unity. The only force for unity and advancement among the Nadars in those early years was the organization of the Christian missions. An agent of integration and mobilization, the mission exerted an impact upon the Nadar community far beyond those actually brought into the Christian fold.

The European missionaries working among the Nadars offered them not only the gospel of a new religion, but the possibility of a secular salvation in their release from the fetters of the tradition which had for centuries burdened them with social disabilities and economic dependence. The earliest movement for social uplift among the Nadar community came in their response to the efforts of the London Missionary Society in southern Travancore. Here the mission field was so predominantly Nadar that in 1820, the year following the founding of the Nagarcoil church, nearly all of the three thousand people who had placed themselves under instruction were Nadars.<sup>2</sup>

The Nadars of southern Travancore, like their brothers in Tinnevely, were largely palmyra climbers. Among their number, however, was a significant portion of sub-tenants to the Nair landlords, and in the regions to the east, bordering Tinnevely District, to the Vellala landlords. In this eastern region, particularly Agesthewaram, nearly a score of Nadan families held control over the lands, claiming special titles.<sup>3</sup> Charles Mead, "the father of the South Travancore Mission", described the principal man of one village as a Nadan who possessed "a great abundance of 'the good things of life,' and [was] much respected for his peaceable behavior by all classes." His wealth consisted of lands and cattle, and his holding was considered "very extensive for a person of this caste."<sup>4</sup>

2. G.T. Mackenzie, *Christianity in Travancore* (Trivandrum: Government Press, 1901), p. 51.

3. V. Nagam Aiya, *The Travancore State Manual*, Trivandrum: Government Press, 1906, II, 393.

4. Rev. C. Mead, letter to the London Missionary Society, dated Neyoor, August 22, 1831, Manuscript (London Missionary Society, hereafter cited as L.M.S.).

The traditions of these families claim the lands to have been bestowed by the kings of Travancore in return for the Nadans' services.<sup>5</sup> Many of the Nadan families claimed that they had come at the invitation of the king and considered themselves socially superior to the larger community, which had surely migrated into the southern taluqs of Travancore in economic need. The migration into southern Travancore undoubtedly occurred quite early, perhaps during the sixteenth century when the Travancore king held control of the southern region of Tinnevely, including the sandy wastes of Manadu. In the more luxuriant lands of Travancore, these Nadars continued as palmyra-climbers, laboring on the lands of aristocratic Nadans or Vellalas in the eastern portion of Kanyakumari and, towards the west, on the lands of the powerful Nair community. Although Travancore offered a geographically more hospitable country, the Nadars fared little better than in Tinnevely. The vast majority were severely depressed economically and suffered the social degradation of a low caste in the rigid hierarchy of ritual purity.

Persons of low caste in Travancore were not permitted to approach those of higher status, and fixed distances were prescribed for each caste. A Nadar must remain thirty-six paces distant from a Nambudiri Brahmin, and must come no closer than twelve to a Nair.<sup>6</sup> As members of a degraded caste, Nadars were prohibited from carrying an umbrella, wearing shoes or golden ornaments. Their houses could not be higher than one storey in height. They were not allowed to milk cows; Nadar women were not permitted to carry pots of water on their hips, as was the custom among the higher castes; nor were they permitted to cover the upper

5. "Migrating into Chera," according to a legendary account, "many Nadars won the affection and regard of the Chera King by virtue of their physical strength, valour, and spirit. They were the palanquin bearers of the king. This was considered to be an honour bestowed. Rivalry among the Nambudiris and Nairs of Chera sparked a plot to murder the ruler on his return from an expedition. The plot was to extinguish the torches and stab the king in the dark. The torch-bearers were Nairs. When they extinguished their torches, the Nadar palanquin bearers, sensing foul play, protected the king. Greatly pleased, the maharaja immediately presented them with lands in the southern part of the kingdom." Manuscript prepared by Raj Kumar Swamidoss, New Delhi, September, 1964.

6. Mateer, *The Land of Charity*, p. 132; the distances of approach are subject to disagreement. J. Wilson, in his *Indian Caste* (1877), indicated a distance of 24 rather than 36 paces separation. Cited in Hutton, *op. cit.*, p. 70.

portions of their bodies.<sup>7</sup> They were subjected to heavy taxation, and while they were not enslaved, as were the Paraiyans, the Nadars were forced to perform corvee labor in service to the State. The economic dependence of the Nadar climber or cultivator on his landlord bound him to the lowest levels of society, but for the climber the alternate palmyra season of Travancore and Tinnevely offered him at least the possibility of seasonal migration to Tinnevely for employment as a tapper.

The migrant climbers' contact with more socially advanced regions of British India only made the yoke of Nair domination in Travancore weigh more heavily upon them, opening the community to the missionary efforts. Writing to the London Missionary Society, a missionary in Nagercoil proclaimed that, "the whole Shanar community, amounting together to about 150,000, is open to us..." With regard to the progress of the mission among the "long-degraded and despised body," he wrote that if the Shanars "continue to grow in mind, intelligence, and character, they must gain influence, and that influence must be felt, and felt for good." "Already other castes are beginning to be jealous of the advantages the Shanars are gaining from their connexion with us."<sup>8</sup>

The Nadars did indeed advance under the protection of the missionaries, but the progress was not always viewed so favourably. Charles Mead wrote in 1851, "We have raised them in a civil point of view—delivered them from unjust taxes and oppressive customs and a grievous poll tribute, the cause of much cruelty in its collection—but as to mind they are generally as debased as ever. The best instructed have often turned but the worst characters...."<sup>9</sup> Another missionary, writing of his twenty-two years' experience in southern Travancore, shared Mead's doubts:

The Shanars, ... although in an oppressed and degraded condition, had many proud references to a noble ancestry and were not only capable of mental improvement, but also

7. Mateer, *The Land of Charity*, p. 41.

8. Rev. W.H. Drew, letter to the London Missionary Society, dated Nagercoil, April 6, 1846, in *The Missionary Magazine and Chronicle* (London), X (July, 1846), 104.

9. Rev. C. Mead, letter to the London Missionary Society, dated Neyoor, October 8, 1851, Manuscript (L.M.S.).

exceedingly ambitious to hold positions of importance, and take part in the government in the country. The more wealthy members of this class would assert that they were originally the ruling powers of the kingdom; and, in consequence of this opinion, would rule over the lower castes with an authority and an assumption of superiority which would be tamely submitted to by those whom they oppressed; in their turn, the Shanars, however rich or influential in their sphere, would submit to the Nairs, addressing them by the same terms of abject servility by which they themselves were accustomed to be called by the degraded pariahs. The Shanars, as a class, were not satisfied with their position, and how far this circumstance may have induced them so readily to give in their adherence in large numbers to a profession of Christianity in the early days of our mission, I am not prepared to say... the Shanar is very exclusive in his feelings, looking with contempt on those below him, and with jealousy on those who are his social superiors.<sup>10</sup>

With the aid of the missionaries, the Nadars extracted themselves from many of the burdensome taxes and from the corvee labor demanded by the government. But, more important, they began to advance economically. Some of the Nadars turned to trade, securing sufficient wealth to purchase their own lands.<sup>11</sup> Others did so with financial assistance from the mission. In the years following the establishment of the mission in South Travancore, the Nadar converts benefited by education and the general protection of the mission. Their release from the obligations of servility and their concomitant rise in economic status aroused both antagonism and jealousy among the higher castes and even where their economic position was not greatly improved, education and Christianity had given the Nadars hope for an escape from their sufferings under the dominance of the Nair landlords. No longer

10. Rev. John Abbs, *Twenty-Two Years' Missionary Experience in Travancore* (London: John Snow and Co., 1870), pp. 151-152.

11. Rev. James Russell, letter to the London Missionary Society, dated Nagercoil, January 24, 1856, Manuscript (L.M.S.), reprinted in *The Missionary Magazine and Chronicle*, XX (August, 1856), 166.

isolated in their economic subservience, the Nadars now found a new unity through the organization of the Church. Supported by the European missionaries, the Nadars sought to use that strength for the uplift of the community.

The movement for social uplift was symbolized in the Nadars' attempt to vest themselves with the attributes of higher status, and their efforts, beginning in the early nineteenth century, soon gave rise to the "breast-cloth controversy". By tradition in Travancore, the breast was bared in deference to those of higher status as a symbol of respect. In the elaborate hierarchy of caste ranking, the Nairs for example, bared their breasts before the Nambudiri Brahmins, and the Brahmins did so only before the deity.<sup>12</sup> The Nadars, like all of the lower castes, were categorically forbidden to cover their breasts at any time. The manner of dress prescribed for the Nadars consisted of a single cloth of coarse texture, to be worn alike by males and females no lower than the knee nor higher than the waist.<sup>13</sup> "This style of dress", a missionary wrote some years later, "was of course incompatible with the modesty and decorum of Christian women, many of whom had received a good education and were taught to appear decent in public." Some of the Christian women were so far advanced, he wrote, "that they won prizes in the 'Great Exhibition of 1851' for the 'pillow lace'".<sup>14</sup>

As early as 1812, Colonel Munro, then Resident of Travancore, issued an order that permission be granted to "the women converted to Christianity to cover their bosoms as obtained among Christians in other countries..."<sup>15</sup> In pursuance of this order, the Government of Travancore issued a Circular Order in May 1814, permitting the female converts of the lower classes to cover their bodies with a short bodice or jacket, as was worn by the women of

12. Mateer, *Native life in Travancore*, p. 230.

13. Petition to His Highness the Rajah of Travancore from Missionaries of the L.M.S., February 7, 1859 (signed Rev. James Russell et al.) in *Brief Statement of the Gross Outrages Recently Committed in Travancore by the Heathen Natives on Their Christian Countrymen* (London: London Missionary Society, 1859), pp. 13-14.

14. C.M. Agur, *Church History of Travancore* (Madras: S.P.G. Press, 1901), p. 935.

15. Order from Colonel J. Munro, Resident Dewan to the Sarvadiciariacars of Trivandrum and Neiyattangurru Taluq, dated Quilon, 1812, in Agur, *op. cit.*, Appendix, p. 1.

the Syrian Christian and Muslim Mopla communities.<sup>16</sup> They were not, however, permitted to wear the upper cloth in the manner of the higher castes: no Shanar women "were ever to be allowed to wear clothes on their bosoms as the Nair women..."<sup>17</sup>

The missionary wives had devised a loose jacket for the women of the mission. The jacket, while perhaps satisfying the modesty of the European ladies, did not meet the social aspirations of the Christian Nadar women. The Nadars of Tinnevely wore the breast cloth freely, and the women of Travancore would have nothing less. Thus, in addition to the prescribed jacket, or often in lieu of it, the Nadar women increasingly adopted the use of the upper cloth, which was worn by the women of the higher classes. In May 1822, the Nairs reacted against the Nadar pretensions. "The Christian women thus appearing in decent dress displeased their neighbors, especially the Sudras who began to mock, abuse and ill-treat them in various ways in markets and way sides."<sup>18</sup> At Pulpanabapuram, in 1823, "a complaint was lodged against some Christians under their heathen names as Shanars, for not paying the arrears of their toddy-rent and for their women wearing upper cloth..." The Court inquired of Mead as to whether Christians were required by their religion to wear an upper cloth, and, with an affirmative reply, the Court decided in favor of the accused on that point.<sup>19</sup>

Mead, while gaining a great point in the decree, remained cautious in initiating radical changes, and the missionaries advised the converts to wear the jackets alone rather than the upper cloth, but their entreaty met with little success. The feelings against the Nadars were rapidly rising, and in October 1828, the Nairs in South Travancore, under the leadership of a local revenue inspector, began to terrorize the Christian converts.<sup>20</sup> "At first threatening language

16. Aiya, *op. cit.* I, 525.

17. Quoted in a letter from the Government of Madras to Lord Stanley, Secretary of State for India, dated March 25, 1859, in Great Britain, *Parliamentary Papers*, 1859 Session II, XXV, No. 158, 353. East India (Travancore), *Copies of the Official Papers Sent from India Touching the Recent Disturbances in Travancore*, India Office, August 5, 1859. J.W. Kaye, Secretary in the Political and Secret Departments. Ordered by the House Of Commons To Be Printed, August 6, 1859, p. 3.

18. Agur, *op. cit.*, pp. 780-782.

19. *Ibid.*

20. *Ibid.*, p. 826.

was used by the heathen to deter the people from attending Christian worship," wrote Mead in his report of the situation to the London Missionary Society. Men were seized on the Sabbath for public works, schools were occasionally interrupted, the books thrown into the streets or torn to pieces, and the women were beaten in the public bazaar for wearing the upper cloth over their bosoms, and the clothes were stripped from their bodies.<sup>21</sup>

The missionaries of the South Travancore Mission petitioned the British Resident of Travancore to intervene, as the Government had taken no action to prevent further persecution or to punish those who had started the trouble in October. "The Shanars are esteemed a low caste," the missionaries wrote "and before their acquaintance with Christianity were in general depraved in their morals and filthy in their habits. Christianity has affected a considerable alteration in both these respects." The progress of the Shanars had an unsettling effect upon the higher castes, however. "The Soodras appear to be jealous at seeing the improvement which the Christians present in their outward appearance and habits. They are vexed likewise at the Shanars because they refuse to labour for them without pay, as they had been obliged to do while heathen."<sup>22</sup> Believing the Nadars to use Christianity as an excuse to evade taxation and corvee labor, as well as a lever to raise their social status, the Nairs lashed out at the mission. As rioting spread, chapels and schools were burned, and, with an attempt on Mead's life, troops were sent into the area.<sup>23</sup>

The Government of Travancore issued a royal Proclamation on February 3, 1829. The preamble began,

Whereas some disturbances have taken place . . . between the Shanars and Nairs originating in a pretension of the women of the Shanars to wear the upper cloth contrary to orders and ancient customs, and in a refusal of that caste to perform the Sirkar oolium work required of them in

21. Rev. C. Mead, "A Report of the Neyoor Mission, July 1829", dated June 30, 1829, Manuscript (L.M.S.).

22. Quoted *ibid.*

23. Agur, *op. cit.*, pp. 826-844.

common with other individuals, I deem it proper to publish the following Proclamation:

*First*, as it is not reasonable on the part of the Shanar women to wear cloth over their breasts, such custom being prohibited, they are required to abstain in future from covering the upper part of their body.

The Proclamation confirmed the previous circular of 1814, and ordered that it be republished in contravention of the court decree which was taken by the Nadars as establishing their legal right to wear the breast cloth. Section Two of the Proclamation required that Christians perform *ooliam* service, that is, corvee labor for the Government, like other sections of the population, but that they might be exempted from such service on Sundays. Section Three warned the Christians that they should act towards the higher castes according to the usage before conversion. Section Four prohibited the construction of places of worship "without regular permission" of the Travancore Government. The fifth and last section of the Proclamation was directed against the practice of "certain Shanar converts to Christianity" seeking redress through the local missionaries. The Nadars were notified that the Government authorities were the only recognized tribunals of the country, and that all complaints were to be referred only to them.<sup>24</sup>

The Proclamation eased the situation, but it in no way deterred the Nadar Christian women from dressing in the manner of the Nairs, as had become their custom. Increasingly the women of the Hindu Nadar community in South Travancore adopted the upper cloth as well. The women of the superior Nadan families had always worn the upper garment without opposition from the Nairs, but now for the first time, the lower Hindu classes began to cover their breasts. One of the Nadan families in Agestheswaram which enjoyed special benefits under the Raja earned the future contempt of the Nadar community by announcing during the controversy that they as Nadans alone had the right to wear the breast-cloth. The lower classes, being only Shanans, had no such right.<sup>25</sup>

24. *Ibid.*, pp. 843-944.

25. Interview, Kunjam Kadar, M.L.A., Kanyakumari, February, 1965.

General Cullen, Resident of Travancore, began to receive petitions from Hindu Shanars concerning the use of the breast-cloth, but the British Government declined to intervene as the matter was taken as one of local caste usage.<sup>26</sup> Cullen suspected the missionaries of attempting to unsettle, if not altogether subvert, the existing political arrangement in the princely State of Travancore. The missionaries, too, believed Cullen to be the enemy of the Church in Travancore and the opponent of the native Christians' aspiration to higher status. Cullen contended that the Nadar Christians were behind the adoption of the breast-cloth by the Hindus. The missionaries denied any connection with the changes in heathen apparel. The missionaries asserted that the adoption of the upper cloth among the Hindu Nadars was the consequence of their seasonal migrations into Tinnevely, where all women, "without molestation," wore the garment. In the regions of Travancore bordering on Tinnevely, it had become, the missionaries wrote, "the rule and not the exception" to wear the breast-cloth.<sup>27</sup>

In the eyes of the Nairs, the missionaries were surely responsible for the spread of the upper-cloth, which had become the symbol of change in southern Travancore. The Nairs' antagonism against the Nadars' social innovations and prosperity was only heightened with the anxiety following the abolition of slavery in Travancore in 1855. Christianity threatened the tradition of Travancore, and each Christian posed a seditious threat to its Government. Many of the missionaries worked actively against the Maharaja. John Cox petitioned the Government of Madras in regard to the outrages of slavery, torture, and persecution of Christians in Travancore, and appealed for the Governor's direct intervention and the supersession of princely authority. The publication of Cox's correspondence with the Madras Government revealed a delicate situation between the Church and the Government of Travancore, for not only did the publication of the political pamphlet violate the rules under which the mission functioned, but the pamphlet was printed

26. Letter from the Resident of Travancore and Cochin, General W. Cullen, to the Chief Secretary to the Government, Madras (T. Pycroft), dated January 13, 1859, in *Copies of the Official Papers* . . . , p. 5.

27. Petition to His Highness, February 7, 1859, in *Brief Statement of the Gross Outrages* . . . , pp. 14-15.

at the Mission Press at Nagercoil.<sup>28</sup>

With its economic and political base, the frustrations of the Nair landowners were directed against the pretensions of the Nadar and their assumption of the breast-cloth. "The agitation has been recently revived," General Cullen wrote to the Chief Secretary to the Government, Madras, in January, 1859, "the Soodras asserting that the Shanar women are constantly assuming the privilege of covering the upper part of the person, and thereby preventing a recognition of the caste. . . ."<sup>29</sup> Rioting broke out in October 1858, as Sudras attacked Nadar women in the bazaars, stripping them of their upper garments. Feelings were aggravated in November, with the Queen's Proclamation on the assumption of rule by the British Crown. "Firmly relying ourselves of the truth of Christianity, and acknowledging with gratitude the solace of religion, we disclaim alike the right and desire to impose our convictions on any of our subjects. We declare," the Queen went on, "it to be our royal will and pleasure that none be in any wise favored, none molested or disquieted, by reason of their religious faith or observance, but that all shall alike enjoy the equal and impartial protection of the law; and we do strictly charge and enjoin all those who may be in authority under us that they abstain from all interference with the religious belief or worship of any of our subjects on pain of our highest displeasure."<sup>30</sup> The Nadars imagined that the Proclamation granted them all that they had sought, while the Sudras considered it "as sanctioning their taking the law into their own hands to repress what they took as an aggression into their caste domains."<sup>31</sup> Robert Caldwell wrote that the Proclamation was "almost universally interpreted by the natives as a declaration in favour of custom and caste against proselytism in every shape. The purpose of it is supposed to be—Christianity for the Queen and English alone,

28. Rev. John Cox, *Travancore: Its Present Ruin Shown and the Remedy Sought* (Nagercoil: London Mission Press, 1857).

29. Letter from the Resident of Travancore and Cochin, General W. Cullen, to the Chief Secretary to the Government, Madras, dated January 13, 1859, in *Copies of the Official Papers* . . . , p. 5.

30. Quoted in Donald E. Smith, *India as a Secular State* (Princeton: University Press, 1963), pp. 71-72.

31. "A Native Statesman," in *The Calcutta Review* (October, 1872), quoted in Aiyar, *op. cit.*, I, 526.

Hindooism for the Hindoos."<sup>32</sup>

In a letter to General Cullen, one of the Travancore missionaries said that "ever since the reading of Her Majesty Queen Victoria's Proclamation, the Soodras have taken it into their heads that they are at liberty to do whatever they like with the lower classes . . . They have begun to close the bazaars, and will only sell to such persons as they please."<sup>33</sup> Certain officials used the misinterpretation of the Proclamation to intimidate the Nadars. In a petition to His Highness the Rajah of Travancore, the missionaries of the South Travancore Mission stated that the Sudras in their lawless proceedings were not only encouraged and abetted by some of the lower grades of Government officials, "but that these officials themselves are the chief instigators and perpetrators" of the outrages committed against the Nadar community. "... they plead authority from Your Highness for what they are thus doing, and either misunderstand or wilfully misinterpret the Proclamation of Her Majesty the Queen, as though for the future all protection were withdrawn from European missionaries and their converts, and such missionaries prohibited from carrying on their works." "Their object in all this," the missionaries advised the Rajah, "is to destroy the Christian cause in Travancore, and to restore society to that state in which it existed previous to the year 1809."<sup>34</sup>

In a village market, a petty official, declaring that he had been empowered by the Government to do so, stripped Nadar women of their breast-cloths. The incident sparked twenty days of rioting in the district, during which time three chapels were destroyed by fire. Rioting soon followed in other districts, but it was in Nagercoil that the rage of the Sudras burst forth with the greatest violence. On January 4, 1859, some two hundred Sudras, armed with clubs and knives, attacked the Christian Nadars of a village near Nagercoil, beating them and stripping the upper-cloths from the

32. Letter from Robert Caldwell to Rev. Whitehouse, late of Nagercoil, dated February 5, 1859, Edeyengoody, Manuscript (L.M.S.).

33. Letter from Rev. James Russel to General Cullen, dated January 6, 1859, quoted in *Annual Report of the Travancore District Committee (L.M.S.) for the year 1859* (Nagercoil: London Mission Press, 1860), p. 2.

34. Petition to His Highness, February 7, 1859, in *Brief Statement of Gross Outrages* . . . , p. 13.

women. Similar attacks soon followed throughout the district.<sup>35</sup> Houses were burned and looted, and on the 10th of January, the thatched bungalow which was reserved for the Resident when he was in Nagercoil was destroyed by fire.<sup>36</sup> During the months of rioting between October 1858 and February 1859, nine chapels and three schools were burned.<sup>37</sup> There was no loss of life.

The violence during this period was not wholly onesided. General Cullen reported that excesses had been committed on both sides, citing the reported attack by a large body of Nadars on a village, where they plundered shops and committed violence.<sup>38</sup> The Dewan of Travancore, Madhava Row, reported that "the Shanars of the Agasteeswarm district were raising men and money, and proposed combined and systematic resistance to Sirkar authority, and the plunder of the villages and towns. It was also clear that they had solicited the cooperation of the Shanars residing in the district of Tinnevely in the vicinity of our frontier."<sup>39</sup> The Dewan warned Cullen that Nadars across the border in Tinnevely were collecting with a view to entering Travancore to join in the plunder of villages along the frontier. The report was corroborated in a letter to Cullen from Tinnevely.<sup>40</sup> Many Nadars in the areas of Travancore bordering on Tinnevely sought refuge across the boundary during the riots. Caldwell said in a letter to a former missionary of Nagercoil that Edeyengoody was "full of refugees."<sup>41</sup> Later correspondence reveals that these refugees got up a petition, with the help of Caldwell, which appeared in the *Madras Times* and a copy of which was forwarded to the Queen.

35. Mateer, *The Land of Charity*, pp. 298-305.

36. Letter from the Resident of Travancore and Cochin to the Chief Secretary to the Government, Madras, dated January 19, 1859, in *Copies of the Official Papers* . . . , pp. 8-10.

37. Agur, *op. cit.*, p. 933.

38. Letter from General Cullen to the South Travancore Mission, in *Annual Report of the Travancore District Committee (L.M.S.) for the Year 1859*, pp. 3-4.

39. Report to the Resident, by Dewan Madava Row, dated February 12, 1859, in *Aiya, op. cit.*, I, 529; also in *Copies of the Official Papers* . . . , pp. 8-10.

40. Letter from the Resident of Travancore and Cochin to the Chief Secretary to the Government, Madras, dated January 18, 1859, in *Copies of the Official Papers* . . . , p. 6.

41. Letter from Rev. Robert Caldwell to Rev. Whitehead, February 5, 1859, Manuscript (L.M.S.).

The military was ordered out on December 27, 1858, soon after commencement of the rioting, and the Dewan issued a public warning that "it is clearly wrong to violate ancient *usage* without authority" and that "whoever does so in future shall be *severely* punished. Shanars are to hear this, and act accordingly . . . . Sudras and people of the higher caste are not to do anything themselves against the Shanars, or to break the peace. If they do so, it will become necessary to *enquire into* their conduct."<sup>42</sup> Later, presenting his position to the missionaries who took the warning as proof of his "gross and unconcealed partiality" to the high caste Hindus, the Dewan wrote, "It is obvious that as long as the Proclamation of 1829 is in force, the Shanars, both Hindu and Christian, are bound to conform to its provisions; that no section of the subjects can be permitted to infringe a law affecting the great majority of the people, on the ground, that in their opinion, the law ought to be changed; that the *only legitimate course open to them* is to continue to submit to it and formally to apply to the Sirkar for a change with such facts and arguments as they may have to urge in their favor."<sup>43</sup>

In an order dated January 27, 1859, from the Chief Secretary to the Government of Madras to the Resident, General Cullen was instructed to be "careful to give no countenance to the idea that the British Government of which he is the representative, recognizes any exclusive distinctions, or the right of any set of men to prevent others from following, in all matters of social or domestic life, such course as they may see fit, provided it be not repugnant to public decency and morals." Cullen was reminded that it was his duty to impress these views on the Rajah and to point out that, in the view of the British Government, the prohibitions on the use of the breast-cloth were "unsuited to the present age, and unworthy of an enlightened prince . . . ."<sup>44</sup>

In early February, the missionaries of the South Travancore Mission, finding no response to their petition to the Rajah submitted their petition to the Governor of Madras, Sir Charles Trevelyan.

42. Quoted in Mateer, *The Land of Charity*, pp. 298-305.

43. Quoted in Aiya, *op. cit.*, I, 527.

44. Government Order, No. 75, January 27, 1859, to the Resident from T. Pycroft, Chief Secretary to the Government, Madras, in *Copies of the Official Papers* . . . , pp. 6-7.

About this same time, the Governor received the report on the events of the previous months. In consideration of the events in Travancore, the Governor prepared a minute on his personal observations. The controversy was complicated by the fact that "the differences on religious principles and caste habits are mixed up with social and pecuniary interest." The Shanars, the Governor observed, "on becoming Christians, claim privileges which their state of serfdom, if not slavery, previously entailed upon them; and on these advantages accruing to the Christian converts, the heathen Shanars evidently aspire to the enjoyment of the same changes, though without conversion." On the other side, the Sudras "look with great jealousy on these changes, not only on account of their placing those whom they consider a degraded race in a better social position, but also because they themselves become losers by the emancipation, to some extent, of their serfs or slaves from some of their duties."<sup>45</sup>

The Governor's feelings on the issue were voiced in a letter to the Resident, May 6, 1859.

I have seldom met with a case, in which not only truth and justice, but every feeling of our common humanity are so entirely on one side. The whole civilized world would cry shame upon us, if we do not take a firm stand on such an occasion. If any thing could make this line of conduct more incumbent on us, it would be the extraordinary fact that persecution of a singularly personal and delicate kind is attempted to be justified by a Royal Proclamation, the special object of which was to assure to Her Majesty's Indian subjects liberty of thought and action, as long as they did not interfere with the just rights of others. I should fail in respect to Her Majesty, if I attempted to describe the feelings with which she must regard the use made against her own sex, of the promises of protection so graciously accorded by her.<sup>46</sup>

45. Minute by the Governor, dated February 28, 1859, in *Copies of the Official Papers* . . . , pp. 10-11.

46. Letter to the Resident of Travancore and Cochin from the Governor of Madras, dated May 6, 1859, in *Copies of the Official Papers* . . . , p. 36; also in Aiya, *op. cit.*, I, 530.

The official response to the Dewan's Report by the Madras Government was recorded in the Minutes of Consultation, observing it to be "a temperate and a fair statement," but, "the degree of interference which for many years past has been exercised by the representative of the British Government in the Affairs of Travancore is so large, and his intervention so general, that the credit or discredit of the administration greatly rests with the British Government and it has thereby become their duty to insist upon the observance of a system of toleration, in a more decided manner, than they would be at liberty to adopt, if they had merely to bring their influence to bear on an independent State."<sup>47</sup>

Having consulted the Maharaja, the Dewan now wrote to the British Resident that "His Highness now proposes to abolish all rules prohibiting the covering of the upper parts of the persons of Shanar women and to grant them perfect liberty to meet the requirements of decency any way they may deem proper, with the simple restriction that they do not imitate the same mode of dress that appertains to the higher castes."<sup>48</sup> With this restriction, the proposed modification may have satisfied the demands of "decency" but hardly of social aspiration. "His Highness would not have made even this small reservation," the Dewan noted, "were it not for the fear that the sudden and total abolition of all distinctions of dress, which have from time immemorial distinguished one caste from another, may produce most undesirable impressions on the minds of the larger portion of his subjects and cause their serious discontent."<sup>49</sup> The British accepted the concession,<sup>50</sup> and a Royal Proclamation was issued accordingly by the State of Travancore on July 26, 1859.<sup>51</sup>

We hereby proclaim that there is no objection to Shanar women either putting on a jacket, like the Christian Shanar

47. Order, No. 161, dated March 12, 1859, signed T. Pycroft, Chief Secretary to the Government, Madras, in *Copies of the Official Papers*, p. 36; also in *Aiya, op. cit.* I, 530.

48. Letter to the Resident from the Dewan of Travancore, dated May 17, 1859 in *Aiya, op. cit.*, I, 530-531.

49. *Ibid.*

50. Order, June 6, 1859, No. 347, signed T. Pycroft, Chief Secretary to the Government, Madras, in *Copies of the Official Papers . . .*, p. 46.

51. *Aiya, op. cit.*, I, 531.

women, or to Shanar women of all creeds dressing in coarse cloth, and tying themselves round with it as the Mukkavattigal low caste fisherman do, or to their covering their bosoms in any manner whatever; but not like women of high caste.<sup>52</sup>

The Proclamation did very little to change the situation, and the missionaries continued to engage in attempts to undermine the princely state of Travancore. The mission, however, had provided an organizational base for unity among the Nadar community which extended beyond the Christian fold alone. The Christians themselves had been brought within the protective embrace of the European missionary, and within each village, a unified structure of authority was established. Each village parish was then linked to the other through the hierarchy of the church organization. Through the structure of the mission in the southern districts, the Nadars, for the first time, were brought into association with each other over a wide area. The continued intimacy between Christian and Hindu within the Nadar community served increasingly to draw the Hindu Nadars within the sphere of mission influence, and many Hindu children attended the mission schools. Unconverted, the Hindu Nadar, nevertheless, shared with his Christian brother an awakening consciousness of caste. The breast-cloth controversy served as the initial catalyst of increasing community self-consciousness. As the first movement for social uplift, it brought to the Nadars the awareness and solidarity of an emerging integrated culture.

52. *Matcer, The Land of Charity*, p. 305.

## BOOK REVIEWS

*Inshā'-i-Mahrū* (Letters of 'Ain ud-dīn' Ain ul-Mulk 'Abdullāh bin Mahrū), edited by Prof. Sh. 'Abdur Rashid, assisted by Dr. Muhammad Bashir Husayn, pp. 54, 244. Lahore, Research Society of Pakistan, University of the Punjab, 1965 : Pak. Rs. 15/-.

The modern historian must put the Delhi Sultanate in a middle position between the provincial Indian Sultanates and the Mughal empire, as regards the possibilities of historical research in depth. For the pre-16th century Sultanates we can usually rely only on a single chronicle tradition, richer in some cases (e.g., Bahmanis, Kashmir), than in others (e.g. Bengal, Khandesh). For Mughal India we have a great wealth of documents (though mostly dating from after 1580 A.D.); an abundance of chronicles; the evidence of foreign travellers and of foreign commercial records; that of vernacular literary compositions which mirror the real life of the people; and the copious and closely observed testimony of a realistic tradition of book illustration. This situation in Mughal India is to some extent paralleled in the later Deccan Sultanates which were its contemporaries. As regards the Delhi Sultanate of the thirteenth and fourteenth centuries, we lack pictorial evidence and are served less well by foreign travellers. Ibn Battutah's account is invaluable, as are the scraps of information in the Arab geographers; but European travellers only touched the periphery of the territories of the Delhi Sultanate<sup>1</sup>, and the observations of credu-

1. Many of the medieval European travellers, like Marco Polo, travelled down the Western Coast of India, and in some cases also visited the shrine of St Thomas on the Coromandel Coast; but none penetrated to the inland territories of the Delhi Sultanate. The most direct contact of Europeans with the power of the Delhi Sultanate was the sad incident of the martyrdom of the Blessed Thomas of Tolentino and three other Franciscans, which occurred at Thana near Bombay, probably in 1321 A. D. The account of Ojoric of Pordenone, who visited the spot only a few years later, is not devoid of miraculous accretions, but shows clearly the operations of law and order in the Delhi Sultanate. The Qazi of the settlement delivers a formally correct judgement, and calls upon the Malik to implement the supreme penalty. The Malik eventually incurs the wrath of his sovereign, "the emperor of Delhi", and is arrested by his officers and sent back in chains to the capital city v. Sir H. Yule and H. Cordier, "Cathay and the Way Thither", London, Hakluyt Society, 1915, Vol. II, pp. 117-125.

lous medieval Europeans of the fourteenth century, stuffed with mythical geographical notions before the outset of their travels, are of far less value than those of the pre-modern nationalist European travellers of the seventeenth century. Original legal documents of the Delhi Sultanate hardly exist<sup>2</sup>, in contrast with the tens of thousands of the later Mughal period. The non-Persian, North Indian vernacular sources of the Delhi Sultanate period are of growing value for the picture which emerges from them of the life of the people<sup>3</sup>, but again they are very much less copious than those of the Mughal period, though they compare well with any to which attention has hitherto been drawn from the earlier provincial Sultanates.

The Delhi Sultanate is not only of seminal importance in the adaptation and evolution of Indo-Muslim culture, but it is also more fortunate than the provincial Sultanates in its surviving Persian chronicles, which are detailed, contemporary and idiosyncratic. Apart from the chronicles, a much greater number of Indo-Persian literary works has come down to us than is the case from the provincial Sultanates. From these we have the wherewithal to construct a detailed survey of certain aspects of the cultural, social and administrative life of the thirteenth and fourteenth centuries, in a way which is impossible with regard to any other region or period of Muslim India before the consolidation of Mughal power under Akbar.

The lack of original documents from the Delhi Sultanate gives a peculiar value to the two collections of correspondence surviving from it, the *Rasā'il ul-I'jāz* or *I'jāz-i-Khusravī* of the poet Amir Khusrav and the *Inshā'* of 'Ayn ul-Mulk Māhru. The *I'jāz-i-Khusravī* is of great length but hardly of proportionate value in pro-

2. Of several *farmans* purporting to be of the Delhi Sultanate, which have been published, the reviewer accepts as genuine the *farman* granted to members of the Jain community by Sultan Muhammad Tughlaq, of which a partially legible photograph was reproduced by A. M. Husayn in his "Tughlaq Dynasty", Calcutta, 1963, plate facing p. 363.

3. The most exciting single recent addition to our sources for the social life of the Sultanate has been the reconstruction and publication of the Hindi text of the *Chandayan* of Mawlana Da'ud Dalam'i. (Edited by P. L. Gupta, Bombay, Hindi Granth Ratnakara, 1964). The *Kirttilaia* of Vidyapati Thakur (ed. V. S. Agravala, Jhansi, Sahitya Sadan, 1962), though it is a description of the successor capital of Jaunpur in the first years of the fifteenth century, provides an unrivalled picture of how a great early Indo-Muslim city appeared to a Bhraman man of letters.

viding details of the actual life of the Delhi Sultanate. Many pages of almost intolerably ornate Persian prose must often be perused with attention to extract a single fact. Moreover many of the letters are model letters for particular and fictitious occasions, like the *Fathnama* or proclamation on a mythical victory at Ghazni, imprudently cited by Elliott and Dowson.<sup>4</sup>

Manuscripts of the *I'jāz-i-Khusravī* are moderately common,<sup>5</sup> and an elegant lithographed edition with marginal commentary was produced as long ago as 1872 by the great Lucknow firm of Naval Kishore<sup>6</sup>. It is by a narrow margin of good fortune that the *Inshā'-i-Māhru* has come down to us at all. A single very old, possibly contemporary manuscript has survived, passing through Tippu Sultan's library to the collection of the Asiatic Society of Bengal.<sup>7</sup> From this manuscript three transcripts were made in the previous half century, which have formed the basis of the present edition of Professor Rashid.<sup>8</sup> The element of risk did not end even with the original editing, for, of an earlier edition, put out over a decade ago by the History Department of the University of 'Aligarh' not more than a dozen copies survived an unspecified disaster at the

4. Sir H. Elliott and Prof. J. Dowson, "The History of India as told by its own Historians", London, 1868-1878, Vol. III, pp. 566-7.

5. Rieu, "Catalogue of the Persian Manuscripts in the British Museum", p. 257, (two Mss, one dated 1081-2/1670-1). Ethe, Catalogue of the Persian Mss in the Library of the India Office, Nos 1219 (dated 1084/1674), 1220. Ivanow, Catalogue ... Asiatic Soc. of Bengal, No 334; Catalogue of the Curzon Collection, No. 125. 'Abdul Muqtadir, Catalogue of the Buhār Library, No. 287. The reviewer possesses a respectably written Ms of 1114-5/1720-4. It is curious that, in contrast with the unique manuscript of the *Inshā'-i-Māhru*, no nearly contemporary manuscript of the *I'jāz-i-Mhusravī* is available.

6. Amir Khusrav Dehlavi, *I'jāz-i-Khusravī*, with marginal commentary by Ghulam Husayn Kanturi and Munshi Khiyali Ram; V. Vols in II, folio; Naval Kishor, Lucknow, 1876. In 1959, when the reviewer was in Lucknow, there was still a limited stock of this fine publication in the hands of Naval Kishor's descendants. The India Office appears only to possess the first two volumes.

7. A page from this Ms is reproduced by A. M. Husayn in this "Tughlaq Dynasty", Calcutta, 1963, Plate facing p. 621. Ivanow dated the Ms to the 9th (15th) or the beginning of the 10th (16th) century. The reviewer believes from the palaeography that it could be also a nearly contemporary of the late 14th century. The reference to Ivanow's Catalogue is wrongly given on p. 14 of the introduction of the recent edition: it should read pp. 145-8.

8. The reviewer is indebted to Shaykh Muhammad Ikram, Sitara-i-imtiyaz, Pakistan Civil Service, D. Litt., and to Mr. Rafique Afzal, Secretary to the Research Society of Pakistan, for their kindness in sending to him the publication here reviewed.

Bombay printers. The present reviewer has only seen two of these copies, both in the possession of well-known historians. The general publication of this new edition, by which the labours of its scholarly editor are shown not to have been in vain, after so many years of expectation is much to be welcomed.

Like other collections of Persian *inshā'*, much of the *Inshā'-i-Māhru* is filled with useless verbiage, and with admired varieties of literary artifice and elegant variation. Some letters indeed contain nothing but a conventional and lengthy expression of the writer's goodwill towards the recipient. But the style is very much clearer than that of the *I'jaz-i-Khusravi*, and the factual information less sparsely scattered: and all the letters are actual letters which we can be confident were despatched. The *Inshā'-i-Māhru* is the correspondence of one of the longest lived and most distinguished of the non-military administrators of the Delhi Sultanate<sup>9</sup>. In some letters he wrote as a private person to his friends or relations, in others in connexion with the duties of his official employments. In others, in nature of proclamations, he wrote as the official draughtsman (*dabīr*) of the Sultan, or—evidently in his youth—of great officers of state (Letter 13). On internal evidence the collection is entirely composed of letters draughted personally on real occasions, by a single distinguished scribe and administrator. Topics on which information may be gathered include the relations of the state with its employees (*passim*), with vassal rulers (letters 88, 99, 134) and with traders (Letter 120); land-revenue, taxation and the condition of the peasantry (Letters 20, 26, 28, 31, 35, 54, 110); rural communities of Musalmans (Letter 7); the state of public order on the roads (Letter 83); and Khanqah organization (Letters 17, 23). This list is far from exhaustive.

The value of this edition is enhanced by an English summary of the contents of each letter, a feature which makes it superior to the earlier abortive publication. It is a pity that this summary is at times misleading. For instance, in Letter 23 (text, p. 56; English introduction, p. 19) *tanka-i-nuqra'i* is rendered 'gold tankas, when the reference must be to silver tankas, though whether in the

9. See Prof. S. A. Rashid, "The *Inshā'-i-Māhru*" in the Journal of the Research Society of Pakistan, Vol I, 2, pp. 79-109.

middle years of the fourteenth century the pure or the base metal coin is intended is open to doubt. Similarly in letter 16 (text, p. 38; introduction, p. 18) the *waqfs* left by men of learning and piety are arbitrarily assumed to have been royal foundations merely "for the benefit of the 'Ulama". From the text the point seems to be that they were non-royal *waqfs*, legacies of private piety, and *therefore* the state's claims for tax needed to be specifically remitted. The Persian text is carefully printed, and, given the difficulty of working from modern transcripts of a single defective manuscript, it very seldom gives rise to dissatisfaction or doubt.<sup>10</sup> The editor and the Research Society in the University of the Punjab are to be congratulated on the elegant production of a text which will be of use to all scholars working in the field.

*Shri Ram—A Biography* by Khushwant Singh and Arun Joshi, Bombay. Pp. 240. Price Rs. 15/-.

Nothing succeeds like success, at least that is how the authors make out the life story of the late Sir Shri Ram. Curiously, this is also true of the most successful entrepreneurs of the U.K. and the U.S.A. At the initial stages of their career, there was pluck superscribed by an element of luck. That this was the case with Sir Shri Ram is borne out by the authors' reference to his birth sign. The life story of Sir Shri Ram, we are told, is essentially that of a Taurean child. His success was preordained, in-so-far as the children of the Zodiacal sign Taurus are "destined to succeed in their material pursuits. Security means everything to them. At first they may be obsessed with achieving it: then with preserving it. The authors substantiate this mention in Dell's Horoscope Magazine with the life story of Sir Shri Ram, who was only a third division matriculate; whose beginning of career was hesitant and insignificant, failing in his first business venture; and who ultimately got into the Delhi Cloth Mills through the influence of his real

10. On p. 220 one should surely read *Nakhshabī* for *Bakhshī*. Ziya ud-din Nakhshabī was one of the best known and most prolific Persian authors of the Sultanate.

father (he was adopted by his uncle).

Even in these Shri Ram showed something more than usual. He was not only hardworking but also sensitive to the changes in consumers' tastes. His integrity and aptitude for dealing with problem areas distinguished him in his activities. His appreciation of a human approach to problems paid rich dividends. Under his care, the D.C.M. was one of the very few enterprises that encouraged employee shareholding. In 1923, for instance, about 25 per cent of the D.C.M. shares were held by employees, yielding high dividends, ranging between 28 and 50 per cent per share.

Shri Ram's success as an entrepreneur centred on the D.C.M. The accumulated experience of the D.C.M. was utilised in diversification of all kinds—horizontal, vertical and conglomerate. The complex that has grown out of the D.C.M. is primarily characterised by an almost complete marketing orientation, sensitive to consumer behaviour in internal and international markets. There are such executives and designations in these organisations as one would not commonly find in India. Mainly because of Sir Shri Ram's leadership there has been a phenomenal growth in profitability in these units. He had the unusual knack for selecting the right man for the right job.

Shri Ram's interest in the successful running of the Sindri Fertilisers and, in the process, his encounter with the bureaucracy have been narrated in some detail. The authors give an elaborate account of his concern for development of industrial research and the establishment of Shri Ram Institute for Industrial Research; his interest in education and his involvement in several educational institutions under Delhi University; and his personal life and relationships with his family and friends. The entrepreneurial qualities for which he was known are reflected in all his activities.

The dramatic effect sought to be given by the authors, both of whom have written novels, somewhat mars the seriousness of purpose in a work of this kind.

P. CHATTERJEE

Sir Percival Griffiths : *The History of the Indian Tea Industry* (Weidenfield and Nicolson, 5 Winsby Street, London W., 1967) Pp. 730 ; Price 8 gns.

There has been no dearth of published historical accounts of the Indian tea industry till date. But all of them are limited either to select aspects or to select units of production. Mr. Griffiths' work, although presented in the form of a business history, is the only available complete account of the tea industry, with an all-India coverage. The first sixty pages retell the old story of early tea drinking in Asia and Europe and of the discovery of tea in Assam. The second section describes the growth of the Indian tea industry right from the 1830's to the end of 1960. However, the author adds to our knowledge only in subsequent sections when he deals, chronologically, with developments in the fields of labour recruitment, scientific research, technology, organisation, finance, taxation and marketing.

The author's method is rather descriptive, often at the cost of analysis. Besides, his personal involvement in the industry, as an adviser to the organised planting interests for over twenty-six years, has not allowed him to take a detached view of things. Nevertheless, he has faithfully—though one-sidedly—chronicled the course of events in detail, as far as they can be seen through the files of the planters' organisations. In fact one merit of this work lies in the author's intimate knowledge of the process through which European plantation interests made themselves felt at all levels of governmental policy-making. To that extent, the book is extremely illuminating.

The history of income-taxation in our country goes back as early as 1861. But for more than half a century, the tea industry managed to escape the income tax on the plea that its operations were purely agricultural, and not industrial. It began to pay income-tax only from 1 April 1919; but even then on only twenty-five percent of its income. In 1927 this apportionment was finally raised to the figure of forty per cent, which remains unaltered up to today. The record in the field of agricultural income tax is all the more interesting. The Assam Agricultural Income Tax Bill was introduced early in 1939 by the then Bardoloi Ministry. The Indian Tea Association, under the changed circumstances of responsible

government at provincial level, did not oppose the bill in principle, but insisted on drastic amendments. "The representatives of the tea industry at this time occupied an important position in the Assam Legislative Assembly.... The controversy over the Bill inevitably became merely part of the wider struggle between the opposing forces in the Legislative Assembly." Although the plantation interestsests were defeated for the time being and the bill was duly passed, the Congress Ministry's attitude towards the War led them to resign, and under the new Government of Sir Mohammed Sadadullah, "an old friend of the industry", the draft rules framed "represented a distinct advance on the original Act." The author does not forget to tell us that the salary of a planter was, of course, liable to income tax all along, "but it is comfortable to remember that, in 1893, the highest rate of income tax was 5 pies in the rupee—or about  $6\frac{1}{4}$  d. in the £". Even in this case, the authorities had to carry on a long-drawn battle to rope in commissions and emoluments in kind, within the purview of taxation.

The process of adjustments in the Government-Planter relationships at a new level after India's independence is best illustrated by the two chapters on the problems of the post-war period. The indigenous tea-chest industry—not necessarily Indian—had expanded considerably during the War. The new Government wanted to encourage it through a policy of protective tariffs as well as import cuts, despite the Tea Industry's protests. In 1948, the Government further proposed that twenty-five per cent of the import licences for the tea chests be issued to newcomers—meaning Indians. The Indian Tea Industry opposed the proposal and urged that import licences be issued direct to the producers, who would make their own arrangements for import. It is also opposed the other idea of direct import of tea-chests from producing countries instead of through a London intermediary. As an alternative, the Government even proposed to make bulk purchases from Russia and allot the tea-chests to various producers' associations. This too, was not acceptable. Ultimately, the Government had to yield and did agree to issue eighty per cent of the import licences direct to the companies, without any stipulation regarding the elimination of a London intermediary. On the other hand, the tea industry agreed to pur-

chase 2.6 indigenous tea-chests for every imported chest. As to the Indianisation of superior posts in the industry, the Government readily approved of the Indian Tea Association's 5-year Plan of increasing the number of covenanted Indian officers up to 28 per cent of the total number by the end of 1960 !

The author's treatment of wage trends and of conditions of labour in general is inadequate and even distorted because of too great a dependence on data supplied by the industry. He has not consulted any trade union sources or even academic research on the subject, although Government Labour Enquiry Reports have been made use of. As a result, he has failed to note the fact that from around 1861 to the end of the 19th century, the indentured labour was earning less than the free labour in the industry or elsewhere. On pages 268 and 304, the author suggests that the rate of monthly wage in tea gardens in the fifties of the last century was Rs. 2-8as only. But in fact the wage-rate at that time varied between Rs. 3 and Rs. 3-8as. and had to be raised to Rs. 4 by 1857, as we know from the official *History of the Assam Company*. The information given on page 74 of his book also shows that in 1859 it was doubtful "whether an increase of wages from Rs. 4 to Rs. 5 per month would suffice to attract labour from distant provinces." This alone explains why, throughout the remaining part of the 19th century or even later, the planters had to adopt legal and illegal extra-economic measures to coerce their labourers to acceptance of unsatisfactory wages. These wages in practice were far lower than the stipulated minimum of Rs. 5 in the case of male and Rs. 4 in the case of female adult workers.

Finally the book, while encyclopaedic in scope, has not attempted to present any analysis in depth. This work will remain a valuable and handy book of reference for more serious researchers in the field.

AMALENDU GUHA  
Gokhale Institute of  
Politics & Economics,  
Poona.

H. K. Sherwani : *Muhammad-Quli Qutb Shah, founder of Haidarabad*, (Asia Publishing House, 1967) pp. 150, Rs. 16.

Professor Sherwani has in the present monograph given us an interesting account of the cultural and political history of Tilang-Andhra during the reign of Muhammad Quli Qutb Shah (1580-1611). The volume is divided into two parts—the first dealing with the cultural and the second with the political aspects.

The personality of Muhammad Quli as it emerges from this study is probably representative of a certain type. Here is a man who is culturally very refined, takes a deep interest in the promotion of both fine arts and languages and is himself a poet of some consequence in Dakhni-Urdu. Professor Sherwani, in fact, compares his contribution to the development of Dakhni-Urdu with that of Geoffrey Chaucer to English poetry. A number of Persian poets also came to Haidrabad and settled there under his patronage. Muhammad Quli also took a keen interest in architecture and was the founder of the city of Haidarabad. But when it came to statesmanship and diplomacy, Muhammad Quli was an utter failure. As Professor Sherwani has shown, quite a few disasters on the borders of the kingdom could have been averted if only the king had been a little more statesmanlike. Whatever right steps were taken in the political field were mainly the result of his leaving alone a relatively efficient team of ministers and officials. Probably the most significant among these was the timely help accorded to Ahmadnagar in the 1590's which, among other things, ultimately contained the Mughal intrusion into the region.

The volume is very well produced and reasonably priced. It is a useful addition to the literature on fine arts—particularly architecture—in Southern India during the sixteenth and early seventeenth century.

OM PRAKASH  
Delhi School of Economics

