

**The Economic and Social Impact of Colonial Rule in India**  
**Chapter 3 of *Class Structure and Economic Growth: India & Pakistan since the Moghuls***  
***Maddison (1971)***

British imperialism was more pragmatic than that of other colonial powers. Its motivation was economic, not evangelical. There was none of the dedicated Christian fanaticism which the Portuguese and Spanish demonstrated in Latin America and less enthusiasm for cultural diffusion than the French (or the Americans) showed in their colonies. For this reason they westernized India only to a limited degree.

British interests were of several kinds. At first the main purpose was to achieve a monopolistic trading position. Later it was felt that a regime of free trade would make India a major market for British goods and a source of raw materials, but British capitalists who invested in India, or who sold banking or shipping service there, continued effectively to enjoy monopolistic privileges. India also provided interesting and lucrative employment for a sizeable portion of the British upper middle class, and the remittances they sent home made an appreciable contribution to Britain's balance of payments and capacity to save. Finally, control of India was a key element in the world power structure, in terms of geography, logistics and military manpower. The British were not averse to Indian economic development if it increased their markets but refused to help in areas where they felt there was conflict with their own economic interests or political security. Hence, they refused to give protection to the Indian textile industry until its main competitor became Japan rather than Manchester, and they did almost nothing to further technical education. They introduced some British concepts of property, but did not push them too far when they met vested interests.

The main changes which the British made in Indian society were at the top. They replaced the wasteful warlord aristocracy by a bureaucratic-military establishment, carefully designed by utilitarian technocrats, which was very efficient in maintaining law and order. The greater efficiency of government permitted a substantial reduction in the fiscal burden, and a bigger share of the national product was available for landlords, capitalists and the new professional classes. Some of this upper class income was siphoned off to the UK, but the bulk was spent in India. However, the pattern of consumption changed as the new upper class no longer kept harems and palaces, nor did they wear fine muslins and damascened swords. This caused some painful readjustments in the traditional handicraft sector. It seems likely that there was some increase in productive investment which must have been near zero in Moghul India: government itself carried out productive investment in railways and irrigation and as a result there was a growth in both agricultural and industrial output. The new elite established a Western life-style using the English language and

English schools. New towns and urban amenities were created with segregated suburbs and housing for them. Their habits were copied by the new professional elite of lawyers, doctors, teachers, journalists and businessmen. Within this group, old caste barriers were eased and social mobility increased.

As far as the mass of the population were concerned, colonial rule brought few significant changes. The British educational effort was very limited. There were no major changes in village society, in the caste system, the position of untouchables, the joint family system, or in production techniques in agriculture.

British impact on economic and social development was, therefore, limited. Total output and population increased substantially but the gain in per capita output was small or negligible.

It is interesting to speculate about India's potential economic fate if it had not had two centuries of British rule. There are three major alternatives which can be seriously considered. One would have been the maintenance of indigenous rule with a few foreign enclaves, as in China. Given the fissiparous forces in Indian society, it is likely that there would have been major civil wars in China in the second half of the nineteenth century and the first half of the twentieth century and the country would probably have split up. Without direct foreign interference with its educational system, it is less likely that India would have developed a modernizing intelligentsia than China because Indian society was less rational and more conservative, and the Chinese had a much more homogeneous civilization around which to build their reactive nationalism. If this situation had prevailed, population would certainly have grown less but the average standard of living might possibly have been a little higher because of the bigger upper class, and the smaller drain of resources abroad (1). Another alternative to British rule would have been conquest and maintenance of power by some other West European country such as France or Holland. This probably would not have produced results very different in economic terms from British rule. The third hypothesis is perhaps the most intriguing, i.e. conquest by a European power, with earlier accession to independence. If India had had self-government from the 1880s, after a century and a quarter of British rule, it is likely that both income and population growth would have been accelerated. There would have been a smaller drain of investible funds abroad, greater tariff protection, more state enterprise and favours to local industry, more technical training - the sort of things which happened after 1947. However, India would probably not have fared as well as Meiji Japan, because the fiscal leverage of government would have been smaller, zeal for mass education less, and religious and caste barriers would have remained as important constraints on productivity.

### **Establishment of a New Westernized Elite**

The biggest change the British made in the social structure was to replace the warlord aristocracy by an efficient bureaucracy and army. The traditional system of the East India Company had been to pay its servants fairly modest salaries, and to let them augment their income from

private transactions. This arrangement worked reasonably well before the conquest of Bengal, but was inefficient as a way of remunerating the officials of a substantial territorial Empire because (a) too much of the profit went into private hands rather than the Company's coffers, and (b) an over-rapacious short-term policy was damaging to the productive capacity of the economy and likely to drive the local population to revolt, both of which were against the Company's longer-term interests.

Clive had operated a 'dual' system, i.e. Company power and a puppet Nawab. Warren Hastings displaced the Nawab and took over direct administration, but retained Indian officials. Finally, in 1785, Cornwallis created a professional cadre of Company servants who had generous salaries, had no private trading or production interests in India, enjoyed the prospect of regular promotion and were entitled to pensions (2). All high-level posts were reserved for the British, and Indians were excluded. Cornwallis appointed British judges, and established British officials as revenue collectors and magistrates in each district of Bengal.

From 1806 the Company trained its young recruits in Haileybury College near London. Appointments were still organized on a system of patronage, but after 1833 the Company selected amongst its nominated candidates by competitive examination. After 1853, selection was entirely on merit and the examination was thrown open to any British candidate. The examination system was influenced by the Chinese model, which had worked well for 2,000 years and had a similar emphasis on classical learning and literary competence. The Indian civil service was therefore able to secure high quality people because (a) it was very highly paid; (b) it enjoyed political power which no bureaucrat could have had in England.

In 1829 the system was strengthened by establishing districts throughout British India small enough to be effectively controlled by an individual British official who henceforth exercised a completely autocratic power, acting as revenue collector, judge and chief of police (functions which had been separate under the Moghul administration). This arrangement later became the cornerstone of Imperial administration throughout the British Empire. As the civil service was ultimately subject to the control of the British parliament, and the British community in India was subject to close mutual surveillance, the administration was virtually incorruptible.

The army of the Company was a local mercenary force with 20,000-30,000 British officers and troops. It was by far the most modern and efficient army in Asia. After the Mutiny in 1857, the size of the British contingent was raised to a third of the total strength and all officers were British until the 1920s when a very small number of Indians was recruited. Normally, the total strength of the army was about 200,000. This army was very much smaller than those of Moghul India,<sup>3</sup> but had better training and equipment, and the railway network (which was constructed partly for military reasons) gave it greater mobility, better logistics and intelligence.

The higher ranks of the administration remained almost entirely British until the 1920s when the Indian civil service examinations began to be held in India as well as the UK.<sup>4</sup> In

addition, there was a whole hierarchy of separate bureaucracies in which the higher ranks were British, i.e. the revenue, justice, police, education, medical, public works, engineering, postal and railway services as well as the provincial civil services. India thus offered highly-paid careers to an appreciable portion of the British middle and upper classes (particularly for its peripheral members from Scotland and Ireland).

From the 1820s to the 1850s the British demonstrated a strong urge to change Indian social institutions, and to Westernize India.<sup>5</sup> They stamped out infanticide and ritual burning of widows (*sati*). They abolished slavery and eliminated *dacoits* (religious thugs) from the highways. They legalized the remarriage of widows and allowed Hindu converts to Christianity to lay claim to their share of joint family property. They took steps to introduce a penal code (the code was actually introduced in 1861) based on British law, which helped inculcate some ideas of equality. 'Under his old Hindu law, a Brahmin murderer might not be put to death, while a Sudra who cohabited with a high-caste woman would automatically suffer execution. Under the new law, Brahmin and Sudra were liable to the same punishment for the same offence (6).

There was a strong streak of Benthamite radicalism in the East India Company administration (7). James Mill became a senior company official in 1819 after writing a monumental history of India which showed a strong contempt for Indian institutions (8). From 1831 to 1836 he was the chief executive officer of the E.I.C. and his son John Stuart Mill worked for the Company from 1823 to 1858. Malthus was professor of economics at Haileybury, and the teaching there for future company officials was strongly influenced by Utilitarianism. Bentham himself was also consulted on the reform of Indian institutions. The Utilitarians deliberately used India to try out experiments and ideas (e.g. competitive entry for the civil service) which they would have liked to apply in England. The Utilitarians were strong supporters of *laissez-faire* and abhorred any kind of state interference to promote economic development. Thus they tended to rely on market forces to deal with famine problems, they did nothing to stimulate agriculture or protect industry. This laissez-faire tradition was more deeply embedded in the Indian civil service than in the UK itself, and persisted very strongly until the late 1920s. The administration was efficient and incorruptible, but the state apparatus was of a watchdog character with few development ambitions. Even in 1936, more than half of government spending was for the military, justice, police and jails, and less than 3 per cent for agriculture (9).

One of the most significant things the British did to Westernize India was to introduce a modified version of English education. Macaulay's 1835 Minute on Education had a decisive impact on British educational policy and is a classic example of a Western rationalist approach to Indian civilization. Before the British took over, the Court language of the Moghuls was Persian and the Muslim population used Urdu, a mixture of Persian, Arabic and Sanskrit. Higher education was largely religious and stressed knowledge of Arabic and Sanskrit. The Company had given some

financial support to a Calcutta Madrassa (1781), and a Sanskrit college at Benares (1792), Warren Hastings, as governor general from 1782 to 1795 had himself learned Sanskrit and Persian, and several other Company officials were oriental scholars. One of them, Sir William Jones, had translated a great mass of Sanskrit literature and had founded the Asiatic Society of Bengal in 1785. But Macaulay was strongly opposed to this orientalism: “I believe that the present system tends, not to accelerate the progress of truth, but to delay the natural death of expiring errors. We are a Board for wasting public money, for printing books which are less value than the paper on which they are printed was while it was blank; for giving artificial encouragement to absurd history, absurd metaphysics, absurd physics, absurd theology ... I have no knowledge of either Sanskrit or Arabic ... But I have done what I could to form a correct estimate of their value ... Who could deny that a single shelf of a good European library was worth the whole native literature of India and Arabia ... all the historical information which has been collected from all the books written in the Sanskrit language is less valuable than what may be found in the most paltry abridgements used at preparatory schools in England.”

For these reasons Macaulay had no hesitation in deciding in favour of English education, but it was not to be for the masses: “It is impossible for us, with our limited means to attempt to educate the body of the people. We must at present do our best to form a class who may be interpreters between us and the millions whom we govern; a class of persons, Indian in blood and colour, but English in taste, in opinions, in morals, and in intellect. To that class we may leave it to refine the vernacular dialects of the country, to enrich those dialects with terms of science borrowed from the Western nomenclature, and to render them by degrees fit vehicles for conveying knowledge to the great mass of the population” (10).

Until 1857 it was possible to entertain the view (as Marx did) that the British may eventually destroy traditional Indian society and Westernize the country (11). But activist Westernizing policies and the attempt to extend British rule by taking over native states whose rulers had left no heirs provoked sections of both the Hindu and Muslim communities into rebellion in the Mutiny of 1857. Although the Mutiny was successfully put down with substantial help from loyal Indian troops including the recently conquered Sikhs, British policy towards Indian institutions and society became much more conservative. The Crown took over direct responsibility and the East India Company was disbanded. The Indian civil service attracted fewer people with innovating ideas than had the East India Company and was more closely controlled from London. The British forged an alliance with the remaining native princes and stopped taking over new territory. Until the end of their rule about a quarter of the Indian population remained in quasi-autonomous native states. These had official British residents but were fairly free in internal policy, and the effort of Westernization came to a standstill.

The education system which developed was a very pale reflection of that in the UK. Three universities were set up in 1857 in Calcutta, Madras and Bombay, but they were merely examining bodies and did no teaching. Higher education was carried out in affiliated colleges which gave a two-year B.A. course with heavy emphasis on rote learning and examinations. Drop-out ratios were always very high. They did little to promote analytic capacity or independent thinking and produced a group of graduates with a half-baked knowledge of English, but sufficiently Westernized to be alienated from their own culture.<sup>12</sup> It was not until the 1920s that Indian universities provided teaching facilities and then only for M.A. students. Furthermore, Indian education was of a predominantly literacy character and the provision for technical training was much less than in any European country. Education for girls was almost totally ignored throughout the nineteenth century. Because higher education was in English, there was no official effort to translate Western literature into the vernacular, nor was there any standardization of Indian scripts whose variety is a major barrier to multi-lingualism amongst educated Indians.

Primary education was not taken very seriously as a government obligation and was financed largely by the weak local authorities. As a result, the great mass of the population had no access to education and, at independence in 1947, 88 per cent were illiterate. Progress was accelerated from the 1930s onwards, but at independence only a fifth of children were receiving any primary schooling.

Education could have played a major role in encouraging social mobility, eliminating religious superstition, increasing productivity, and uplifting the status of women. Instead it was used to turn a tiny elite into imitation Englishmen and a somewhat bigger group into government clerks.

Having failed to Westernize India, the British established themselves as a separate ruling caste. Like other Indian castes, they did not intermarry or eat with the lower (native) castes. Thanks to the British public-school system, their children were shipped off and did not mingle with the natives. At the end of their professional careers they returned home. The small creole class of Anglo-Indians were outcastes unable to integrate into Indian or local British society (13). The British kept to their clubs and bungalows in special suburbs known as cantonments and civil lines. They maintained the Moghul tradition of official pomp, sumptuary residences, and retinues of servants (14). They did not adopt the Moghul custom of polygamy, but remained monogamous and brought in their own women. Society became prim and priggish (15). The British ruled India in much the same way as the Roman consuls had ruled in Africa 2,000 years earlier, and were very conscious of the Roman paradigm. The elite with its classical education and contempt for business were quite happy establishing law and order, and keeping 'barbarians' at bay on the frontier of the raj.<sup>16</sup> They developed their own brand of self-righteous arrogance, considering themselves purveyors not of popular but of good government. For them the word 'British' lost its geographic connotation and became an epithet signifying moral rectitude.

The striking thing about the British raj is that it was operated by so few people. There were only 31,000 British in India in 1805 (of which 22,000 were in the army and 2,000 in civil government) (17). The number increased substantially after the Mutiny, but thereafter remained steady. In 1911, there were 164,000 British (106,000 employed, of which 66,000 were in the army and police and 4,000 in civil government) (18). In 1931, there were 168,000 (90,000 employed, 60,000 in the army and police and 4,000 in civil government). They were a thinner layer than the Muslim rulers had been (never more than 0.05 per cent of the population).

Because of the small size of the administration and its philosophy of minimal government responsibility outside the field of law and order, India ended the colonial period with a very low level of taxation. The British had inherited the Moghul tax system which provided a land revenue equal to 15 per cent of national income, but by the end of the colonial period land tax was only 1 per cent of national income and the total tax burden was only 6 per cent. It is curious that this large reduction in the fiscal burden has passed almost without comment in the literature on Indian economic history.<sup>19</sup> On the contrary, emphasis is usually placed on the heaviness of the tax burden, e.g. by D. Naoroji and R.C. Dutt.

Most of the benefits of the lower fiscal burden were felt by landlords, and were not passed on to the mass of the population. In urban areas new classes emerged under British rule, i.e. industrial capitalists and a new bourgeoisie of bureaucrats, lawyers, doctors, teachers and journalists whose social position was due to education and training rather than heredity. In the princely states, the remnants of the Moghul aristocracy continued their extravagances - large palaces, harems, hordes of retainers, miniature armies, ceremonial elephants, tiger hunts, and stables full of Rolls Royces.

### **Agriculture**

The colonial government made institutional changes in agriculture by transforming traditionally circumscribed property rights into something more closely resembling the unencumbered private property characteristic of Western capitalism. The beneficiaries of these new rights varied in different parts of India. The top layer of Moghul property, the jagir, was abolished (except in the autonomous princely states), and the bulk of the old warlord aristocracy was dispossessed. Their previous income from land revenue, and that of the Moghul state, was now appropriated by the British as land tax. However, in the Bengal presidency (i.e. modern Bengal, Bihar, Orissa and part of Madras) the second layer of Moghul property rights belonging to Moghul tax collectors (zamindars) was reinforced (20). All zamindars in these areas now had hereditary status, so long as they paid their land taxes, and their judicial and administrative functions disappeared (21). In the Moghul period the zamindars had usually kept a tenth of the land revenue to themselves, but by the end of British rule their income from rents was a multiple of the tax they paid to the state. In Bihar, for instance, five-sixths of the total sum levied by 1950 was rent and only one-sixth revenue (22).

However, zamindars were not really the equivalent of Western landowners. Dominant families in each village remained as their 'tenants-in-chief' and continued to enjoy many of the old customary rights, i.e. they could not be evicted, their rights were heritable and their rental payments could not be raised easily. Lower-caste families were usually sub-tenants of the tenants-in-chief, rather than direct tenants of the zamindars. Often there were several layers of tenancy between the actual cultivator and the zamindar. Sub-tenants had less security and less defence against rack-renting than tenants-in-chief. It is worth noting that when zamindari rights were abolished around 1952 and the old zamindar rental income was converted into state revenue, the amount involved was only about 2 per cent of farm income in the relevant areas of India. This suggests that by the end of the colonial period, the zamindars were not able to squeeze as much surplus out of their chief tenants as is sometimes suggested.

The typical zamindari estate at the end of British rule seems to have been very different from that at the end of the eighteenth century. In Bengal the total "number of landowners which did not exceed 100 in the beginning of Hasting's administration in 1772, rose in the course of a century to 154,200". In 1872 there were 154,200 estates of which "533, or 0.34 per cent, only are great properties with an area of 20,000 acres and upwards; 15,747, or 10.21 per cent, range from 500 to 20,000 acres in area; while the number of estates which fell short of 500 acres is no less than 137,920, or 89.44 per cent, of the whole" (23).

Misra attributes this fall in the average size of zamindari properties to the fact that they could be inherited or sold freely, whereas the Moghul state wanted to keep the number small because zamindars had administrative functions under the Moghul Empire. Under the British, transfers became much more frequent, particularly into the hands of moneylenders. The moneylenders are frequently presented as squeezing out poor peasants and tenantry and thus promoting the concentration of wealth, but the evidence of what happened to zamindar estates suggests that village moneylenders may also have helped to break up concentrations of wealth (24).

In the Madras and Bombay Presidencies, which covered most of Southern India, the British dispossessed many of the old Moghul and Mahratta nobility and big zamindars, and vested property rights and tax obligations in individual 'peasants'. This settlement was known as the *ryotwari* (peasant tenure) system. However, the term peasant is misleading, because most of those who acquired land titles belonged to the traditionally dominant castes in villages. Lower-caste cultivators became their tenants. Thus there was no change in social structure at the village level, except that the new ownership rights gave greater opportunities for sale and mortgage, and the security of the tenant was less than it had been under the previous system. The change in legal status was limited by several factors. First of all, illiterate peasant did not always understand the new situation, and there were strong social ties in the joint family and the caste *panchayats* to prevent major deviations from old habits Secondly, the new administration was rather remote from

individual villages (with a district officer responsible for over a thousand villages), and many British administrators had a personal bias in favour of customary tenant rights because by maintaining them they could avoid political trouble. At a later stage, the government itself introduced a good deal of legislation to protect customary rights in response to peasant disturbances.<sup>25</sup> Land policy was, therefore, another instance of British policy of half-Westernization. The change from custom to contract was not nearly as sharp as that brought about in Japan by the Meiji land reforms. The British were more concerned with arrangements which would guarantee their revenue and not provoke too much political disturbance rather than in increasing productivity or introducing capitalist institutions. The Utilitarians who dominated the Company from 1820 to 1850 would have liked to push in this direction, but they were displaced at mid-century by the paternalist conservatives of the Imperial raj.

Nevertheless, there were some economic consequences of the new legal situation. Because of the emergence of clear titles, it was now possible to mortgage land. The status of moneylenders was also improved by the change from Muslim to British law. There had been moneylenders in the Moghul period, but their importance grew substantially under British rule, and over time a considerable amount of land changed hands through foreclosures (26).

Over time, two forces raised the income of landowners. One of these was the increasing scarcity of land as population expanded. This raised land values and rents. The second was the decline in the incidence of land tax. Indian literature usually stresses the heavy burden of land tax in the early days of British rule, but the fact that it fell substantially over time is seldom noted (27). The Moghul land tax was about 30 per cent of the crop, but by 1947 land tax was only 2 per cent of agricultural income. The fall was most marked in Bengal where the tax was fixed in perpetuity in 1793, but it was also true in other areas.

As a result of these changes, there was not only an increase in village income but a widening of income inequality within villages. The village squirearchy received relatively higher incomes because of the reduced burden of land tax and the increase in rents; tenants and agricultural labourers may well have experienced a decline in income because their traditional rights were curtailed and their bargaining power was reduced by land scarcity. The class of landless agricultural labourers grew in size under British rule, but modern scholarship has shown that they were not a "creation" of the British (28). They were about 15 per cent of the rural population at the end of the eighteenth century, and about a quarter of the labour force now.

Although these were important modifications in the village structure, the traditional hierarchy of caste was not destroyed. Income differentials widened, but the social and ritual hierarchy in villages did not change its character. Village society was not egalitarian in Moghul times, and in most cases those whose income rose in the British period were already socially dominant, although there were exceptions (29). Recent sociological studies, although they indicate

changes in the British period, also portray a village hierarchy in the 1940s and 1950s which cannot be very different from that in the Moghul period (30). We still find a dominant caste of petty landlords, an intermediate group of tenants, village artisans tied by jajmani relationships, a group of low-status labourers, untouchable menials with the whole held together by the same elaborate system of caste.

One might have expected the legal changes introduced by the British to have had a positive effect on efficiency. They removed the class of jagirdars who had no incentive to invest in agriculture, and gave land rights to rural capitalists who could buy and sell land fairly freely and enjoy an increasing portion of the product. Moneylenders helped to root out improvident or inefficient landowners. However, most farmers were illiterate and the government did not provide research or extension services, or encourage the use of fertilizers. Until recently, with the arrival of the tubewell, there were technical limits to the possibility of small-scale irrigation. There were also organizational difficulties in changing technique to improve productivity. The division of labour in the village and hereditary attitudes to work as a semi-religious ritual rather than a means to improve income were obstacles to change. Furthermore, a good many of the cultivating landowners whose income was increased were relatively poor and used their increased income for consumption rather than investment. Some of those who were better off probably improved their land or took over waste land, but as religion inculcated the idea that manual labour was polluting, some of them probably worked less (31). The big zamindars used some of their extra income to develop waste land, but many cultivated a life style rather like the old Moghul aristocracy and had a high propensity to consume. According to Raychaudhuri, "a zamindar's house with a hundred rooms was not exceptional". Some of the enterprising ones probably transferred their savings out of agriculture into trade and industry or bought their children a Western-type education. Thus the effect of the change was to increase productivity and savings, but not much.

During the period of British rule, agricultural production grew substantially in order to feed a population which grew from 165 million in 1757 to 420 million in 1947. The new system of land ownership offered some stimulus to increase output, and there was substantial waste land available for development.

The colonial government made some contribution towards increased output through irrigation. The irrigated area was increased about eightfold, and eventually more than a quarter of the land of British India was irrigated.<sup>33</sup> Irrigation was extended both as a source of revenue and as a measure against famine. A good deal of the irrigation work was in the Punjab and Sind. The motive here was to provide land for retired Indian army personnel, many of whom came from the Punjab, and to build up population in an area which bordered on the disputed frontier with Afghanistan. These areas, which had formerly been desert, became the biggest irrigated area in the world and a major producer of wheat and cotton, both for export and for sale in other parts of India.

Apart from government investment in irrigation, there was a substantial private investment, and by the end of British rule private irrigation investment covered nearly 25 million acres of British India.

Improvements in transport facilities (particularly railways, but also steamships and the Suez canal) helped agriculture by permitting some degree of specialization on cash crops. This increased yields somewhat, but the bulk of the country stuck to subsistence farming. Plantations were developed for indigo, sugar, jute and tea. These items made a significant contribution to exports, but in the context of Indian agriculture as a whole, they were not very important. In 1946, the two primary staples, tea and jute, were less than 3.5 per cent of the gross value of crop output.<sup>34</sup> Thus the enlargement of markets through international trade was less of a stimulus in India than in other Asian countries such as Ceylon, Burma or Thailand (35).

Little was done to promote agricultural technology. There was some improvement in seeds, but no extension service, no improvement in livestock and no official encouragement to use fertilizer. Lord Mayo, the Governor General, said in 1870, "I do not know what is precisely meant by ammoniac manure. If it means guano, superphosphate or any other artificial product of that kind, we might as well ask the people of India to manure their ground with champagne" (36).

Statistics are not available on agricultural output for the first century and a half of British rule, but all the indications suggest that there was substantial growth. We do not know whether output rose faster or more slowly than population, but it seems likely that the movements were roughly parallel.

For the last half century of British rule, the main calculations of output are those by George Blyn. His first study, which has been widely quoted, was published in 1954 by the National Income Unit of the Indian government and showed only a 3 per cent increase in crop output in British India from 1893 to 1946, i.e. a period in which population increased 46 per cent! His second study, published in 1966 showed a 16.6 per cent increase, and this, too, has been widely quoted, but he also gives a 'modified' series which shows a 28.9 per cent increase. This seems preferable, as the official figures on rice yields in Orissa, which are corrected in his "modified" estimate, seem obviously in error. However, even Blyn's upper estimate is probably an understatement because he shows a very small increase in acreage. It is difficult to believe that per capita food output could have gone down as much as he suggests, whilst waste land remained unused. There has been a very big increase in the cultivated area since independence and it seems likely that the increase in the preceding half century was bigger than Blyn suggests. Therefore, my own estimate of crop output (Appendix B) for 1900-46, uses Blyn's figures on yields but assumes that the cultivated area rose by 23 per cent (Sivasubramonian's figure) rather than by 12.2 per cent (Blyn's figure) (37). My estimate shows agricultural output rising about the same amount as population from 1900 to 1946. However, even this may be too low.

The basic reports on areas under cultivation are those provided by village accountants

(*patwaris*) in areas where land revenue was periodically changed, and by village watchmen (*chowkidars*) in areas where the land revenue was permanently settled. There was some incentive for farmers to bribe *patwaris* to under-report land for tax purposes, and *chowkidars* are all too often illiterate and drowsy people, who would usually report that things were normal, i.e. the same as the year before. There is, therefore, a tendency for under-reporting of both levels and rates of growth in areas covered by statistics, and the areas not covered by statistics were generally on the margin of cultivation and may have had a more steeply rising trend than the average area covered. Thus Blyn shows no growth in output in Bengal where the *chowkidars* did the basic reporting. He did not cover the Sind desert area in which the British built the huge Sukkur barrage in 1932. Blyn was, of course, aware of these difficulties and tried to correct for them as far as possible, but the fundamental problems are not amenable to 'statistical' manipulation but require 'hunch' adjustment.

My own conclusion from the evidence available is that agricultural output per head was at least as high at the end of British rule as it was in the Moghul period, and that rural consumption levels were somewhat higher because of the lower tax burden on agriculture, and the smaller degree of wastage which allowed surplus areas to sell their grains. This slight improvement in standards may have contributed to the expansion in population. However, agricultural yields and nutritional levels at independence were amongst the lowest in the world.

Under British rule, the Indian population remained subject to recurrent famines and epidemic diseases. In 1876-8 and 1899-1900 famine killed millions of people. In the 1890s there was a widespread outbreak of bubonic plague and in 1919 a great influenza epidemic. It is sometimes asserted by Indian nationalist historians that British policy increased the incidence of famine in India, particularly in the nineteenth century (38). Unfortunately we do not have any figures on agricultural production for this period, and it is difficult to base a judgement merely on catalogues of famine years whose intensity we cannot measure. As agriculture was extended to more marginal land one would have expected output to become more volatile. But this was offset to a considerable extent by the major improvement in transport brought by railways, and the greater security of water supply brought by irrigation. It is noteworthy that the decades in which famines occurred were ones in which population was static rather than falling.<sup>39</sup> In the 1920s and 1930s there were no famines, and the 1944 famine in Bengal was due to war conditions and transport difficulties rather than crop failure. However, the greater stability after 1920 may have been partly due to a lucky break in the weather cycle<sup>40</sup> rather than to a new stability of agriculture.

British rule reduced some of the old checks on Indian population growth. The main contribution was the ending of internal warfare and local banditry. There was some reduction in the incidence of famine. The death rate was also reduced to some degree by making ritual suicide and infanticide illegal. The British contributed to public health by introducing smallpox vaccination, establishing Western medicine and training modern doctors, by killing rats, and establishing

quarantine procedures. As a result, the death rate fell and the population of India grew by 1947 to more than two-and-a-half times its size in 1757.

### **Industry**

Several Indian authors have argued that British rule led to a de-industrialization of India. R.C. Dutt argued, “India in the eighteenth century was a great manufacturing as well as a great agricultural country, and the products of the Indian loom supplied the markets of Asia and Europe. It is, unfortunately, true that the East India Company and the British Parliament, following the selfish commercial policy of a hundred years ago, discouraged Indian manufacturers in the early years of British rule in order to encourage the rising manufactures of England. Their fixed policy, pursued during the last decades of the eighteenth century and the first decades of the nineteenth, was to make India subservient to the industries of Great Britain, and to make the Indian people grow raw produce only, in order to supply material for the looms and manufactories of Great Britain” (41).

R. Palme Dutt, writing forty years later, argued that the process had been continuous: “the real picture of modern India is a picture of what has been aptly called “de-industrialization”- that is, the decline of the old handicraft industry without the compensating advance of modern industry. The advance of factory industry has not overtaken the decay of handicraft. The process of decay characteristic of the nineteenth century has been carried forward in the twentieth century and in the post-war period” (42).

Nehru, in his popular history is a conflation of the two Dutts, argued that the British deindustrialized India, and that this “is the real the fundamental cause of the appalling poverty of the Indian people, and it is of comparatively recent origin” (43).

There is a good deal of truth in the deindustrialization argument. Moghul India did have a bigger industry than any other country which became a European colony, and was unique in being an industrial exporter in pre-colonial times. A large part of the Moghul industry was destroyed in the course of British rule. However, it is important to understand precisely how this deindustrialization came about and to try to get some idea of its quantitative significance in different periods. Oversimplified explanations, which exaggerate the role of British commercial policy and ignore the role of changes in demand and technology, have been very common and have had some adverse impact on post-independence economic policy (44).

Between 1757 and 1857 the British wiped out the Moghul court, and eliminated three-quarters of the warlord aristocracy (all except those in princely states). They also eliminated more than half of the local chiefs (*zamindars*) and in their place established a bureaucracy with European tastes. The new rulers wore European clothes and shoes, drank imported beer, wines and spirits, and used European weapons. Their tastes were copied by the male members of the new Indian 'middle class' which arose to act as their clerks and intermediaries. As a result of these political and social

changes, about three-quarters of the domestic demand for luxury handicrafts was destroyed. This was a shattering blow to manufacturers of fine muslins, jewellery, luxury clothing and footwear, decorative swords and weapons. It is not known how important these items were in national income, but my own guess would be that the home market for these goods was about 5 per cent of Moghul national income. The export market was probably another 1.5 per cent of national income, and most of this market was also lost. There was a reduction of European demand because of the change in sartorial tastes after the French revolution, and the greatly reduced price of more ordinary materials because of the revolution of textile technology in England.

The second blow to Indian industry came from massive imports of cheap textiles from England after the Napoleonic wars. In the period 1896-1913, imported piece goods supplied about 60 per cent of Indian cloth consumption,<sup>45</sup> and the proportion was probably higher for most of the nineteenth century. Home spinning, which was a spare-time activity of village women, was greatly reduced. A large proportion of village hand-loom weavers must have been displaced, though many switched to using factory instead of home-spun yarn. Even as late as 1940 a third of Indian piece goods were produced on hand looms (46).

The new manufactured textile goods were considerably cheaper (47) and of better quality than hand-loom products, so their advent increased textile consumption. At the end of British rule, there can be no doubt that cloth consumption per head was substantially larger than in the Moghul period. We do not know how big an increase in textile consumption occurred, but if per capita consumption of cotton cloth doubled (which seems quite plausible), then the displacement effect on hand-loom weavers would have been smaller than at first appears. The hand-loom weavers who produced a third of output in 1940 would have been producing two-thirds if there had been no increase in per capita consumption.

In time, India built up her own textile manufacturing industry which displaced British imports. But there was a gap of several decades before manufacturing started and a period of 130 years before British textile imports were eliminated. India could probably have copied Lancashire's technology more quickly if she had been allowed to impose a protective tariff in the way that was done in the USA and France in the first few decades of the nineteenth century, but the British imposed a policy of free trade. British imports entered India duty free, and when a small tariff was required for revenue purposes Lancashire pressure led to the imposition of a corresponding excise duty on Indian products to prevent them gaining a competitive advantage. This undoubtedly handicapped industrial development. If India had been politically independent, her tax structure would probably have been different. In the 1880s, Indian customs revenues were only 2.2 per cent of the trade turnover, i.e. the lowest ratio in any country. In Brazil, by contrast, import duties at that period were 21 per cent of trade turnover.<sup>48</sup> If India had enjoyed protection there is no doubt that its textile industry would have started earlier and grown faster.

The first textile mills were started in the 1850s by Indian capitalists who had made their money trading with the British and had acquired some education in English. Cotton textiles were launched in Bombay with financial and managerial help from British trading companies.

India was the first country in Asia to have a modern textile industry, preceding Japan by twenty years and China by forty years. Cotton mills were started in Bombay in 1851, and they concentrated on coarse yarns sold domestically and to China and Japan; yarn exports were about half of output.

Modern jute manufacturing started about the same time as cotton textiles. The first jute mill was built in 1854 and the industry expanded rapidly in the vicinity of Calcutta. The industry was largely in the hands of foreigners (mainly Scots). Between 1879 and 1913 the number of jute spindles rose tenfold - much faster than growth in the cotton textile industry. The jute industry was able to expand faster than cotton textiles because its sales did not depend so heavily on the poverty-stricken domestic markets. Most of jute output was for export.

Coal mining, mainly in Bengal, was another industry which achieved significance. Its output, which by 1914 had reached 15.7 million tons, largely met the demands of the Indian railways.

In 1911 the first Indian steel mill was built by the Tata Company at Jamshedpur in Bihar. However, production did not take place on a significant scale before the First World War. The Indian steel industry started fifteen years later than in China, where the first steel mill was built at Hangyang in 1896. The first Japanese mill was built in 1898. In both China and Japan the first steel mills (and the first textile mills) were government enterprises.

Indian firms in industry, insurance and banking were given a boost from 1905 onwards by the *swadeshi* movement, which was a nationalist boycott of British goods in favour of Indian enterprise. During the First World War, lack of British imports strengthened the hold of Indian firms on the home market for textiles and steel. After the war, under nationalist pressure, the government started to favour Indian enterprise in its purchase of stores and it agreed to create a tariff commission in 1921 which started raising tariffs for protective reasons. By 1925, the average tariff level was 14 per cent<sup>49</sup> compared with 5 per cent pre-war. The procedure for fixing tariffs was lengthy and tariff protection was granted more readily to foreign-owned than to Indian firms, but in the 1930s protection was sharply increased (50). The government was more willing to protect the textile industry when the threat came from Japan and not the UK. Between 1930 and 1934 the tariff on cotton cloth was raised from 11 to 50 per cent, although British imports were accorded a margin of preference. As a result of these measures, there was considerable substitution of local textiles for imports. In 1896, Indian mills supplied only 8 per cent of total cloth consumption; in 1913, 20 per cent; in 1936, 62 per cent; and in 1945, 76 per cent (51). By the latter date there were no imports of piece goods.

Until the end of the Napoleonic wars, cotton manufactures had been India's main export. They reached their peak in 1798, and in 1813 they still amounted to £2 million, but thereafter they fell rapidly (52). Thirty years later, half of Indian imports were cotton textiles from Manchester. This collapse in India's main export caused a problem for the Company, which had to find ways to convert its rupee revenue into resources transferable to the UK. The Company therefore promoted exports of raw materials on a larger scale, including sugar, silk, saltpetre and indigo, and greatly increased exports of opium which were traded against Chinese tea. These dope-peddling efforts provoked the Anglo-Chinese war of 1842, after which access to the Chinese market was greatly widened. By the middle of the nineteenth century opium was by far the biggest export of India, and remained in this position until the 1880s when its relative and absolute importance began to decline. Another new export was raw cotton, which could not compete very well in European markets against higher quality American and Egyptian cottons, (except during the US Civil War), but found a market in Japan and China. Sugar exports were built up after 1833 when the abolition of slavery raised West Indian production costs, but India had no long-run comparative advantage in sugar exports. Indigo (used to dye textiles) was an important export until the 1890s when it was hit by competition from German synthetic dyes. The jute industry boomed from the time of the Crimean War onwards, when the UK stopped importing flax from Russia. In addition to raw jute (shipped for manufacture in Dundee) India exported jute manufactures. Grain exports were also built up on a sizeable scale, mainly from the newly irrigated area of the Punjab. The tea industry was introduced to India from China and built up on a plantation basis. Tea exports became important from the 1860s onwards. Hides and skins and oil cake (used as animal feed and fertilizer) were also important raw material exports.

**Table 3-1**  
**Level of Asian Exports f.o.b. 1850-1950**  
(million dollars)

	<b>1850</b>	<b>1913</b>	<b>1937</b>	<b>1950</b>
Ceylon	5	76	124	328
China	24	294	516	(700)
India	89	786	717	1,178
Indonesia	24	270	550	800
Japan	1	354	1,207	820
Malaya	24	193	522	1,312
Philippines	n.a.	48	153	331
Thailand	3	43	76	304

Figures refer to customs area of the year concerned. In 1850 and 1913 the Indian area included Burma. The comparability of 1937 and 1950 figures is affected by the separation of Pakistan.

Manufactured textile exports from India began to increase in the 1850s when the first modern mills were established. The bulk of exports were yarn and crude piece goods which were sold in China and Japan. As the Chinese and Japanese were prevented by colonial-type treaties from

imposing tariffs for manufactured imports they were wide open to Indian goods, and particularly cotton textiles and yarn. Indian jute manufactures were exported mainly to Europe and the USA

However, India began to suffer from Japanese competition in the 1890s. Indian yarn exports to Japan dropped sharply from 8,400 tons in 1890 to practically nothing in 1898, and India also suffered from Japanese competition in China. The Japanese set up factories in China after the Sino-Japanese War of 1894-5. Before this, India had supplied 96 per cent of Chinese yarn imports, the UK 4 per cent, and Japan none. Within three years the Japanese were supplying a quarter to Chinese imports, and by 1914 India was exporting less yarn to China than was Japan. During the First World War Japan made further progress in the Chinese market and by 1924 supplied three-quarters of Chinese imports. By 1928 India was exporting only 3 per cent of her yarn output.

By the end of the 1930s, Indian exports of yarn to China and Japan had disappeared, piece goods exports had fallen off, and India imported both yarn and piece goods from China and Japan.

Indian exports grew fairly rapidly in the period up to 1913, but their growth was slower than that of most other Asian countries which had a natural resource endowment offering greater opportunities for trade. As a consequence, in 1913, India had a smaller trade per head than most countries except China. Nevertheless, exports were 10.7 per cent of national income, probably a higher ratio than has been reached before or since.

Until 1898 India, like most Asian countries, was on the silver standard. In the 1870s the price of silver began to fall and the rupee depreciated against sterling. This led to some rise in the internal price level, but it helped to make Indian exports more competitive with those of the UK, e.g. in the Chinese textile market. In 1898, India adopted a gold exchange standard which tied the rupee to sterling at a fixed value of 15 to 1. This weakened her competitiveness vis-à-vis China which remained on a depreciating silver standard, but its potential adverse effects were mitigated because Japan went on to the gold exchange standard at the same time.

During the First World War, when the sterling exchange rate was allowed to float, the rupee appreciated. Unfortunately, when sterling resumed a fixed (and overvalued) parity in 1925, the rupee exchange rate was fixed above the pre-war level. This overvaluation eased the fiscal problems of government in making transfers to the UK and enabled British residents in India, or those on Indian pensions in the UK, to get more sterling for their rupees, but it made it necessary for domestic economic policy to be deflationary (in cutting wages) and greatly hindered Indian exports, particularly those to or competing with China and Japan.

As a result, Indian exports fell from 1913 to 1937, a poorer performance than that of almost any other country. At independence exports were less than 5 per cent of national income. If we look at Indian export performance from 1850 to 1950 it was worse than that of any other country

in Asia (see Table 3-1).

The Second World War gave a fillip to Indian industrial output, but there was not much increase in capacity because of the difficulty of importing capital goods and the lack of a domestic capital goods industry.

Many of the most lucrative commercial, financial, business and plantation jobs in the modern sector were occupied by foreigners. Although the East India Company's legally enforced monopoly privileges were ended in 1833, the British continued to exercise effective dominance through the system of 'managing agencies'. These agencies, originally set up by former employees of the East India Company, were used both to manage industrial enterprise and to handle most of India's international trade. They were closely linked with British banks, insurance and shipping companies. Managing agencies had a quasi-monopoly in access to capital, and they had interlocking directorships which gave them control over supplies and markets (53). They dominated the foreign markets in Asia. They had better access to government officials than did Indians. The agencies were in many ways able to take decisions favourable to their own interests rather than those of shareholders. They were paid commissions based on gross profits or total sales and were often agents for the raw materials used by the companies they managed. Thus the Indian capitalists who did emerge were highly dependent on British commercial capital and many sectors of industry were dominated by British firms, e.g. shipping, banking, insurance, coal, plantation crops and jute.

Indian industrial efficiency was hampered by the British administration's neglect of technical education, and the reluctance of British firms and managing agencies to provide training of managerial experience to Indians. Even in the Bombay textile industry, where most of the capital was Indian, 28 per cent of the managerial and supervisory staff were British in 1925 (42 per cent in 1895) and the British component was even bigger in more complex industries. This naturally raised Indian production costs (54). At lower levels there was widespread use of jobbers for hiring workers and maintaining discipline, and workers themselves were a completely unskilled group who had to bribe the jobbers to get and retain their jobs. There were also problems of race, language and caste distinctions between management, supervisors and workers (55). The small size and very diversified output of the enterprises hindered efficiency. It is partly for these reasons (and the overvaluation of the currency) that Indian exports had difficulty in competing with Japan.

The basic limitations on the growth of industrial output were the extreme poverty of the rural population, and the fact that a large proportion of the elite had a taste for imported goods or exported their purchasing power. The government eventually provided tariff protection but did not itself create industrial plants, sponsor development banks, or give preference to local industry in allotting contracts. The banking system gave little help to industry and technical education was poor. Most of these things changed when India became independent except the first and most important, i.e. the extreme poverty of the rural population which limited the expansion of the

market for industrial goods.

By the time of independence, large-scale factory industry in India employed less than 3 million people as compared with 12 1/4 million in small-scale industry and handicrafts, and a labour force of 160 million.<sup>56</sup> This may appear meagre, but India's per capita industrial output at independence was higher than elsewhere in Asia outside Japan, and more than half of India's exports were manufactures. British policy was less repressive to local industry than that of other colonial power, and had permitted the emergence of a small but powerful class of Indian entrepreneurs. It should be noted, however, that modern industry was heavily concentrated in Calcutta, Bombay and Ahmedabad. The area which was to become Pakistan had practically no industry at all.

**Table 3-2**  
**Industrial Growth in the Last Half Century of British Rule**

	<b>Small-scale enterprise</b>		<b>Factory establishments</b>	
	Employment (thousands)	Value added (million 1938 rupees)	Employment (thousands)	Value added (million 1938 rupees)
1900/1901	13,308	2,296	601	379
1945/1946	12,074	2,083	2,983	2,461

Source: S. Sivasubramonian, *op. cit.*, for employment and value added in factories. For small-scale enterprise I assume value added to move proportionately to employment.

In the last half century of British rule the output of factory industry rose about six-fold (about 4.2 per cent a year) whereas the output of small-scale industry declined. Their joint output rose about two-thirds (1.2 per cent a year), and per head of population, joint output was rising by 0.4 per cent a year. We know that output in the modern factory sector was zero in 1850, and if we assume that small enterprise output grew parallel with population from 1850 to 1900, then total industrial output would have grown by 0.8 per cent a year in this period, or about 0.3 per cent a year per head of population. Some increase seems plausible in this period of railway development and expanding international trade. It therefore seems possible that in the last century of British rule, per capita output of industrial goods rose by a third. But in the first century of British rule, i.e. 1757-1857, it seems certain that industrial output fell per head of population because (a) the home and domestic market for luxury goods was cut so drastically; (b) the home market for yarn and cheap cloth was invaded by foreign competition. Over the whole period of British rule it therefore seems likely that industrial output per head of the population was not significantly changed.

### **The Economic Burden of Foreign Rule**

The major burden of foreign rule arose from the fact that the British raj was a regime of expatriates. Under an Indian administration, income from government service would have accrued to the local inhabitants and not to foreigners. The diversion of upper-class income into the hands of foreigners

inhibited the development of local industry because it put purchasing power into the hands of people with a taste for foreign goods. This increased imports and was particularly damaging to the luxury handicraft industries.

Another important effect of foreign rule on the long-run growth potential of the economy was the fact that a large part of its potential savings were siphoned abroad. This 'drain' of funds from India to the UK has been a point of major controversy between Indian nationalist historians and defenders of the British raj. However, the only real grounds for controversy are statistical. There can be no denial that there was a substantial outflow which lasted for 190 years. If these funds had been invested in India they could have made a significant contribution to raising income levels.

The first generation of British rulers was rapacious. Clive took quarter of a million pounds for himself as well as a jagir worth £27,000 a year, but the British did not pillage on the scale of Nadir Shah, who probably took as much from India in one year as the East India Company did in the twenty years following the battle of Plassey (57). They were also shrewd enough to realize that it was not in their long-run interest to devastate the country.

However, British salaries were high: the Viceroy received £25,000 a year, and governors £10,000. The starting salary in the engineering service was £420 a year or about sixty times the average income of the Indian labour force. From 1757 to 1919, India also had to meet administrative expenses in London, first of the East India Company, and then of the India Office, as well as other minor but irritatingly extraneous charges. The cost of British staff was raised by long home leave in the UK, early retirement and lavish amenities in the form of subsidized housing, utilities, rest houses, etc.

Under the rule of the East India Company, official transfers to the UK rose gradually until they reached about £3.5 million in 1856, the year before the mutiny. In addition, there were private remittances. In the twenty years 1835-54, India's average annual balance on trade and bullion was favourable by about £4.5 million a year.

During the period of direct British rule from 1858 to 1947, official transfers of funds to the UK by the colonial government were called the "Home Charges". They mainly represented debt service, pensions, India Office expenses in the UK, purchases of military items and railway equipment. Government procurement of civilian goods, armaments and shipping was carried out almost exclusively in the UK. By the 1930s these home charges were in the range of £40 to £50 million a year. Some of these flows would have occurred in a non-colonial economy, e.g. debt service on loans used to finance railway development, but a large part of the debt was incurred as a result of colonial wars. Some government expenditure was on imports which an independent government would have bought from local manufacturers. Of these official payments, we can legitimately consider service charges on non-productive debt, pensions and furlough payments as a

balance of payment drain due to colonialism.

There were also substantial private remittances by British officials in India either as savings or to meet educational and other family charges in the UK. In the inter-war period, these amounted to about £10 million a year, and Naoroji estimated that they were running at the same level in 1887.<sup>58</sup> These items were clearly the result of colonial rule. In addition, there were dividend and interest remittances by shipping and banking interests, plantations, and other British investors; to some extent, these were normal commercial transactions, but there was a large element of monopoly profit due to the privileged position of British business in India; and, in many cases, the original assets were not acquired by remitting funds to India but by savings from income earned locally, or by purchase of property on favourable terms, e.g. the land acquisitions of plantation companies. About a third of the private profit remittances should therefore be treated as the profits of colonialism.

**Table 3-3**

**India's Balance on Merchandise and Bullion, 1835-1967**

	Balance in current prices (annual average)	Balance in 1948-9 prices (£million)	Per capita balance at 1948-9 prices (£)
1835-54	4.5	n.a.	n.a.
1855-74	7.3	50.0	0.21
1875-94	13.4	80.0	0.30
1895-1913	16.8	77.6	0.26
1914-34	22.5	59.2	0.19
1935-46	27.9	66.1	0.17
1948-57	-99.9	-97.6	-0.21(India and Pakistan)
1958-67	-472.7	-384.7	-0.67(India and Pakistan )

Source: Constant price figures for 1948 onwards deflated by the national income deflator, earlier years by the price index of M. Mukherjee, *National Income of India*, Statistical Publishing Society, Calcutta, 1969. The Indian surplus is understated, and deficit overstated because imports are recorded c.i.f. and exports f.o.b.

The total 'drain' due to government pensions and leave payments, interest on non-railway official debt, private remittances for education and savings, and a third commercial profits amounted to about 1.5 per cent of national income of undivided India from 1921 to 1938 and was probably a little larger before that (59). Net investment was about 5 per cent of national income at the end of British rule, so about a quarter of Indian savings were transferred out of the economy, and foreign exchange was lost which could have paid for imports of capital goods. As a consequence of this foreign drain the Indian balance of trade and bullion was always positive as can be seen in Table 3-3 (60). If we take the table as a rough indicator of the movement in the colonial burden (though not of its absolute level) it would seem that it was biggest around the 1880s. Since

independence the picture has been completely reversed and there is now a substantial inflow of resources because of foreign aid.

In spite of its constant favourable balance of trade, India acquired substantial debts. By 1939 foreign assets in India amounted to \$2.8 billion, of which about \$1.5 billion was government bonded debt and the rest represented direct investment (mainly tea, other plantations and the jute industry).

India did not reduce its foreign debt during the First World War as many other developing countries did. Instead, there were two 'voluntary' war gifts to the UK amounting to £150 million (\$730 million). India also contributed one-and-a-quarter million troops, which were financed from the Indian budget. The 'drain' of funds to England continued in the interwar years because of home charges and profit remittances. There was also a small outflow of British capital.

In the depression of 1929-33, many developing countries defaulted on foreign debt or froze dividend transfers, but this was not possible for India. The currency was kept at par with sterling and devalued in 1931, but the decisions were based on British rather than Indian needs. Furthermore, the salaries of civil servants remained at high level, and the burden of official transfers increased in a period of falling prices (61).

During the Second World War, India's international financial position was transformed. The UK had enormous military expenditures for its own troops in India and also financed local costs of allied troops under Lease-Lend arrangements. Indian war finance was much more inflationary than in the UK and prices rose threefold, so these local costs of troop support were extremely high in terms of sterling, as the exchange rate remained unchanged. As a result, India was able to liquidate \$1.2 billion of pre-war debt and acquired reserve assets of \$5.1 billion, ending the war a large net creditor (62) These new assets and the disappearance of the colonial drain gave a formidable boost to post-war development policy.

## **Conclusions**

There has been a good deal of controversy amongst statisticians about the rate of growth of income in India in the colonial period. The argument is politically coloured and the statistics are poor. For the last fifty years of British rule there is enough statistical information to make rough estimates of the growth of national income. My own estimates, which are based largely on work by Blyn and Sivasubramonian, show no increase in per capita income over the years 1900-46 (see Appendix B). Other observers have estimates which show some growth over this period as well as in the period from 1857 (63). Although I think my estimates are the best available, I have enough scepticism about the basic agricultural data to believe that the other estimates could be right for the wrong reasons and that there may have been some rise in per capita income from 1857 to 1947. There are no estimates for the movement in income from Clive's conquest to the Mutiny, but there could not have been much net progress in real income per head before the development of railways,

modern industry, irrigation and the big expansion in international trade, and there are reasons for thinking that there was some decline.<sup>64</sup> From the beginning of British conquest in 1757 to independence, it seems unlikely that per capita income could have increased by more than a third and it probably did not increase at all. In the UK itself there was a tenfold increase in per capita income over these two centuries.<sup>65</sup> The most noticeable change in the economy was the rise in population from about 170 million to 420 million from 1757 to 1947.

However, there were some significant changes in social structure and in the pattern of output. The social pyramid was truncated because the British lopped off most of the top three layers of the Moghul hierarchy, i.e. the Moghul court, the Moghul aristocracy and quasi-autonomous princes (a quarter of these survived), and the local chieftainry (zamindars who survived in about 40 per cent of India). In place of these people the British installed a modern bureaucracy which took a smaller share of national income. The newcomers had a more modest life-style than the Moghuls, but siphoned a large part of their savings out of the country and provided almost no market for India's luxury handicrafts. The modern factory sector which they created produced only 7.5 per cent of national income at the end of British rule and thus did little more than replace the old luxury handicrafts and part of the village textile production.

The British reduced the tax squeeze on agriculture and turned warlords into landlords, but the new order had little dynamism. A good deal of the old fuzziness about property rights remained, and landlords were still largely parasitic. The bigger zamindars copied the Moghul life-style by maintaining hordes of retainers and huge mansions, the smaller landowner's ambition was to stop working and enhance his ritual purity by establishing a seedy gentility. Very little incentive was provided for investment and almost nothing was done to promote technical change in agriculture. At the bottom of society the position of sharecropping tenantry and landless labourers remained wretched. In urban areas a new Westernized 'middle class' of Indians emerged and became the major challenge to the British raj.

Table 3-4 gives a rough idea of the social structure around 1938. Some of the figures are based on detective work and hunches and should be regarded as well-informed guesses rather than firm estimates. However, the table illustrates the orders of magnitude involved and, as these are often misunderstood, there is some justification for tabulating them (66). It can be seen that the British were a very thin layer at the top of society but they took about 5 per cent of national income. Their allies, the native princes and zamindars, took about 3 per cent. Eight per cent is a sizeable proportion for the ruling class but, under the Moghul regime, the equivalent group collected 15 per cent of national income in taxes and spent most of it on their own consumption.

Immediately under this group were two new indigenous classes - capitalists and professionals - who became the dominant elite in independent India. They were relatively larger in number and probably had a bigger share of national income than their counterparts under the

Moghuls, i.e. the *shroffs* (indigenous urban bankers), merchants, *qazis* and pandits (lawyers), *hakims* (indigenous doctors), etc.

Table 3–4 **Social Structure of India at the End of British Rule**

Percentage of labour force		Per cent of national income after tax
18	<b>NON-VILLAGE ECONOMY</b>	44
0.06	{ British officials and military British capitalists, plantation owners, traders, bankers & managers }	5
0.94	{ Native princes Big zamindars and jagirdars Indian capitalists, merchants and managers The new Indian professional class }	3 3 3
17	{ Petty traders, small entrepreneurs, traditional professions, clerical and manual workers in government, soldiers, railway and industrial workers, urban artisans, servants, sweepers & scavengers }	30
75	<b>VILLAGE ECONOMY</b>	54
9	Village rentiers, rural moneylender small zamindars, tenants-in-chief	20
20	Working proprietors, protected tenants	18
29	Tenants-at-will, sharecroppers, village artisans and servants	12
17	Landless labourers, scavengers	4
7	<b>TRIBAL ECONOMY</b>	2

There were also changes in the lower class in the non-village economy. At the end of British rule there were 3 million factory workers making cheap textiles and jute sacking, whose Moghul predecessors had worked on muslins and silks, and a million railway workers who had no earlier counterpart. This lower-class urban group was probably bigger than in Moghul times, because they had displaced some of the village artisans.

Within village society the social structure was probably similar to that in Moghul India, with the two top economic groups corresponding to the old dominant castes, the next group to peasant castes, and the bottom group consisting largely of untouchables. The main difference from the Moghul economy is that village proprietors and tenants-in-chief were no longer heavily squeezed by taxation and their share of national income had probably increased.

Thus the main gainers from the British regime (apart from the British) were the so-called 'middle' class of Indian capitalists and professionals, and the village squirearchy. Most of these were high caste Hindus though the Parsis and Sikhs did fairly well. The main losers were the Muslims who had formed the major part of the Moghul aristocracy, officer corps, lawyers, and artisans in the luxury handicrafts.

### Notes on Chapter 3

- 1) See A. Maddison, "The Historical Origins of Indian Poverty", *Banca Nazionale del Lavoro Quarterly Review*, March 1970, which gives some comparative data on Indian and Chinese development in the colonial period. However, the comparison deserves much more detailed study. M.D. Morris has also speculated on the consequences of alternative paths of development, see his 'Trends and Tendencies in Indian Economic History'. *The Indian Economic and Social History Review*, December 1968. Morris is the most outspoken critic of the 'canonical tradition' of Indian nationalist historians who have put great emphasis on colonialism as a cause of Indian poverty. His original article on this theme was "Towards a Reinterpretation of Nineteenth Century Indian Economic History", *Journal of Economic History*, December 1963, was reprinted in the March 1968 issue of *The Indian Economic and Social History Review*, together with a reply by three critics, of which the most outstanding is Tapan Raychaudhuri. My own feeling is that Morris does not emphasize sufficiently the retarding effect of 'the drain', understates the adverse impact of British conquest on luxury handicrafts, understates the role of caste as a hindrance to economic growth, and exaggerates the improvement in per capita income under British rule.
- 2) See *Report of the Pay and Services Commission, 1959-62*, Government of Pakistan, 1969, p. 23: "The term 'civil service' was used for the first time by the East India Company which maintained military forces side by side with a body of 'merchants, factors and writers' exclusively recruited in England whose functions, with the onward march of the Company's administrative responsibilities, underwent a process of transformation into those of local administrators while the Company's trading activities gradually declined. Thus the civil administration of the country passed by degrees into the hands of those employees of the Company, whose careers were secured by the terms of covenants executed in England, before they left for India, and who were therefore known as Covenanted Servants of the Company."
- 3) Moreland suggests that in the time of Akbar the military strength of India was well over a million men, i.e. about four times the size of the armies maintained in British India and the princely states, and much bigger in relation to population. See W.H. Moreland, *India at the Death of Akbar*, A. Ram, Delhi, 1962, p. 72.
- 4) The army officer class was more exclusive than the civil service and in 1911 had practically no Indians and only 135 Anglo-Indians as compared with 4,378 British officers, see *Census of*

*India*, 1911. P. Woodruff, *The Men who Ruled India, The Guardians*, Cape, London, 1963, p. 363, shows the composition of the I.C.S. (the top rank of the civil service) from 1859 to 1939. In 1869 there were 882 Europeans and 1 Indian; in 1909, 1,082 Europeans and 60 Indians; in 1939, 759 Europeans and 540 Indians.

- 5) See S. Sivasubramonian, *National Income of India 1900-1 to 1946-7*, Delhi School of Economics, 1965 (mimeographed, but now incorporated in *The National Income of India in the Twentieth Century*, Oxford University Press, New Delhi, 2000).
- 6) See H. Tinker, *India and Pakistan*, Pall Mall, London, 1967, p. 172.
- 7) See E. Stokes, *The English Utilitarians and India*, Oxford, 1959, for an analysis of their influence.
- 8) *Ibid.*, p. 53: "James Mill's *History of British India* was principally an attempt to make a philosophic analysis of Indian society and assess its place in the 'scale of civilization'. Undoubtedly one of his main aims was to dispel what he considered the silly sentimental admiration of oriental despotism which had marked the earlier thinkers of the Enlightenment. Even such a 'keen-eyed and skeptical judge' as Voltaire had succumbed, and the conservative tendencies of the Enlightenment had been mischievously strengthened. Mill's indictment of so-called Hindu and Muslim civilization is a *tour de force* ... In India there was a 'hideous state of society', much inferior in acquirements to Europe even in its darkest feudal age. So far from any diffidence on account of his entire lack of personal experience of India, Mill prided himself that the severity of his judgement was all the more justified by its very disinterestedness."
- 9) See V. Anstey, *The Economic Development of India*, Longmans Green, London, 1952, p. 540.
- 10) Quoted from the text as given in M. Edwardes, *British India 1772-1947*, Sidgwick and Jackson, London, 1967.
- 11) See K. Marx, article in the *New York Daily Tribune*, August 8, 1853: "England has to fulfill a double mission in India: one destructive, the other regenerating - the annihilation of old Asiatic society, and the laying of the material foundations of Western society in Asia.' In his articles on India, Marx stressed the fact that the British were breaking up the village community, uprooting handicraft industry, and establishing private property in land - 'the great desideratum of Indian society". He also expected irrigation and railways to have a significant effect on economic growth, and that industrialization would destroy the caste system: "Modern industry, resulting from the railway system, will dissolve the hereditary divisions of labour, upon which rest the Indian castes, those decisive impediments to Indian progress and Indian power." Marx's assessment of the likely impact of British rule was reasonable enough in 1853 when it was written, but unfortunately these brief newspaper articles (which Marx based largely on information provided by Engels) have been resuscitated by vulgar Marxists as if they were holy writ, particularly by Palme Dutt. Thus they have contributed to the general exaggeration of the impact of British rule in India.
- 12) See Government of India, *Report of the Education Commission 1964-66*, Delhi, 1966.
- 13) The situation was totally different in the Portuguese colony of Goa. The Portuguese intermarried with the natives, broke down caste barriers, brought in Jesuit priests, imposed Catholicism, imported a saint, buried him locally and thus established a centre for pilgrimage. Spanish practice in the Philippines was similar. The British deliberately kept out missionaries until 1813, which is when they brought in their first bishop.
- 14) See Lord Beveridge's life of his parents, *India Called Them*, Allen and Unwin, London, 1957. Beveridge's father did not have a very successful career, but had 21 servants to start married

life, 39 when he had three children, and 18 when living on his own. The 18 servants cost him less than 6 per cent of his salary.

- 15) The change in British attitudes in the early nineteenth century is noted in M. Edwardes, *op. cit.*, p. 33. "There were other factors which contributed to the growing estrangement between Indians and the British. One of these was the growing number of women in the British settlements. They tended to bring with them the prejudices of their time. Their attitude, generally speaking, was Christian, and narrowly so. They brought, too, a new sense of family life, and their arrival resulted in the expulsion of native mistresses who had at least injected something of India into the world of the British. The women had little to occupy their minds. Their life was a tedious social round. But they did have gossip."
- 16) The connections with India had a substantial impact on British domestic institutions and attitudes. The British civil service, with its tradition of generalists and brahminical status of the administrative class, is derived from the Indian model. The British 'public' school system was greatly strengthened by the needs of expatriate families. The domestic status of royalty was enhanced by the Imperial connection. The close contact with Hindu casteism strengthened British snobbery and helped to make the British somewhat more racist towards subject peoples than the French and Dutch who intermarried with colonials much more.
- 17) See D.A.B. Bhattacharya (ed.), *Report on the Population Estimates of India (1820-30)*, *Census of India 1961*, Government of India, Registrar General, Delhi, 1963, pp. 4-5.
- 18) See *Census of India 1911*, Vol. I, *India*, Part II, *Tables*, Calcutta, 1913, pp. 374-6. The total population of all India (including native states) was 313 million and the total labour force 149 million. It is interesting to note that the European population of India was of relatively much lower importance than in Indonesia, where there were 95,000 Europeans in a population of 38 million in 1905: see J.S. Furnivall, *Colonial Policy and Practice*, Cambridge, 1948, p. 255; or in French Indo-China with 42,000 Europeans and a total population of 23 million in 1937; see C. Robequain, *The Economic Development of French Indo-China*, Oxford University Press, London, 1944.
- 19) Tapan Raychaudhuri is the only Indian historian to have stressed this point. See his essay in R.E. Frykenberg (ed.), *Land Control and Social Structure in Indian History*, Madison, 1969, p. 168: 'the relatively low and unchanging rate of revenue demand which left a large surplus to be distributed among a numerous and parasitical class of rather poor intermediaries'.
- 20) Big Moghul landlords (taluqdars) were also confirmed in their position in Oudh (U.P.) after the Mutiny of 1857.
- 21) Even in the Moghul period many zamindars had held hereditary status because they were from Hindu families which had been local chieftains in pre-Moghul times. Other zamindars had lifetime status.
- 22) See D. Warriner, *Land Reform in Principle and Practice*, Oxford University Press, 1969, p. 158.
- 23) See B.B. Misra, *op. cit.*, p. 131. Nehru made the same point about zamindars in the United Provinces. See J. Nehru, *An Autobiography*, Allied Publishers, Bombay, 1962, p. 58: "In the United Provinces, so far as I can remember, there are a million-and-a-half persons classed as zamindars. Probably over ninety per cent of these are almost on the same level as the poorest tenants, and another nine per cent are only moderately well off. The biggish landowners are not more than five thousand in the whole province, and of this number, about one-tenth might be considered the really big zamindars and taluqadars."
- 24) See W.C. Neale, *Economic Change in Rural India*, Yale University Press, 1962, p. 63.

- 25) e.g. the Bengal Act X of 1859, the Bengal Tenancy Act of 1885, the Oudh Sub-Settlement Act of 1866, the Deccan Agriculturalists Relief Act of 1879 and the Punjab Alienation of Land Act of 1900.
- 26) For a description of the changed status of the moneylender under British rule, see M.L. Darling, *The Punjab Peasant in Prosperity and Debt*, Oxford University Press, London, 1947, p. 178: "For centuries he was nothing but a servile adjunct to the Mohammadan cultivator, who despised him as much for his trade as for his religion. Forbidden to wear a turban and allowed to ride only on a donkey, and often the object of 'unmentionable indignities', sufferance was the badge of all his tribe; but when British rule freed him from restraint and armed him with the power of the law, he became as oppressive as he had hitherto been submissive."
- 27) See particularly R.C. Dutt, *op. cit.* Dutt was a spokesman of landlord interests who argued strongly against 'excessive' land taxation. He was one of the early leaders of the nationalist movement whose spurious arguments still unfortunately carry some weight.
- 28) See D. Kumar, *Land and Caste in South India*, Cambridge, 1965, who estimates that landless labourers were 15 per cent of the rural population of South India in 1800. Her book reviews the extensive literature which attempts to show that the British created the class of landless labourers. Her critique of R.P. Dutt, *India Today*, is particularly devastating. Dutt asserted that: 'In 1842 Sir Thomas Munro, as Census Commissioner, reported that there were no landless peasants in India.' Kumar retorted: "It does not strengthen one's confidence in this view to recall that there was no all-India census until 1871, that there was no Madras census in 1842, that Sir Thomas Munro was never Census Commissioner, and that in 1842 he was dead."
- 29) See F.G. Bailey, *op. cit.*
- 30) See M. Marriott (ed.), *Village India*, Chicago, 1955; O. Lewis, *op. cit.*; M.N. Srinivas (ed.), *India's Villages*, Asia Publishing House, Bombay, 1969.
- 31) See D. Thorner, *The Agrarian Prospect in India*, Delhi School of Economics, 1956, p. 12: "The primary aim of all classes in the agrarian structure has been not to increase their income by adopting more efficient methods, but the rise in social prestige by abstaining insofar as possible from physical labour."
- 32) See T. Raychaudhuri, "Permanent Settlement in Operation: Bakarganj District, East Bengal" in R.E. Frykenberg (ed.), *Land Control and Social Structure in Indian History*, Madison, 1969.
- 33) See *The First Five Year Plan*, Planning Commission, Delhi, December, 1952, pp. 338 and 344. In 1850, 2 to 3 million acres were irrigated by tank or canal and 5 million acres by wells. In 1941-5, 58.1 million out of 216.6 million acres of cultivated land in British India were irrigated of which 33.6 million acres by government works.
- 34) See G. Blyn, *Agricultural Trends in India, 1891-1947*, University of Pennsylvania, 1966. These two items were about 5.2 per cent of the eighteen crops he lists, but he covers only about 62 per cent of total crops.
- 35) In Ceylon tea, rubber, coconuts and other estate crops were three-quarters of agricultural output in 1950, see D.R. Snodgrass, *Ceylon: An Export Economy in Transition*, Irwin, Illinois, 1966, p. 128. In Thailand rice exports rose from 5 per cent of output in 1905 to 50 per cent in 1907, see J.C. Ingram, *Economic Change in Thailand since 1850*, Stanford, 1955. For theoretical analysis of the impact of trade and colonization on South-East Asia, see H. Myint, "The Classical Theory of International Trade and the Underdeveloped Countries", *Economic Journal*, June 1958, and R.E. Caves, "Vent for Surplus Models of Trade and

- Growth”, in R.E. Caves, H.G. Johnson, and P.B. Kenen, *Trade Growth and Balance of Payments*, North Holland, Amsterdam, 1965.
- 36) See M. Edwardes, *op. cit.*, p. 219.
- 37) See G. Blyn, *op. cit.*, pp. 251, 316-17 and 349-50, which gives his first, second and modified estimates. For my estimates, see Appendix B.
- 38) This is the argument of Romesh Dutt and also of the British author William Digby, *Prosperous British India*, London, 1901. More recently their assertion that the incidence of famine increased under British rule has been repeated in B.M. Bhatia, *Famines in India*, Asia Publishing House, Bombay, 1963, pp. 7-8: “The frequency of famine showed a disconcerting increase in the nineteenth century.” However, there is no evidence to support this statement. In the period of British rule, the population started to increase which must have been due to some degree to a reduction in the impact of crop failure on mortality.
- 39) See K. Davis, *op. cit.*, p. 28. In the 1870s Indian population was static, in the 1880s it rose 9 per cent, in the 1890s 1 per cent, in the first decade of the twentieth century 6 per cent, and in the second less than 1 per cent.
- 40) See S.R. Sen, *Growth and Stability in Indian Agriculture*, Waltair, January 1967.
- 41) See R.C. Dutt, *op. cit.*, p. xxv (written in 1901).
- 42) See R.P. Dutt, *India Today*, Gollancz, London, 1940, p. 165. Dutt based his conclusion in part on incomparable census material on industrial development. See D. and A. Thorner, *Land and Labour in India*, Asia Publishing House, New York, 1962, Chapter 6, for a refutation of the deindustrialization argument based on census figures.
- 43) See J. Nehru, *The Discovery of India*, Day, New York, 1946, p. 299.
- 44) D.R. Gadgil, *op. cit.*, is the only author who gives any stress to changes in demand pattern which were the indirect consequence (i.e. not induced by deliberate policy) of British rule.
- 45) See A.I. Levkovsky, *Capitalism in India: Basic Trends in Development*, People's Publishing House, Bombay, 1966, p. 78.
- 46) See R.C. Desai, *Standard of Living in India and Pakistan 1931-32 to 1940-41*, Popular Book Depot, Bombay, 1953, p. 95.
- 47) See H. Heaton, *Economic History of Europe*, Harper and Row, London, 1965, p. 491: 'Between 1779 and 1812 the cost of making cotton yarn dropped nine-tenths. The mule's fine cheap yarn "brought to the masses of the people better goods than even the rich had been able to afford in the earlier period!" There was almost equal cost reduction in the weaving process. British textile exports rose thirty-fold in volume between the 1780s and the end of the Napoleonic wars; see P. Deane, *The First Industrial Revolution*, Cambridge University Press, 1965, p. 89.
- 48) See M.G. Mulhall, *The Dictionary of Statistics*, Routledge, London, 1899, pp. 172 and 258.
- 49) See W.A. Lewis, *Economic Survey, 1919-39*, Allen and Unwin, London, 1949, p. 48.
- 50) See M. Kidron, *Foreign Investments in India*, Oxford University Press, London, 1965, p. 13.
- 51) See A.I. Levkovsky, *op. cit.*, pp. 78, 305, 335.
- 52) See R.C. Dutt, *op. cit.*, p. 202.
- 53) In 1913, foreign banks held over three-quarters of total deposits, Indian Joint Stock Banks less than one-fourth. In the eighteenth century there had been very powerful Indian banking houses (dominated by the Jagath Seths) which handled revenue remittances and advances for the Moghul Empire, the Nawab of Bengal, the East India Company, other foreign companies, and Indian traders, and which also carried out arbitrage between Indian currency of different areas and vintages. These indigenous banking houses were largely pushed out by

the British.

- 54) See D.H. Buchanan, *The Development of Capitalist Enterprise in India*, Cass, London, 1966, pp. 211 and 321, who gives figures of the cost of European managerial personnel. In the Tata steelworks in 1921-2 the average salary of foreign supervisory staff was 13,527 rupees a year, whereas Indian workers got 240 rupees. These foreigners cost twice as much as in the USA and were usually less efficient. Use of foreign staff often led to inappropriate design, e.g. multi-storey mills in a hot climate or use of mule instead of ring spindles.
- 55) M.D. Morris has suggested that caste was not an obstacle to industrial development, because the industrial labour power included workers of all castes. See M.D. Morris, *The Emergence of an Industrial Labour Force in India*, Cambridge University Press, 1965.
- 56) See S. Sivasubramonian, *op. cit.*
- 57) There is a tendency amongst Marxist and anti-British historians to exaggerate the size of the Indian plunder. R.P. Dutt argues that 'the spoliation of India was the hidden source of accumulation which played an all important role in helping to make possible the Industrial Revolution in England', see R.P. Dutt, *op. cit.* An even more extreme view is taken by P.A. Baran, *The Political Economy of Growth*, Prometheus, New York, 1957, p. 145. See also B. Adams, *The Law of Civilization and Decay*, New York, 1910 and W. Digby, *Prosperous British India*, 1901. In fact a good deal of the Indian revenue was used to finance local wars and did not reach the UK. The latest scholarly estimates suggest that the transfer to the UK was about one-tenth of the amounts estimated by Digby.
- 58) See A.K. Banerji, *India's Balance of Payments*, Asia Publishing House, Bombay, 1963, p. 136; D. Naoroji, *Poverty and Un-British Rule in India*, London, 1901 (Governments of India Reprint), Delhi, 1962, p. 223; C. Lewis, *America's Stake in International Investments*, Brookings, Washington, D.C., 1938, p. 462, suggests that the annual remittances including business profits from India and China were already 6 million in 1838. The bulk of this would be from India as at that time there were probably less than 250 British residing in China, see C. Lewis, *op. cit.*, p. 176.
- 59) 'Drain; estimate derived from A.K. Banerji, *op. cit.*, and national income figures from Appendix B.
- 60) India continued to be a massive net importer of bullion under British rule.
- 61) There was a cut in civil service salaries in 1931, but it applied only to new recruits.
- 62) In 1939, India had a foreign debt of 4,485 million rupees and assets of 739 million. In 1945 its official debt was only 175 million and its assets 17,243 million rupees. See K.C. Chacko, *The Monetary and Fiscal Policy of India*, Vora, Bombay, 1957.
- 63) See M. Mukherjee, *National Income of India*, *op. cit.*, p. 61, who shows a 50 per cent rise from 1857 to 1945 (including a 28 per cent rise from 1900 to 1945). S Sivasubramonian, *op. cit.*, shows a 23 per cent growth in per capita income from 1900 to 1946, but in several important cases his deflation procedures seem inadequate. See Appendix B.
- 64) This is the view of T. Raychaudhuri, *The Indian Economic and Social History Review*, March 1968. M.D. Morris expresses a contrary view in the same journal.
- 65) See P. Deane and W.A. Cole, *op. cit.*, pp. 68, 282, 329-30, and A. Maddison, *Economic Growth in Japan and the USSR*, Allen and Unwin, London, 1969, p. 159.
- 66) For village society I derived estimates of income and social class from Tables VI-1 and VI-2, assuming that they were about the same at the end of the colonial period. Other estimates are from miscellaneous budgetary and census material, and national income data.