CHAPTER I

THE PROCESS OF COMMERCIALISATION OF INDIAN AGRICULTURE DURING THE COLONIAL PERIOD

The process of commercialisation of agriculture is a component of the overall process of transformation of traditional agriculture. It is the process through which exchange relations increasingly penetrate into agriculture. Starting from a state where production is primarily for the own use of the producers, it gradually leads to the situation where production is not only for exchange but also founded on exchange. During the process of commercialisation the peasant producers come to participate more and more in the market both as sellers as well as buyers. It implies that, over time a greater portion of the peasants' output enters exchange where the marketed crop is either the very same crop which provides the peasants' subsistence or a "cash crop" which substitutes for the "subsistence crop". In the former case, commercialisation does not affect the crop composition, while in the latter case, it involves increasing relative importance of cash crop in agricultural production. As its revenue side, peasants also buy a larger portion of their inputs from the market. Wider dependence on exchange entails greater
monetization: commodities and services are increasingly exchanged for money rather than for other commodities. For instance, rent comes to be paid in cash rather than in produce of land or direct labour service of the tenant; hired labour is paid in cash rather than in kind. Likewise, a greater proportion of the purchases of non-agricultural goods are made against cash payments and not bartered against agricultural products. Commercialisation of agriculture also implies that the various rights in land undergo a qualitative change. The customary right of the agents of the state to collect rent and that of the peasants to cultivate land give way to marketable rights of "private ownership" and "occupancy".

The introduction of British rule marked the beginning of a most crucial phase in the process of commercialisation of agriculture in India. The colonial Government, guided

1. It is not suggested here that "cash-nexus" and "production for exchange" are entirely the innovations introduced by the British. In fact, over large parts of the Mughal Empire (during the 16th and 17th centuries), the land revenue, which accounted for one third to one half of the peasants' gross produce, was collected in cash and not in kind. See Irfan Habib, Agrarian System of Mughal India (Bombay, 1963), pp.190-230 and 236-39. Given this form of realisation of land revenue, 'most of the surplus was put on the market, and therefore a very large portion of agricultural production would not have been directly "for contd... p.3..."
by the objective of ensuring a flow of a stable and expanding revenue from agriculture, imposed an excessive land revenue. In Bengal, the first possession of the East India Company, the land revenue increased by more than 200 per cent between 1764, the last year of Mohammedan rule, and 1793, the first year of the permanent settlement. Likewise, in Northern India and Bombay the Company imposed substantial increases over the land revenue demand of the Native rulers, within a few years of its accession. In Madras the Company's initial revenue demand absorbed half of the gross produce of land. 2

The excessive burden on the peasantry, once imposed, was maintained in several ways. The land revenue demand of the Government was raised at each new settlement in the United Provinces, the Central Provinces and the Punjab.

contd...

use", but would have been commodity production, properly speaking'. See Irfan Habib, "Potentialities of Capitalistic Development in the Economy of Mughal India", Enquiry, Winter 1971, pp.11-12.

However, commercialisation is not the simple existence of production for market but a historical process encompassing various other interrelated developments as well.

where the Zamindari settlements were temporary, and in most of Madras, Bombay, Sind, Barar and Assam, where the settlements were Ryotwari. Furthermore, the gap between the Ryot's rent payments and the Government's revenue demand gradually grew in favour of the landlords. In Bengal, the substantial increase in the Government's land revenue demand, at the Permanent Settlement, and its two-fold rigidity (see below) introduced "an unprecedented element of risk into the land holding system".

The zamindars responded to it by creating and purchasing intermediary-tenures, so that if they lost their zamindary rights they would retain some proprietary interest in

---

3. R.P. Dutt, *India Today* (Second Indian Edition, Calcutta, 1970), pp.223-7. Although the land revenue demand, in cash, increased monotonically, its real burden gradually declined. "The latter figures of land assessment in modern times show a smaller proportion to total produce...than the earlier figures of the first period of British rule... But by this time other forms of exploitation had come to play a correspondingly greater part, out-weighting the role of direct government land revenue, through the development of landlordism and enhanced rents, commercial penetration, additional taxation on articles of consumption and rising indebtedness. The simple direct tribute of the earlier period, buttressed mainly on land revenue, has given place to the network of forms of exploitation of modern finance-capital, with its host of subsidiary parasites in Indian Economy". Ibid., pp.226-7.

land, albeit of an inferior quality. Thus, a variety of under-tenures in land were created and a market emerged in these rights which rapidly expanded. This has been described as "the first phase in the commercialisation of Bengal's agriculture". As its consequence, a large number of intermediary tenure holders came to intervene between the government and the rent paying peasants, each of them with a specific and well defined claim to the peasants' output. The expansion of this class exerted an ever increasing pressure on the peasants, as a part of the overall commercialisation process. The rates of rent and the rental increased substantially while the Government's demand remained fixed from 1793. Consequently, the share of the zamindars and the intermediaries in the rental increased rapidly and surpassed that of the Government.

In Northern India, around the middle of the nineteenth century, a large number of intermediary tenure holders came to intervene between the government and the rent paying peasants. Each of them with a specific and well defined claim to the peasants' output. The expansion of this class exerted an ever increasing pressure on the peasants, as a part of the overall commercialisation process. The rates of rent and the rental increased substantially while the Government's demand remained fixed from 1793. Consequently, the share of the zamindars and the intermediaries in the rental increased rapidly and surpassed that of the Government.


7. However, the increase in rent was slower than the rise in the value of agricultural produce. Compared with the period immediately after the Permanent Settlement, "the rent burden seems to have greatly diminished from about the end of the nineteenth century". According to one set of estimates the

\begin{align*}
5. & \text{ Ibid., p.48.} \\
7. & \text{ However, the increase in rent was slower than the rise in the value of agricultural produce. Compared with the period immediately after the Permanent Settlement, "the rent burden seems to have greatly diminished from about the end of the nineteenth century". Ibid., p.366. According to one set of estimates the} \\
\end{align*}
century, the landlords enjoyed an equal share in the rental. In the Ryotwari tracts too, the growth of landlordism gradually pushed the Government's share in the rent to relative insignificance.

The Government's revenue demand was inelastic in terms of both amount and timing of collection implying a two-fold rigidity mentioned above. This aspect of the land revenue collection was a novelty in India. In spite of being a tax on the produce of land, its realisation, in practice, bore no relation with the annual amount of harvest. It had to be paid in cash, irrespective of good or bad harvest, and by a fixed date. In case of default, the zamindar ran the risk of losing his right. Similarly the ryot was in danger of losing his right to use land if he failed to pay rent. In fact, some of the revenue instalments typically became due before the

---

contd...
rent per cultivated acre in Bengal went up by 160% between the Permanent Settlement and 1940, while the value of agricultural produce per acre increased by 390% during the same period. See Abu Ahmed Abdullah, Landlord and Rich Peasant under the Permanent Settlement (mimeographed), p.44.

harvest could be realised. For the vast majority of cultivators, without any savings, it created a great inconvenience even in years of plentiful harvest. They had to borrow in order to pay rent in time.\textsuperscript{10} The occurrence of natural calamities and the consequent losses in output further worsened their condition. Thus, the heaviness of rent/revenue demand, coupled with its rigidity and inconvenient timing of collection forced the peasants to depend on money-lenders in an essential manner.

Admittedly, peasant indebtedness was far from being "unknown" in pre-British India.\textsuperscript{11} But some developments, during the British period, relating to the legal position of the money-lender and the evolution of cultivators' rights in land as marketable assets, in addition to the causes already mentioned, gave it a strong impetus and greatly added to its bulk. During the pre-British period, the attitude of the state towards money-lending and the recovery of the money-lender's dues was one of "apathy". The establishment of the British Legal System and the enactment of several laws relating to usury immensely

\textsuperscript{10.} Elizabeth Whitcombe, \textit{op. cit.}, pp.146-60.

\textsuperscript{11.} Irfan Habib, "Usury in Medieval India", \textit{Comparative Studies in Society and History}, vol.6, no.4, p.394.
strengthened the money-lenders' position. It became easier for them to realise their dues from the defaulters.\(^\text{12}\)

Again, peasant-holdings had not become salable during the pre-British period.\(^\text{13}\) However, in the British period, "Rising land values resulting from the increasing demand for land, rising agricultural prices, better definition by the law of the peasants' rights in land...made possession of land increasingly attractive to creditors".\(^\text{14}\) The peasants also found it easier to borrow on the security of land. Consequently, by the beginning of this century at least, the vast majority of peasant households had become significantly indebted to the village money-lenders. Moreover, the consequences of debt default were qualitatively different in the British period compared to earlier times. During the pre-British period and even the early


\(^{13}\) Irfan Habib, "The Social Distribution of Landed Property in Pre-British India", Enquiry, Winter 1965, p.73.

years of British rule, the creditor recovered his dues in the form of direct labour service of the debtor, when all other methods such as seizure of the latter's properties and cattle etc. failed. On the other hand, during the later part of British rule, ryoti right in land having emerged as a dominant collateral in the market for rural credit, default led to the transfer of the indebted peasant's land right, defined either in ownership or in occupancy terms.

As a natural consequence of the policy of extracting a very high revenue from agriculture, the colonial Government encouraged the process of converting India into a producer and supplier of raw materials for British trade and industry. The economy of India was made completely subservient to that of Great Britain. Time and again the cropping pattern in India's agriculture and the commodity composition of its trade were altered to suit the requirements of the metropolis. From the late eighteenth century, to finance

15. Ibid., pp.126-7.
16. The first half of the nineteenth century witnessed the "almost entire transformation of her (India's) exports into the category of primary commodities". K.N. Chaudhuri (ed.), The Economic Development of India under the East India Company, 1814-58, (C.U.P., 1971), Introduction, p.26. Moreover, "apart from being a source of raw materials and a potential contd...p.10."
the East India Company's imports of tea and raw silk from China, Bengal was made to export opium and raw cotton to China. 17 Towards the end of the 1780s, when the supply of indigo to Europe from the traditional sources fell off, the cultivation and exports of indigo from Bengal received a strong impetus. 18 The export of indigo was an important means of remittance of the income of the Company's servants. 19 When the supply of raw silk from Italy was cut off during Napoleonic Wars, Bengal was made to cultivate raw silk and export it to England. 20 After the cotton textile industry in India was crushed by Lancashire, increased production of raw cotton was primarily for exports to China, U.K. and Japan, before the cotton textile industry developed in

contd...

market for Britain's industrial products, India was of vital significance to Britain in a strictly financial sense. India's export surplus with other countries enabled Britain to increase her imports from those countries. Ibid., p.5.


18. B.B. Chaudhuri, Growth of Commercial Agriculture..., pp.73-75.


Bombay, Ahmedabad and Kanpur. The growth of jute manufacturing industry at Dundee created an increasing demand for Indian (Bengal) raw jute from the 1830s. The Crimean War, which stopped the imports of Russian hemp, a substitute of jute, into Britain, gave a further impetus to raw jute exports from India. 21

In the early period, the Government actively intervened and used direct and indirect coercion, economic and otherwise, to ensure the production of certain crops like poppy and raw silk. Gradually, such overt direct interference gave way to indirect methods. Instead of forcing the peasants to cultivate the desired crops, the Government adopted a policy of encouraging and facilitating the production of those crops. It started experimental cultivation of new crops and provided incentives in the form of irrigation facilities, etc. It improved communications to promote trade. The actual process of making the peasants cultivate particular crops, however, was left to independent merchant interests. The existing agrarian relations, the


22. The regional pattern of government investment in agriculture was determined by the type of land revenue settlements. See A.K. Bagchi, Regional patterns of growth in India in the Colonial Period, (mimeographed).
mass indebtedness of the peasantry in particular, were of immense help to the Government and the merchant interests in their endeavour.

Poppy and indigo were among the first crops to attain commercial significance. Besides, these crops had a distinctly new form of production organization. These crops were raised exclusively for exports. Although both poppy and indigo were cultivated on the basis of small peasant agriculture, the initiative came from the Government and the European planters respectively. Furthermore, the peasants were neither free to take up nor relinquish the cultivation. The extent of cultivation was controlled by the Government (poppy) and planters (indigo) in accordance with the conditions of profitability prevailing in the foreign market. The peasants had to hand over the entire produce at an unremunerative price.

Both poppy and indigo were exclusively grown on cash advance taken by the peasants from the agents of the Government and the planters respectively. In fact, the system of advances was crucial to this new form of organisation of production. It differed from simple usury in

so far as the advances were used to dictate the pattern of production and to secure a desired supply of the crop than to obtain a simple usurious interest. Through the advances, the Government and the planters obtained a control over the peasants. Once having received the advance it was extremely difficult for the peasants to give up the cultivation. On the other hand, the advances, which bore little or no explicit interest charge, were extremely alluring to them because of their requirement of cash in order to meet the rent demand and other cash obligations.

The hold obtained through the system of advances was not always adequate to keep the system of production going.

24. This particular function of credit, that is, the system of crop hypothecation against cash advances from merchants, has been emphasized by Vani Barooah. He argues that one principal feature of rural credit is that it is used by merchants as a vehicle for introducing the cultivation of cash crops which obtain large trading profits rather than high usurious rates of interest. See Vani Barooah, "High interest rates in backward agricultural communities: an examination of the 'default hypothesis'", Cambridge Journal of Economics, December 1980, pp.267-8. On the other hand, Amit Bhaduri argues that the principal objective of a rural money-lender is to capture the assets (mainly land) of the borrower by charging high interest rates which forces the latter to default. See Amit Bhaduri, "On the formation of usurious interest rates in backward agriculture", Cambridge Journal of Economics, December 1977.

It was, therefore, necessary for the Government to supplement it by legal and extra-legal coercion so as to keep the peasants virtually tied to the cultivation of the unremunerative crop. The planters, whose position was obviously inferior to that of the Government, took advantage of the existing agrarian relations. There already existed markets in Zamindari and other intermediary rights. The planters purchased such rights over the indigo cultivators and thus came to enjoy the premier positions as zamindars in the rural society. In order to force the ryots into indigo cultivation, the planter-zamindar exercised a whole range of socio-economic powers derived from his position of landlord. Particularly, rent was a very useful instrument of coercion. Often, a simple threat to enhance rent was enough to break the resistance of the ill-protected peasants.

After the initial years characterised by blatant direct intervention, the colonial Government tried to push forward the cultivation of commercial crops through indirect but conscious policies. A striking example (by no means unique and which was repeated in other areas) was the

26. Ibid., pp.41-55.
27. Ibid., pp.165-90.
development of agricultural resources in the United Provinces through public investment.\textsuperscript{28} The colonial Government constructed massive irrigation projects which facilitated the production of "valuable crops" such as wheat, sugar cane, cotton and indigo. In addition to the canals which were navigable, the construction of roads and railways, on a large scale, greatly helped the expansion of trade in agricultural produce.

The "valuable crops", which were primarily exported, were grown almost exclusively on advances. However, the exporting agencies essentially remained at the top and approached the cultivators through a host of intermediaries. These intermediaries were none other than the zamindars, village headmen, rich peasants, kanungos, patwaris and money-lenders. The latter, who often, but not always, received advances from the former, made advances to the peasants. A large number of the peasants, pressed by the rent burden were indebted and experienced great hardship in paying rent which was due before the harvests could be realised. The timing of advances, coinciding with that of rent collection, lured the peasants into the cultivation

\textsuperscript{28} See Elizabeth Whitcombe, \textit{op. cit.}, for a detailed account of the colonial Government's policies and its consequences.
of the "valuable crops", while the cash advance tied them firmly to the cultivation of these crops. But they hardly received any benefit from the increasing output and prices. Between the small peasants and the "gains from trade" intervened the creditor and intermediary in their many forms mostly through the device of loan-advance. When the money-lenders and zamindars combined merchant activities, the cultivators were compelled to accept prices considerably lower than the market price. Thus, in more extreme cases the cultivators not only bore the burden of a heavy rate of interest but also lost in the ensuing process of exchange of their produce, primarily because of their tied and dependent position in the markets for rural credit and land. In addition, the producers of "valuable crops" now also had to purchase their subsistence from the market, and the region having shifted to valuable crops the prices of foodgrains increased sharply. The small peasantry gradually slipped into a situation of recurring indebtedness.

In short, the process of commercialisation of Indian agriculture during the British rule was closely associated

29. 'Harvest "rates" covered a multitude of individual transactions, governed by the precise relation of purchaser to seller and the extent of the latter's obligation to the former'. Ibid., p.185. Also see pp.174, 176, 188, 189.
with the growing cultivation of "cash" or "valuable" crops. Although none of these crops were new to India, their acreage and output increased significantly. However, the process of commercialisation cannot be entirely identified with the expansion of area under cash crops. During the British period, the trade in food crops, internal as well as external, also expanded significantly, along with the trade in cash crops. The producers of food crops participated in exchange as much as producers of cash crops.

In Bengal Province, the agricultural output did not keep pace with the demands of the rentier class. Consequently, the peasants' level of consumption was systematically pressed down. In order to maintain the bare minimum level of subsistence, the great majority of small peasants had to increasingly resort to borrowing. The mechanism of debt forced them into market relations:

"Settlement of past debt plus current cash expenditure in any period forced the peasant to sell under distress too high a portion of his output. Indeed, the proportion

30. Between 1891-92 and 1946-47, the annual average rate of expansion in food crop acreage was 0.31% and that of non-food crop acreage 0.42%. Output of food crops increased at 0.11% per annum while that of non-food crops rose by 1.31%. See George Blyn, Agricultural Trends in India 1891-1947: Output, Availability and Productivity, (Philadelphia, 1966), pp.96, 108, 141 and 145.
marketed was often so high, that he was soon forced to borrow again (until the next harvest) for distress buying of paddy to supplement his own consumption. The indebtedness was carried over to the next harvest forcing him again to sell too much under the compulsion of debt, leading in turn to the next round of distress buying. This has been described as the "second phase" in the commercialization of Bengal's agriculture.

The indebted small peasant even while producing subsistence crop increasingly came under the compulsion of debt and entered the market both as a seller and as a buyer of paddy. He tended to become almost as much a part of the market as the producer of a cash crop. The prevalence of 'Dadan System' (the system of cash advances) in the marketing of paddy further blurred the conventional distinction between 'subsistence crop' and 'cash crop'.

The process of commercialization, characterised by the forcible involvement of small peasants in exchange


32. In this sense, the extent of cash crop cultivation is not an adequate index of the degree of commercialisation of agriculture.

For a detailed discussion on the role of dadan system in the marketing of rice, see Ch.III, sections 4 and 5.
relations, was essentially a process of exchange of paddy for paddy. It only widened exchange relations within agriculture without linking agriculture with industry. This aspect of the process of exchange was clearly reflected in the external rice commerce of Bengal, carried through the port of Calcutta, during the early decades of this century. While the finer quality Bengal rice, procured from distress sales by peasants, was exported, coarse variety of Burma rice was imported to meet the distress purchase of the same peasants. Moreover, the peasants who were involuntarily involved in exchange paid a higher price for purchasing Burma rice than what they received for selling their higher quality rice. Thus, the mechanism of forced commerce meant a price-loss for the small peasants. 33

In a long-term sense, the position of many indebted small peasants steadily deteriorated. Their debt obligations increased every year and finally they reached a state where their assets were insufficient to offset their debt. It meant a gradual deterioration in their asset positions till they were completely ruined and became either

baridars (share-croppers) or landless labourers.

From our above rough historical sketch, it would appear that in the overall mechanism of extraction of surplus from agriculture, there were two distinct processes at work. Firstly, a substantial portion of the peasants' annual produce was expropriated in the form of rent/revenue. This can be called the tribute system or the process of direct surplus extraction. Under the system the appropriators were the colonial Government, the supreme landlord, the zamindars and the intermediary-tenure-holders. In contrast, a second process of surplus extraction operated mainly through the market mechanism, particularly in the markets for rural credit and agricultural produce. This may be called the process of market based surplus extraction or the process of forced commercialisation. The appropriators in the second mechanism were mostly the money-lenders and the merchants, often the two activities being combined in the same person.

In fact, the two processes were interdependent. The heaviness of the tribute, its rigidity and inconvenient timing of collection compelled the small peasantry into debt. Indebtedness, in turn, led to greater participation of the small peasants in the market for agricultural
produce, often as sellers and buyers of the same crop. The timing of their sales (immediate post-harvest), determined by the credit contracts, made them the victims of seasonal fluctuations in price; the peasants' selling price was lower than their buying-price of the same crop. Furthermore, the creditors, who were traders in agricultural produce, exploited the peasants' dependence on them for credit and dictated the cropping pattern as well as the price of the produce (unremunerative) to the latter. Government's investments in irrigation and communication, which facilitated the production of certain crops and trade, proved a great boon to the merchant interests. Thus, the process of forced commercialisation was sustained by the process of direct surplus extraction. However, over time it gradually assumed greater importance as a mechanism of surplus extraction than the tribute system. 3

34. In Bengal, during early twentieth century, the annual interest burden on the peasantry was greater than the rent burden (including abwabs). In other words, the surplus appropriated through a single market was larger than the tribute. See Abu Ahmed Abdullah, op. cit., pp. 95-100. In 1931 the Central Banking Enquiry Committee estimated the total agricultural debt in India at 9,000 million rupees. The Government's land revenue demand was 350 million rupees, according to the Minority Report of the said Committee. See R.P. Dutt, op. cit., p. 255. Even if the zamindars' share is put at the

contd... p. 22.
The tribute system too benefited from the system of market based surplus extraction. The money-lenders' credit and the traders' advances were actually used by the peasants for their rent/revenue payments. This, to some extent, explains the relatively easy manner in which the Government could realise the tribute even in years of very poor harvests. Moreover, the exportation of a variety of agricultural produce (mostly cash crops) procured through the process of forced commercialisation, greatly facilitated the remittance of the tribute from the colony to the metropolis. Thus, there developed a system of mutual support between the two processes of surplus extraction.

**contd.**

highest possible ratio of six times that of the Government (this share was the maximum that could possibly be obtained even in Bengal), the interest burden will still be larger than the tribute at an average rate of interest of 27.5% per annum, which was actually on the lower side of the observed rates. Also see footnote 3 above.

35. The main articles of raw produce exported were opium, indigo, cotton, silk, jute and oilseeds. See R.C. Dutt, op. cit., vol. I, p. 204, and vol. II, pp. 117-251 and 389. Up to 1920 India was a net exporter of foodgrains. The surplus of foodgrain producing areas (such as Bengal, the wheat growing tracts of the United Provinces etc.) was also supplied to the cash crop zones (such as the cotton growing tracts of the Deccan, opium producing areas of Malwa etc.). But from 1920 net imports of foodgrains (mainly rice) were necessary to sustain the growth of cash crop cultivation on the face of falling per capita output of foodgrains.
The symbiotic relationship between the processes of direct surplus extraction and forced commercialisation continued unabated even in those areas (such as the United Provinces and the Punjab) where the development of agricultural resources was engineered by large scale Government investments in irrigation and transport. It appears paradoxical because higher productivity and increasing prices are normally expected to reduce the dependence of the small peasant on the money-lender. However, what is crucial from the peasant's point of view is not the simple increase in output and prices but, how much of these benefits actually accrues to him. It is precisely here that his prior indebtedness hit him. The merchant-money-lender, because of his preexisting advantages in the credit market, continued to appropriate most of the benefit of the peasant's increased output and its higher value.

In contrast to the above set of views which suggest that the nature of market involvement of the vast majority of small peasants in British India was largely dictated by the compulsion of debt and can be better understood in those terms, there is a more conventional view in conformity with standard economic theory of price responsiveness of the supplier. According to standard economic theory, exchange
leads to specialisation in production, each participant (country or individual) specialises in the production of good(s) in which he enjoys comparative advantage, given the initial resource endowment. The specialised producers engage in exchange in order to have access to a wider range of goods. As a result of exchange, the consumption availability frontier shifts upwards. This has been termed "gains from trade". Here, participation in exchange is essentially voluntary and gains from trade accrue to each participant in the trade. "The very fact that any trade takes place is an indication that both individuals are better off, since each can at the very worst refuse to trade". Following this general approach in our specific context, the latter view attributes the peasants' participation in exchange to "profit motive". More specifically, the peasant's decisions regarding the cropping pattern are held to be guided by considerations of relative profitability of the crops, acreage shifting in favour of that crop which has a higher price.

One such study\textsuperscript{37} analyses the changes in areas under six principal crops, in relation to the changes in their relative prices in India during 1900-1939. The crops chosen are two foodgrains, rice and wheat, and four cash crops, cotton, jute, groundnut and sugar-cane. For each crop the attention is focused on the provinces to which the bulk of the area under the crop belonged. The prices considered relevant for the peasant’s decision to sow a particular crop are pre-sowing-time prices, particularly those ruling one or two seasons preceding.

"Similarity between the behaviour of areas under cash crops and the prices of these crops, corrected with reference to changes either to an index of agricultural prices or in the prices of specific competing crops, is in most cases so striking that price emerges as a decisive consideration with the farmer in the areas he sows to these crops".\textsuperscript{38}

Furthermore, the areas sown to cotton in India and the USA are seen to move in sympathy, which is attributed to the similar movements in cotton prices in the two


\textsuperscript{38} Ibid., p.158.
countries. This adds credence to the Indian farmers' price-responsiveness. 39

When a food-crop competes with a cash crop for the same area, its price, relative to the cash crop, decides how much area the peasants devote to it. This is borne out by the behaviour of area sown to millets in the cotton growing zones of Madras, Bombay and Sind, Central Provinces and Berar, rice in the jute growing districts of Bengal, jowar in the groundnut-growing tracts of Madras, and wheat in a part of the sugar cane-growing region of United Provinces.

On the other hand, when a food-crop competes with other food-crops, the area sown to each is primarily determined by rainfall. It is argued that while allocating area between rival food-crops, the peasant, whether cultivating for pure self-consumption or for the market, tries to maximise the total yield, since the prices of the various food-crops move in close sympathy. Hence, area shifts in favour of that crop for which rainfall is favourable at the sowing-time.

39. Ibid., pp.57-58.
Another study\textsuperscript{40} tests the hypothesis that "peasants in poor countries do not respond, or respond very little, or negatively to price movements", in the light of the data relating to eleven crops in the Punjab for the period from 1914-15 to 1945-46. With the help of the Nerlovian "adjustment" model the coefficients of adjustment and elasticities of acreage with respect to price are estimated. On the strength of these estimates, which vary between crops, the above hypothesis is rejected.

However, the observed responsiveness of area to changes in relative price as such does not establish that the peasants' participation in exchange was primarily due to profit motive. In fact, the observed relationship between acreage and prices could also be explained in terms of the traders' response to changes in relative price in so far as they were the main beneficiaries of such relative price movement and exerted significant control over the cropping pattern. It has been argued above that historically merchant-money-lender came to dictate the cropping pattern to the small peasant through

the system of advances. At the same time, it is by no means established that the peasants always gained by shifting to the cultivation of commercial crops. On the contrary, the peasants sometimes cultivated the commercial crops at a loss, the most striking examples being poppy and indigo. Thus the growth of commercial crop cultivation cannot be fully explained by appealing to rational profit motive of the peasants. More significantly, the phenomenon of large scale local trade in rice in Bengal Province can be still less explained by voluntariness or "gains from trade", since the purchasing price of inferior quality (Burma) rice was higher than the selling price of finer quality (Bengal) rice for the peasant.

There are then two contesting lines of thought regarding the nature of commercialisation of agriculture.

41. Further, even though the small and very small peasants, to whom the merchants dictated the cropping pattern through the system of cash advances, are expected to have constituted the vast majority of agricultural households, they might not have commanded the bulk of the total cropped area since the then distribution of land is expected to have been skewed in favour of the richer cultivators. Thus the observed relationship between acreage and prices at the aggregate level might reflect nothing more than the price responsiveness of the large and medium peasants who might have commanded the bulk of the total area.
in India. The purpose of this study is to analyse, in the light of these views, the characteristics of this process in Orissa agriculture and its impact on the economic position of the peasants. Specifically, this study tries to illuminate the peasants' motives in participating in exchange and the reverse effect of market involvement on their standard of living and tenurial conditions.

The area chosen comprises the districts of Cuttack, Balasore, Puri and Sambalpur. Orissa, under the British, also included the district of Angul. The reasons for leaving it out from the present study are discussed in the Appendix to Chapter III. The Princely States of Orissa are not included for obvious reasons: non-availability of even reasonably reliable data. The period covered is from 1900 to 1930, chosen primarily due to the availability of fairly reliable long-period time-series data on acreage, output, exports, imports and prices, and also, other related variables.

In the following Chapter (Chapter II) we analyse the principal factors underlying large scale agricultural indebtedness in Orissa during the British period, as peasant indebtedness is historically seen to be closely
interlinked with the process of commercialisation. In Chapter III we discuss how the debt mechanism influenced the nature and extent of participation of the peasants in the market for agriculture produce (rice). Considering the nature and extent of market participation, it is possible to identify broadly two qualitatively different kinds of peasant involvement in the market - voluntary and involuntary. Since these two types of market involvement coexisted in our historical context, we try to find out which of these dominated at the aggregate overall level. However, in view of the limitations imposed by the nature and coverage of the available data, we attempt only an indirect statistical exercise, in the Appendix to Chapter III. We use data on external commerce to infer the behaviour of the agricultural marketed surplus. This inevitably takes us to the activities of the traders which are superimposed on the producers' activities and may in turn conceal the latter. Hence our statistical exercise is based on hypothesis which are only suggestive. Chapter IV deals with the relationship between the process of indebtedness and the processes of mortgage and transfer of peasants' rights in land. In Chapter V, the impact of forced commerce on the pattern of labour migration from Orissa is studied. In Chapter VI we present the various conclusions arrived at through this study.