I. Summary of the Dissertation

This dissertation has covered wide ground. It has attempted to chart the overall performance of the agrarian economies of Bombay and Punjab over the course of ninety years and to analyse reasons for the most important contrasts between these regions.

The total period under study, 1881-1972, was sub-divided into three: 1881-1907/08, 1908-1941 and 1951/52-1970/71. Trends in agricultural output, changes in its composition, and movements in the most important inputs were analysed in Chapters 4, 5 and 7.

Such an examination revealed that:

a) Punjab agricultural output grew faster than Bombay's for each of the sub-periods;

b) movements in inputs reflected these differences in output trends;

c) the growth of both output and leading inputs was higher in the post-independence period than before 1947;

d) the leading input in both periods was the area under irrigation.

Chapters 4(Section III), 6, 8 and 9 analyse possible influences on private investment in agriculture in Bombay and Punjab. Chapter 4 sets the scene by an investigation into the nature of peasant differentiation and the relative strength of mercantile capital in these regions during the late nineteenth century. It concludes that even as early as the late nineteenth century Punjab was witnessing the creation of a rich peasant class fathered by the construction of the great canals. This was in contrast to Bombay, which for much of the
1881-1907 period remained a picture of stagnation in output and stability in the patterns of peasant differentiation. The emergence of a rich peasantry, along the lines of Punjab, was prevented (despite the high degree of production for the market) by a high incidence of land revenue and the frequency of famines in the Bombay Deccan. The stranglehold of the trading moneylending class on the rural economy was another major cause of the thwarted growth of a substantial rich peasant class in Bombay. In contrast, the state further eased the birth of the rich peasant class in Punjab by placing restrictions on land transfers to moneylenders, whose business was then eroded by competition from the nascent rich peasantry.

Differences in agricultural policy of the State during the late nineteenth century reflected the principle adopted by the Imperial government of following lines of least resistance. Bombay was annexed earlier than Punjab, and upon arrival the British encountered a well-developed and organised mercantile class which was able to collaborate with the new rulers in both the timely collection of revenue and in extraction of an export surplus from the hinterland. Punjab's trading class, on the contrary, was relatively weak and geared to the domestic economy. In addition, Punjab contained huge stretches of waste land which could be colonised through irrigation investment. This would not only boost revenue but result in the creation of a settled peasantry in the sensitive border areas of the West and North-West Punjab.

Chapter 6 takes up the story (begun in Chapter 4, Section III) in the second sub-period. An improvement and extension of the database promotes a more structured enquiry into factors affecting private investment. The chapter begins with a theoretical discussion of non-capital based explanations of agricultural growth, arguing that such theories are better equipped to explain levels rather than the growth
of output. It then proceeds to investigate the size of the "surplus" peasantry (i.e. peasants with a surplus over essential or actual consumption levels) in Bombay and Punjab, and shows that in both these regions only a small proportion of the peasantry had a surplus for investment. Opportunities for profitable investment are also seen to be very limited, the State being generally more unsuccessful in Bombay in its attempts to introduce newer forms of capital. Other constraints on private investment, such as fragmentation and subdivision, are shown either to add to the supply side constraint posed by the skewed distribution of landholding, or to be relatively insignificant - as in the case of shifts in the supply of labour and agricultural wages.

In a parallel vein to Chapter 4, Chapter 6 then goes on to examine the relative strength of the mercantile class and the peasantry in Bombay and Punjab, noting the sharp decline in indigenous bankers and traders in Punjab, and the entry of merchants in Bombay into processing activities, forging a direct link between trading firms and the Bombay mills. Finally, it looks at alternative avenues of deploying rural surpluses, arguing that moneylending and speculation in land purchase were more profitable avenues for investment than investment in production in both these regions - although more so in Bombay.

Chapters 8 and 9 preserve the most important elements of the discussion contained in Chapter 6, but the availability of several sample surveys, and relatively more sophisticated micro-level studies of different aspects of the rural economy helps to place the conclusions of Chapter 6 on to a firmer footing. Chapter 8 shows that investment in irrigation in Bombay in the post-independence period, though more lumpy than in Punjab, was certainly very profitable. Moreover, other demand side constraints such as fragmentation and sub-division or
tenancy operated with almost equal intensity in the two regions.

Chapter 9, in conformity with Chapter 6, assesses the size of the surplus peasantry in East Punjab and Maharashtra and agrees with its overall conclusion on the size of the surplus peasantry. It further shows that the size of the total economic surplus over essential consumption and the surplus per operated acre was several times larger in the Punjab region, compared to Maharashtra. It then analyses the relative importance of mercantile capital in these two regions and argues that it was considerably stronger in Maharashtra than in Punjab. Finally, it presents evidence to prove that while credit policy in the form of co-operatives was more effective in both regions after independence than before, co-operatives were more successful in East Punjab than in the Bombay region.

II. Implications of Arguments Contained in the Dissertation

The comparison of rural economy in Bombay and Punjab yields some important insights into the process of long run growth.

Firstly, it is clear that there is no necessary connection between the degree of commercialisation and growth output. Commercialisation may be a necessary but not sufficient condition for sustained agricultural growth. Instead, the Bombay case study illustrates a process where a high level of commercialisation, measured in terms of production for the market, actually sustained a class of mercantile capital which was the major beneficiary both from upward movements in output prices and from profits made in processing cash crops such as cotton and groundnut.
Secondly, this work shows the importance of initial conditions in determining a future growth path. This implies that the timing as well as the duration of colonial rule must be examined in the Indian case. We know that the grafting of an Imperialist State on to the pre-capitalist India body-economique produced uneven results across the country. Yet, while colonial rule did modify pre-existing rural economy, the extent and the nature of this transformation was dependent on the structure of the pre-existing economy itself.

Thirdly, this dissertation supports the view that class structure and state policy cannot be disentangled from each other. In Punjab the State, for a number of economic and political reasons of the day, began a colonisation programme. Its effect was to create a surplus peasant class. After independence, when agriculture began to play a more active role in providing industrial wage goods, and when surplus grain was moved to deficit areas on government account, the Punjab rich peasants were able to demand and attain high and guaranteed prices for their output. Seen in this light, the improvement in the inter-sectoral terms of trade after the Green Revolution in favour of agriculture was more the effect of earlier public investment policies than the cause of sustained output growth. Like other groups in society, the State acts on structural conditions transmitted from the past - often of its own making. This inherent circularity between cause and effect in the determination of state policy militates against the belief that questions of growth can be conveniently separated from those of distribution. The debacle behind the collection of betterment levies from the Punjab peasantry in the aftermath of Bhakra Nangal is only one case in point.*

Finally, it is argued that capital and its composition remain the most important ingredients in the growth process. Investment

*See Ansari (1968).
In the purchase of capital is governed by relative rates of return over a range of possible ways of using savings. Yet, in agriculture, there may be not one structure of rates of return but several, depending on the degree to which different markets mesh together, and on the existence of barriers to entry in each market. Hence, we have argued, mercantile capital in Bombay had a comparative advantage in trade, processing and moneylending operations. Relative rates of return on investment were therefore tilted away from investing in agricultural production.

III. Limitations and Unresolved Questions

The introduction of the dissertation pointed out that because of the constant change and extension of the data base, as well as of the lack of good micro-studies on relevant aspects of the rural economy, such as margins from trade, processing, speculation in land, etc., the arguments contained in this work reflect more a balance of probabilities than statistical proofs. Indeed, the quality of agricultural sources was felt to be so central to the data exercises attempted, that the whole of Chapter 3 and several sections in other chapters were devoted to examining and cross-checking the reliability of the data source.

There are several things which this dissertation does not attempt to do. Firstly, it does not attempt to provide an exhaustive economic history of Bombay and Punjab from 1880/81. To do so would involve several volumes. Secondly, it does not use primary sources, such as village surveys by the author, or unpublished files, correspondence and so on. It does use official reports extensively and many of them have not been used widely before. This is not because the importance of primary material is denied, but simply because this is the first
comparative work at the Provincial Level over such a time span and even the published sources have not been carefully utilised. Finally, it does not duplicate work already done by others - especially in the compilation of statistics - unless absolutely necessary. The prime concern of the dissertation is not a re-estimation of data series - where existing estimates appear reasonable - but to bring together a wide range of information to attempt explanations of differences in growth.

With these disclaimers in mind, we can proceed to problems which are left unresolved in this work but which could form the subject of future research. These can be grouped as follows:

i) intra-regional variations in growth of output;

ii) nature of risk encountered by peasants and traders;

iii) use of surplus by traders;

iv) formulation of state agricultural policy at the Provincial Level.

Although this dissertation has attempted to keep intra-regional differences in agricultural growth and agrarian structure in view within the broader framework of regional analysis, it is clear that more detailed comparative studies of sub-regions may complement the work done here. This is a rather obvious gap which any broad study leaves open. Lack of data has also prevented us from making a detailed analysis of the extent to which investment decisions of both traders and peasants are modified or guided by the need to guard against risk. There is by now a growing literature on the effect of risk on both the organisation and the performance of agriculture, and the question becomes significant in a comparative study of areas with different climatic conditions. The question of the use of surplus by traders is also quite basic to this study and we would
have liked to have more micro-level detailed studies on this aspect. Unfortunately, existing literature, dominated as it is by the search for market integration and competitiveness, virtually ignores the question of expansion or contraction of trading business. By claiming that markets are highly competitive it also implies the existence of low profit rates, and hence considers the problem of surplus utilisation to be secondary. If, on the other hand, one can establish the presence of barriers to entry into trade - the size and the utilisation of surplus becomes critical. Unfortunately, the only way to clarify this issue is through detailed micro-level studies of trade. Finally, we know comparatively little about the political bargaining process involved in the formulation and implementation of agricultural policy by the state. To a large extent, this ignorance is the result of narrowly defined areas of interest by individual social sciences. However, if, as we have argued, agricultural policies of the state are endogenous rather than exogenous variables, then the process of policy formulation is relevant to an understanding of the rural economy. It is hoped that further research would enhance our knowledge of such a crucial area.