CHAPTER 9

CONCLUSION

This thesis deals with changes in agrarian relations with respect to land, production, labour, credit and household income at the level of one village between 1950s and 2000s. Specifically, it looks at how commercialisation of agriculture in the village over a period of 50 years was associated with changes in land relations, cropping pattern, supply and demand for labour, levels of profitability in agriculture, number of days of employment, levels and sources of household income and household amenities. The efforts are to analyse how commercialisation transformed the institutions and technology in agriculture on the one hand, and the extent to which conditions of life in the village changed on the other. The village under study is Maskawad, a village in Jalgoan district of Maharashtra. Commercialisation of agriculture in Maskawad was largely driven, between the 1950s and 2000s, by a progressive growth of irrigation and banana cultivation. The database used in this study comes from a detailed study of Maskawad in 1956-57 and an intensive primary survey of the village in 2010.

In the previous chapters, efforts were made to analyse and examine the changes in agrarian relations with respect to land, labour, production, credit, and household income between 1956-57 and 2009-10. The context for this analysis was the growing agricultural commercialisation, and capitalist tendencies. Considering a period of around 50 years from 1957, Maskawad underwent significant changes in general and agriculture in particular. Agricultural commercialisation expanded rapidly, market forces entered the village, new modern agricultural technologies were introduced and as a result, socio-economic conditions in the village changed significantly. The institutional support role of the state was also weakened in the post-liberalisation period after 1991.

Commercialisation of agriculture has a long history in the Khandesh region. Cash crops like cotton were grown even before the colonial rule to pay land revenue in terms of cash. However, it was not the major driver of agriculture until the 19th century. Under the British rule, in the mid-19th century, the process of commercialisation got underway through different ways: an increase in the demand for cash crops (mainly cotton to supply textile mills in England and later Indian textile mills), expansion in railways and growth in markets and trade. The changes in land settlement in Bombay State also
became a driving factor of commercialisation. First, due to the new land settlement system – Ryotwari – land itself became increasingly commodified, which resulted in the land market expanding rapidly. Further, to pay land revenue in terms of cash, the credit market also expanded and land was used widely as collateral. Secondly, a class of intermediaries, i.e., traders and money lenders, emerged who controlled substantial amount of land.

Though the phenomenon of growing cash crops like cotton and banana existed even before the independence, the share of area under food crops remained considerably high. However, an expansion of markets, agricultural technology and mechanisation in the mid-1970s hastened the process of commercialisation and capitalist tenancies in north Maharashtra in general and Khandesh in particular. Change in the cropping pattern was a main feature of this change. The area under irrigation expanded sharply as result of which gross cropped area under food crops declined sharply and area under cash crops like banana increased. Moreover, other high-value crops like sugarcane and onion were introduced, and area under crops like pulses and ground nut declined. Incidence of use of chemical fertilisers, high yielding variety seeds, modern irrigation technology (tube-wells, drips, sprinklers, electric pump sets etc.) and mechanisation (threshers and tractors) boosted commercial agriculture. Data indicate that the average use of fertilisers, number of tractors, and electric pump sets per hectare was higher in Jalgaon compared to the State as whole. As far as the study village Maskawad is concerned, a sharp increase in number of bore-wells was noted mainly in the mid-1970s. Since investment in bore wells, tube wells and other modern irrigation equipments is relatively expensive, only rich peasants could afford to invest. Partly due to this factor, growing commercialisation also became a driving factor of agrarian capitalist development in the study village.

9.1 Village in Change

A major change observed at the village and district level between 1956-57 and 2009-10 was the change in the cropping pattern; there was an increase in the area under banana. However, cultivation of banana was not a new phenomenon. During the colonial period, banana used to be grown but on a relatively small scale. In 2010, around one fourth of the gross cropped area of the village was under banana alone. There was sharp decline in area under food crops and new crops like sugarcane and onion got introduced in the village, which were not at all grown in 1956-57.
The changes in the cropping pattern were accompanied by an expansion of irrigation, railways, and the market. Specifically, modern and improved irrigation systems in the village made a significant contribution to the changes in cropping pattern and boosted overall commercialisation. The use of metal plough and seed-drill, tractors, threshers and electric pump sets significantly increased in the village. Such a development of agricultural mechanisation also brought in changes in agricultural operations (like replacing manual work with machines). Markets and transport facilities also grew; as a result, new banana markets emerged, which are well connected to the major cities of the country through railway. Commercialisation in agriculture, expansion of market and trade, changes in the forces of production changed the village economy substantially.

Between 1956-57 and 2009-10, there was moderate growth in the village population. Such moderate growth in the population was associated with out-migration due to reasons like spread of higher education, and secured employment in the non-farm sector. Interestingly, there were around 13 households in the village where only a single person (that too old) resided; the rest of the members had migrated to towns. There was very little scope for the expansion of gothan area and hence many households shifted to adjoining village and registered themselves there as village residents. On the other hand, there were new households belonging to different caste groups that migrated into the study village, though their numbers were rather insignificant. Yet, the habitation structure of the village, mainly based on the caste, remained unchanged even after 50 years. The households belonging to lower caste groups were located on the eastern side of the village and this phenomenon did not change over 50 years. There was an improvement in the literacy rate in the village across all caste groups.

### 9.2 Land and Tenancy

Even before commodity production became widespread and wealth was unevenly distributed among the different sections, the agrarian structure of Maskawad was highly stratified. The rapid growth of commercialisation further strengthened socio-economic inequalities.

Growth of commercialisation has historically increased polarisation and levels of land inequality in many parts of rural India. In rural India, land ownership is unequally distributed among different social groups and households (see: Ramachandran et al., 2010; Ramakumar et al, 2009; Bakshi, 2008a). In Maskawad too, land distribution was
unequal and skewed. Land was concentrated in the hands of a few households and a significant proportion of households were landless. In Maskawad, in 1956-57, the top two households in the village (around 7 per cent of all) owned 36 per cent of the total owned land. On the other hand, the bottom 50 per cent of the households owned just 9 per cent of land. The land ownership was heavily concentrated in 2010 also. In 2010, the top 5 per cent of the households owned around 32 per cent of the land, whereas share of bottom 50 per cent of households (including landless households) was zero. The Gini coefficient value of land ownership in 2010 was 0.88. Even in 1957, land was mostly concentrated amongst a single caste group, Leva Patil. This phenomenon remained unchanged in 2010 also. In 1957, the incidence of landlessness amongst Dalit and tribal households was insignificant. Among Dalit and tribal (SBC) households 5.3 and 2.9 per cent of households were landless, respectively. In 2010, around 95 per cent of Dalit and 60 per cent of SBC households were landless.

Some empirical studies (Athreya et al., 1990; Harriss et al, 1991; Attwood et al, 1979) have reached a different conclusion, noting a declining instead of increasing polarisation. In other words, these studies have claimed that landlessness in villages fell moderately. Within this, some studies (Himanshu et al., 2011; Attwood, 1979; Rao, 1972; Reddy, 1985) have taken this phenomenon of declining landlessness as an indicator of an overall fall in economic inequalities and have raised questions on the thesis of de-peasantisation. However, in the present study, it has been argued that along with the growth of commercialisation and penetration of capitalist production relations in agriculture, land as a basic means of production got increasingly polarised over the last 50 years in Maskawad. The results from Maskawad show the continuing relevance of the phenomenon of de-peasantisation and differentiation of peasantry, as Lenin (Cited in Patnaik, 2007) argued. A significant share of small and marginal landholders leased-out their small pieces of land on fixed rent and joined the class of agricultural labourers. The small and marginal landowners losing possession of land and rich capitalist farmers gaining more access to land was the major change noted in tenancy relations.

Tenancy has often been considered as a balancing factor between big landholders and the landless households. In India, available secondary sources of data underestimate and do not provide a true picture on the real incidence of tenancy. However, over a period of time, tenancy relations have significantly changed. In Maskawad, in 1957, the proportion
of land under any form of tenancy was not high. Moreover, sharecropping was more prevalent than fixed rent tenancy. Along with commercialisation and capitalist production relations, major shift from share-cropping to fixed rent tenancy was observed.

An important characteristic of tenancy in Maskawad was the change in the character of agents taking part in the land lease market. In the earlier form of lease market, tenants were pure tenants; those who were landless leased in land from big landholders. Under commercialisation and capitalist tendencies in agriculture, the shift was to small land owners leasing out land to the relatively larger landholders, referred to as ‘reverse tenancy’. This phenomenon was quite prevalent in Maskawad. Fixed rent tenancy in the commercialised region was mutually beneficial to both parties – rich peasants and small landholders. There were two main reasons for the growing incidence of ‘reverse tenancy’ and fixed rent tenancy. First, commercial agriculture required intensive capital investment and smaller landholders were unable to invest at that scale. Secondly, smaller landholders found leasing out small pieces of land on fixed rent more profitable than cultivating it on their own. In Maskawad, per acre rent for lease land was high. Land transfer from small holders to richer and capitalist farmers suggests that the rise in inequality of land ownership and possession has taken place in the background of accumulating more surplus in agriculture. In the context of limited industrialisation in Raver taluka, rich peasants found agriculture to be more profitable and hence they started investing in agriculture intensively. For such investment and optimising maximum profit in agriculture from such investment, demand for land increased sharply.

The development of capitalist production relations and commercialisation in agriculture primarily benefited the rich peasant class. Further, this class of rich peasant responded favourably to agricultural capitalism, not just through high valued cash crops but also advance markets for these productions. Through ownership and lease in on fixed land, rich peasant had control over the productive means of production and had certain degree of autonomy in the credit market because land was used as major collateral to access credit. The diversification of major resource (high investment in irrigation) and accumulation of surplus from agriculture by rich peasants was the most important outcome of commercialisation of agriculture.
9.3 Cost of Cultivation and Profitability

In Maskawad, capitalist production of crops like banana and cotton was highly profitable. Using CACP's cost and profitability method, the profitability ratios for banana and cotton were 2.2 and 2.0, respectively. In the early 1980s, modern technology, mechanisation, and advanced irrigation systems were introduced in the village, which brought considerable changes in agricultural operations and increased productivity. Such changes in production also demanded employment of more labour days in agriculture. It was noted in the 1957 report that most of the operations in the village were carried out by the members of the cultivating households. However, with the labour-augmenting changes in cultivation, more skilled labour was in demand, and hence, production shifted from family labour to hired labour. As noted by Patnaik (1990), under the development of capitalism in agriculture, production on the basis of hired labour was more prevalent in commercialised regions.

Despite a fall in the share of gross cropped area, jowar remained one of the important crops in 2009-10. An interesting feature noted in the village was that Jowar was mainly cultivated by smaller landholders. However, as banana and cotton became more profitable and surplus generating crops, a significant shift from jowar to these cash crops took place in the village. New high yielding varieties and hybrids of cotton and Bt-cotton, introduced in early 2000s, became popular. As a result, the area under traditional cotton declined. In 2010, the output per acre of Bt-cotton was higher than for other hybrids and varieties of cotton, although the cost per acre was higher in Bt-cotton cultivation. Therefore, the profitability ratio of Bt-cotton (2.2) was lower than the hybrid cotton (2.5). In 1956-57, with traditional cotton, the profitability ratio was low at 1.6. It was also observed that for Bt-cotton, the share of family labour was lower than in non-Bt hybrid cotton.

It needs to be reiterated that one of the features of commercialisation of agriculture is higher marketed surplus of agricultural produce. In 2010, around 97 per cent of the total agricultural produce was marketed in Maskawad and the main reason was growth in the cultivation of cash crops. Another notable fact observed was the positive relationship between land size holdings and the share of marketed agricultural produce. Most of the small landholders who were cultivating their land by their own were involved in subsistence production and not cash crop production. Along with the growth of commercialisation came higher income inequality among the cultivating households. The
average net farm business income (FBI) per households in 2009-10 was Rs. 1,65,096; the highest net farm business income received was Rs. 16,07,485 and the lowest was in the negative.

On examination of farm size productivity, the results from this study show that there was a positive relationship between farm size and per acre productivity in Maskawad. The argument put forward by scholars (Sen, 1962; Khusro, 1964; Saini, 1969) that there is an inverse relationship between farm size and productivity per acre did not stand up to scrutiny in Maskawad. The proponents of this thesis had argued that in India, small farms were more productive than the large holdings because of intensive cultivation. The populist notion of ‘self exploitation’ introduced by Chayanov was not observed since the proportion of family labour in the commercialised region was insignificant. In commercially advanced region, productivity in agriculture was determined by multiple factors such as irrigation, use of modern technology and machinery, proportion of labour use, availability of credit for purchasing inputs and quality of land.

9.4 Size of the Labour Force

On the one hand, land ownership data showed that the process of de-peasantisation was prevalent in the village; on the other hand, the increased share of agricultural labourers in the workforce showed that a process of proletarianisation was also taking place. In Maharashtra, between 1961 and 2011, the share cultivators in the workforce declined from 57.3 per cent to 42.1 per cent, whereas the share of agricultural labourers in the workforce increased from 29 per cent to 39.4 per cent. In Jalgaon district, such a decline was sharper compared to the State as whole. In the case of Maskawad, both the census data and resurvey data showed that, between 1960s and 2010s, the share of agricultural workforce in total population declined, share of cultivators in the workforce fell and the share of agricultural labourers in the workforce rose. The work participation rate was at 54.7 per cent, higher than the state average. Moreover, amongst the landless Dalit and SBC households, the work participation was higher than the landed OBC caste groups.

In Maskawad, the nature of relationship between labourers and employers underwent considerable changes between 1956-57 and 2009-10. Data based on interviews showed that a major change was the decline in attached/unfree labour, which was replaced by daily wage free labour and contract labour arrangements with different terms and conditions. Short term contracts became more prevalent in the village. According to the
earlier study, the concept of \textit{saaldar} or \textit{salagadi} was more evident in 1956-57. These workers had to work not only in the agricultural field but also do household work. Along with the annual salary (partially in terms of kind), attached workers used to get perks such as cloths, grain and food. In the new labour relations, no perks were offered to workers by the rich peasants. The practice of payment of wages in kind stopped completely in the village and all wages, including wages for grain harvesting, was paid in cash.

There has been a shift from long term labour contract to short term labour contract in agriculture, which was preferred by both parties – cultivators and labourers. Along with the daily wage, ‘piece rated work’, especially in banana and cotton crops, was popular in the village. In case of banana, piece rated work was offered on the basis of number of plants and for other crops such as soyabean, tur and jowar, it was based on the area worked.

\section*{9.5 Demand for Labour in Agriculture}

The level of demand for labour varies across crops, agricultural operations, gender, regions etc. and is determined by multiple factors, which may be land and labour augmenting. The crop- and operation-wise examination of labour demand/absorption in Maskawad showed an increase in labour absorption for cash crops i.e., banana and cotton, and a stagnant labour absorption for food crops. The average human labour use per acre in banana was 197 days, assuming 8 hours per day of work. It is important to note that banana occupied the field for the whole year and not just one season. The gender specification in agricultural operations was more prevalent in banana cultivation. The proportion of male workers employed was slightly higher (102 days) than of female workers (95 days) employed. A significant share of male labour input was used in irrigation. Despite having drip irrigation in all banana fields, male labour input remained important due to the need to supervise it. In other skilled operations like de-suckering and removal of \textit{male buds} also, male labourers were used in higher proportion than female labourers. On the other hand, for operations like hand weeding, transplantation, and harvesting, female labourers were intensively used.

The comparison between 1956-57 and 2009-10 showed that even though the overall labour absorption increased from 163 days to 197 days, male labour absorption declined and female labour absorption rose in banana cultivation. Such a fall in male labour days
was a result of labour-saving changes - mechanisation of ploughing and other operations related to land preparation as well as changes in specific cultivation practices. On the other hand, the rise in female labour absorption was a result of land-augmenting technological changes. In cotton cultivation, due to Bt-cotton, labour absorption increased, mainly for female labourers. The higher productivity in Bt-cotton increased the number of picking rounds in cotton (Ramakumar et al, 2009).

It is evident from the data that new agricultural technology has had a significant impact on the labour use/demand and cultivation practices. Due to mechanisation of certain agricultural operations, labour demand for male workers declined and that for female workers rose. I have argued that there is a positive relationship between the more intensive use of agricultural technology and the incidence of reverse tenancy in the commercial cultivation of banana in Maskawad. The ownership of new machines and equipments were highly expensive, and these machines and equipments were fairly limited in number and distributed very unequally. This required that large capital investment was necessary for cultivation, which was increasingly becoming difficult for the majority of small and marginal landholders.

9.6 Some Features of Employment

In Maskawad, in 2009-10, primary agricultural labourers were employed for around 5 months (152 days) a year. Within this, female agricultural labourers received higher number days (165 days) of employment than the male labourers (137 days). Crop-wise analysis shows that the largest share of agricultural employment came from cash crops – banana and cotton. Since banana was a perennial crop, more than half of agricultural employment was in banana cultivation. Banana and cotton together provided 70 per cent of the total days of employment in 2009-10. In the absence of any industrial development in nearby villages and towns, the share of non-agricultural workers in total working population was low at 17 per cent. However, the average number of days of employment in daily wage non-agricultural work was 154 days in a year. Salaried work was largely available only for Leva Patil household members, which was because of their achievement in higher education. The share of socially marginalised caste groups in salaried employment was extremely low.

There was a fall in the number of days of agricultural employment per worker between 1957 and 2010. The average number of days of agricultural employment for daily
agricultural labourers was 195 days in 1957, which fell to 147 days in 2010. The previous chapter on demand for labourers showed that overall labour absorption in different crops increased due to new agricultural technology and cropping pattern. However, such increased demand for labour in agriculture did not reflect on the number of days of employment in the village. There were multiple factors responsible for this phenomenon: disappearance of labour-intensive crops like jowar and ground nut; introduction of modern irrigation (drip) and mechanisation that reduced employment days for male workers; increased enrolment in schools; growing employment in non-agricultural activities; and stagnant trends in output prices, which to some extent, led to the substitution of hired labour with family labour.

The primary data based studies in different parts of India show that the average days of employment for primary agricultural labourers was much lower. In Maskawad, agriculture remained an important source of employment, in spite of relatively lower wage rates in agriculture. This was mainly because of intensive commercial agriculture and the relative absence of non-farm sector employment. Due to the unavailability of alternative employment options/opportunities, the bargaining power of labourers remained weak and they had no option but to work on lower wage rate.

### 9.7 Income, Credit and Poverty

Distribution of household income was extremely skewed and unequally distributed. A large share of households received a few hundred rupees of income per month, while a few households had incomes of a few lakh rupees a month. If we see the distribution of net income across the top and bottom households, the top five per cent of the households obtained around 45 per cent of the total net income, while the bottom 50 per cent received just 9 per cent of the total income. The Gini co-efficient for the distribution of household income was 0.91.

In any rural economy, caste plays an important role. Caste dominance is deeply rooted in the control over the means of production and incomes. Leva Patil (OBC) was the dominant caste group in terms of land ownership. This caste group also received a significant share of net income in the village: 82 per cent (their share in population was 56.8 per cent). The survey also showed considerable inter-caste income inequality in the village. In 2009-10, the richest household received an annual income of Rs 15 lakhs, and the lowest income was a negative income; both these households were Leva Patil
households. The SC (Dalits) and SBC households were almost wholly represented in lowest income quintile. These two caste groups together received 13.3 per cent of the total net income in the village, while their share in the number of households was 36.1 per cent.

For the cultivating households, a significant share of income in the total net income of the village came from crop production: 43.5 per cent. Non-agricultural activities were also an important income source at 41 per cent. However, this was limited to a few Leva Patil households. For SC and SBC caste groups, the major share of income was from daily wage employment in agriculture and non-agriculture work.

In India, measurement of income-poverty is based on per capita consumption expenditure. When I applied the Rangarajan poverty line i.e., Rs 829 per capita per month for Maharashtra, half of the total population of Maskawad was below the poverty line. A higher proportion of poor households was reported amongst landless, Dalit and SBC households; they relied merely on daily wage employment for incomes. Level of asset distribution was also highly skewed and varied across caste groups, land holding sizes and occupations. Again, Leva Patil was the largest asset holding caste group in the village and the share of land in total asset wealth was considerably high.

In Maskawad, the credit market also witnessed a change. However, informal credit still dominated the credit market with the money lender continuing to have the major share of credit taken by households. In 1991, as a result of changes in credit policies (Chavan, 2014) the dominance of formal credit declined and there was an increase in the share of credit from informal sources. The expansion of formal credit played an important role in Maskawad; however, it remained poorly developed and did not sufficiently meet the growing credit demand of small and marginal cultivators. The benefits from the expansion of institutional credit were not equally spread to all sections of the peasantry. Due to their control on means of production, the capitalist rich cultivators benefited more than the small cultivators. Small and marginal cultivators continued to depend upon the informal credit market for their production and consumption requirements.

In 2010, about one-fourth of the total debt of the households continued to be supplied by the moneylenders. The shares in total debt of the credit supplied by the village co-operative society and public sector banks were only 17.7 and 3.2 per cent respectively. About 45 per cent of the total debt was borrowed from friends and relatives at zero
interest rates. In brief, institutional credit in the village was poorly developed, even after significant steps towards ensuring financial inclusion policy in recent years.

9.8 Summing up

Shift from food crops to high value cash crops, changes in land relations, introduction of modern agricultural technology, development in communication and expansion of irrigation strengthened the market-nexus and capitalist tendencies in Maskawad village economy between 1957 and 2010.

Over a period of about 50 years, the level and degree of agricultural commercialisation in Maskawad intensified. A large share of the gross cropped area in the village was cultivated with cash crops, such as banana and cotton. The adoption of modern technology, mechanisation, use of fertilisers and pesticides, expanding markets and the spread of irrigation boosted commercialisation. There was, thus, a major advance in the forces of production in agriculture, which further contributed to the growth of agrarian capitalism. Intensive commercial agriculture led to an increase in the average per household income in the village. However, commercialisation was uneven. Distribution of ownership and operational holdings in the village was extremely concentrated and unequally distributed. Between 1956-57 and 2009-10, there was a sharp increase in landlessness, particularly among the socially marginalised groups like Dalits and SBCs. The form of tenancy changed over this period of time, and the extent of reverse tenancy grew. The inability of small and marginal farmers to take part in the process of capital investment in agriculture led to an intensification of the process of proletarianisation.

The intra-village income disparity rose significantly between the 1950s and 2000s. It was found that a substantial section of the households were receiving few hundred rupees as monthly income, while on the other hand, a smaller section of households received few lakhs of rupees as monthly income. Half of the village population was below the official poverty line. Asset distribution was highly skewed against the Dalit and SBC households. The institutional credit system was poorly developed, and only the landed and dominant caste groups had access to institutional credit. There was a continuing dominance of moneylenders in the debt portfolios of Dalit and SBC households. The access to basic amenities was also poorly developed, particularly among the Dalit and SBC households.
The findings of this study provide further support to the broader thesis that the agrarian question in the Indian countryside cannot be resolved without seriously addressing questions related to caste, class and gender based exploitation.