During past five decades or so, Bangladesh has experienced enormous changes in all spheres of activity - political, social and economic. The changes were phenomenal specially in the two decades after independence when the state expanded and intensified numerous development programmes launched earlier. As a result, social mobility, exposure and access of the people to the outside world, and adoption of family planning substantially increased, infrastructure remarkably developed, use of modern technology in agriculture considerably spread, a large variety of nonagricultural income opportunities cropped up, and a powerful elite and a large middle class sprang up. All these changes indicate that the important preconditions for take-off have been created in the economy. Despite this, the economy still remains stagnant, impoverished, and densely-populated. The crucial macroeconomic indicators such as savings, investment and growth continue to remain at a low level for a long time. The variables sometimes fluctuated within the narrow amplitudes, but they demonstrated a strong tendency to stabilize at a low level. It appears that there is a sort of low-level equilibrium in the economy and that the equilibrium is dynamically stable. The dynamic stability of low level equilibrium implies that the economy neither develops nor crashes.

One can hardly forbear to ask the pertinent questions: why is the tremendous population pressure not leading the
economy to the Malthusian crash—that is, how is the rapidly growing population absorbed? Again, why did the massive development activities of the state fail to eradicate stagnation and reduce the incidence of poverty?

Explanation of these apparent perplexities are likely to lie in the nature of the dynamics of the economy. It is not the mere number or volume of changes which is important for economic development. Rather, it is the type of changes which matters most. There are some changes which lead the economy to transform take-off into visible growth, while some changes do not lead even to a take-off. Geertz first detected the difference between these two types of changes which may occur in the densely-populated agriculture-dominated developing economies. He observed that the economies of Japan and Java were extraordinarily similar in the mid-nineteenth century and that they have considerable similarities even today. However, the changes which took place in the two economies during the last one century and a half have completely transformed Japan but failed to bring about a successful take-off in Java. Geertz argued that such difference in development was caused by the difference in the nature of changes in the two economies. Japan drastically improved technique of production of agriculture without enlarging the size of agricultural population—she absorbed the growing population in the ever-expanding manufacturing sector. As a result, Japan could increase both per acre and per capita productivity in agriculture, raise per-hour
returns to labour, and improve the level of living of the people. On the contrary, there was no significant expansion of the manufacturing sector in Java. Java absorbed the growing population in agriculture by resorting to the practice of "sharing of poverty" - by increasingly adopting labour-intensive techniques of cultivation, by sharing out of employment opportunities in the villages, and by reducing per capita consumption and nutrition standard. This absorptive process (or the traditional elastic qualities of the villages) was termed by Geertz as one of involution, in the sense that this process involves the increasing elaboration of the socio-economic structures rather than transformation of older structures.

The involutional process results in the dynamic stability of a low level equilibrium in the economy. As this process continues to operate, the economy does not crash, because the increasing population is somehow absorbed, at lower and lower level of living of course, in the rural society. The economy does not develop either. So long as the economy has introversive tendency to absorb growing population through intensification of the existing structures and people have the adaptability to the declining levels of living, the new structures will not emerge.

There is another process which acts closely with the involutional process to prolong stagnation in the economy. Increasing development activities accelerate the pace of
differentiation in the rural society, gradually bringing into being a powerful wealthy class. In most of the developed countries, increased differentiation contributed to economic growth by generating savings for industrial investment. But Geertz (1963) as well as White (1976) observed in rural Java that the rich class is unusually fond of conspicuous consumption and unproductive use of wealth - the class saves or invests very little.

The economy of Bangladesh resembles the economy of Java in some crucial respects. Both have a long colonial past, both are extremely densely-populated, agriculture is the predominant sector and rice cultivation dominates agriculture in both, both have been carrying out development activities for long, but both are still stagnant and impoverished. Such striking similarities between the two economies point to the possibility of the likeness of the nature of changes which have come about there in the recent decades. Therefore, as for Java, an investigation of changes in the Bangladesh economy can unravel the important factors which have stuck the economy on the threshold of take-off.

The present study purported to trace the important changes which have occurred in the rural economy of Bangladesh, examine the nature of changes, and assess the impacts of changes on economic development. The specific objectives of the study were to ascertain the nature and pace of involution and differentiation, and to determine the relationship of the interplay of the two processes with the
prevailing stagnation and the increasing poverty in the economy. The broad hypothesis was: An involutional process is operative in the economy, which, in conjunction with the process of differentiation, has led to economic impasse with high incidence of poverty. The study is based on primary data collected through an intensive survey in two villages of Bangladesh.

The thesis was organized in two parts. Part 1, which comprises chapters 2, 3 and 4, selected the approach, derived the specific hypotheses and determined the methodology of empirical investigations for the study. Chapter 5 through 8 constitute Part II to analyse the results of the field survey.

Chapter 2 briefly discussed the nature of changes in the major indicators of the Bangladesh economy. The objective of the chapter was to highlight the main features of the economy in order to facilitate better conceptualization of the specific problem under the present study and selection of the exact approach of the study. The chapter has shown that Bangladesh is an extremely densely-populated country where the rate of growth of population is also high. In 1991, there were 728 persons per kilometre and the rate of population growth was 2.2 per cent. Since mid-1970s, a large number of people have been migrating to different countries for employment. During the last two decades, employment in the non-agricultural sectors, mostly
in the service sector, has rapidly increased. Unemployment has declined in the recent years. The work-duration of labourers has also increased, but per hour returns to labour are miserably low.

During the last three decades, adoption of modern technology has substantially increased in Bangladesh agriculture. As a result, cropping intensity, cropping pattern and per acre yield of paddy have increased. All these factors together have led to appreciable increase in total agricultural production. But per capita production of paddy remains almost constant during the post-liberation period. The average size of farms has rapidly declined and landlessness increased during the last two decades. Inequity in land distribution has increased.

After liberation, the government expanded and intensified the development programmes launched earlier. The development activities of the state have resulted in spectacular infrastructural development in the economy. Despite this, the proximate determinants of development do not show any discernible change. The percentage of savings has been fluctuating around a very low level - most often less than 3 per cent. The proportion of investment has been declining. Real per capita income has been practically standstill since 1982-83. So is export. A severe stagnation persists in the economy. The rate of growth of industrial production declined from 4.3 per cent during 1975-80 to 2.5 per cent during 1980s. The rate of growth of GDP declined

It is evident in this chapter that a dynamically stable low level equilibrium exists in the Bangladesh economy. Despite all development efforts of the state, the economy remains stagnant and impoverished.

Chapter 3 has reviewed the important approaches to rural development in order to single out the appropriate approach for the present study. Broadly speaking, there are four modern approaches to rural development in the literature: structural approach, neo-populist approach, decision-making models, and systems approach. The structural approach, like the classical Marxist approach, emphasizes the structure of social relationship which are based upon the differences in the ownership and control of resources. The processes of differentiation of the peasantry and of commoditization are, according to this approach, the major sources of change in the agrarian societies. However, compared to the classical Marxists, the structuralists or the neo-Marxists were more liberal and accommodative. Almost all of them maintained that, despite differentiation of the peasantry, the small peasants will survive. The neo-Populists, the counterpart of
the populists in the contemporary era, considered that there is no significant differentiation of the peasantry. The peasants are homogeneous and peasant production is stable. In their view, redistribution of land in favour of the small peasants alone can develop agriculture considerably. The decision-making models, like the neo-classical studies, emphasize the role of individual peasants and efficient resource allocation. In the systems approach, the physical factors such as soil, environment and population are considered as the main determinants of poverty and underdevelopment.

Hunter and Chambers held that the structures of social relationships, the physical conditions of the society and the behaviour of the individual peasants are all important determinants of rural development, although their relative significance varies over time and space. Considered from this point of view, each approach is partial: there is some truth in each, again each ignores some crucial factors. The structuralists emphasized the social character of production, and ignored the physical conditions and the independent role of the individual in decision-making. The systems approach emphasizes the physical conditions, but neglects the social character of production. The decision-making models deal only with the individual's choices and decisions, ignoring the role of physical conditions and the social character of production. The neo-populist approach is very narrow in its coverage: it only explains the efficiency and survival
capacity of peasant production, ignoring all other aspects of the rural economy.

Chambers suggested that a balanced pluralist approach, instead of any partial approach, can better capture the complex realities of rural society. The involution and shared-poverty approach appears to be pluralist in argumentation and coverage - it has internalized the crucial elements of all approaches.

According to the involution and shared-poverty approach, both agricultural involution and differential access to land are responsible for pervasive poverty and economic stagnation in a densely-populated and agriculture-dominated developing economy like Java. While agricultural involution reflects the absorptive capacity based on the physical conditions such as population and environment, differential access to resources is determined by the initial distribution of assets and income and the changing bargaining power of richer and poorer villagers. This approach also emphasizes the behavior of the rich peasants as regards use of wealth and their role in enhancing the rate of saving and investment in the economy.

Chapter 3 concluded that, among all the approaches to rural development, the involution and shared-poverty approach can most appropriately capture the issues under the present study, because this approach is pluralist in argumentation, it addresses the problem of rural development in densely-
populated society and it explains the factors which sustain the low level equilibrium trap in a rural economy.

Chapter 4 discussed the conceptual framework underlying the "involution and shared poverty" approach and the method of collecting primary data.

The conceptual framework divulged the chain of interrelationships among the important economic variables of a densely-populated agriculture-dominated developing economy and delineated the specific hypotheses of the study. A schematic model was utilized to display the functioning of the economy. The model showed that population growth and development efforts of the state are the fundamental factors which via their effects on a number of intermediate variables bring about changes in the economy. Population growth and development programmes have contradictory effects on the intermediate variables and proximate determinants of growth. Increased per capita income and reduced inequity in income and asset distributions are the important preconditions for self-sustained economic growth. Population growth reduces per capita income by reducing size of holding, increasing unemployment and lowering the returns to labour. On the contrary, the development programmes increase per capita income by raising per acre agricultural productivity and expanding employment opportunities. Population growth causes sociological differentiation among the peasantry while development activities increase differentiation along the class lines. The resultant net impacts of population growth
and development activities are determined by the relative strength of the effects of the two. Per acre output and per household labour income will increase, but per capita output and income may not increase. However, due to increasing rural differentiation, total income of few rich households will substantially increase while the vast majority of households may remain poor. The rich households indulge in conspicuous consumption and unproductive use of wealth, rather than saving or investing. As a result, the rural sector cannot contribute to development of the industrial sector. The economy remains stagnant and impoverished.

In order to empirically examine the propositions embodied in the conceptual framework, primary data were collected from two villages. Dhaneshwar, a relatively developed village, was selected from the Comilla region and Hassanpur, a backward village, was selected from the Noakhali region. Data were collected in 1991 from all the 1972-91 cohort households of the villages using six different schedules for six different categories of variables. The general household schedule was administered twice in the year to collect data on the background characteristics and landholding. The employment schedule was administered weekly to collect daily information on employment and returns to labour. Data on costs and returns of paddy productions were collected at the time of sowing and harvesting in each crop season of the year. Data on the daily food-intake were collected for one full day of each week of one month. Data
on non-paddy income and non-daily consumption were collected monthly. Data on savings and investment were collected at the end of the year.

Part 11 examined the tenacity of the important propositions which emerged from the conceptual framework, based on the results of the field survey.

Chapter 5 analyzed the change in the size and distribution of landownership, mobility of households, and the determinants of change in landownership which occurred in the study villages during 1972-91. The objective of the chapter was to find out the nature and pace of differentiation of the peasantry and indicate whether the landownership-related features of involution exist in the villages. There are at least three distinct views on the nature of differentiation of the peasantry. The Marxists argued that, with development of capitalism in agriculture, the peasantry will be completely polarized into two extreme classes. On the contrary, the populists maintained that there cannot be any real differentiation of the peasantry. The neo-Marxists or the structuralists combined the main arguments of the two extreme approaches - classical Marxism and Populism - to hold that the peasantry differentiates but the small peasants will survive. The results of the field survey clearly showed that the concentration of holding increased in both the villages, but more in Hassanpur; the proportion of landless and marginal households increased in
both the villages, but more in Dhaneshwar; and the middle peasants continued to exist in both the villages, although they had slightly weakened in Dhaneshwar and strengthened in Hassanpur. The findings thus conform to the neo-marxist view on the nature of differentiation of the peasantry.

Despite some increase in inequity in distribution in land, the highest proportion of households remained stable during 1972-91 in each village. Stability of households was higher in Dhaneshwar. The findings provide support to the familiar "polarization and persistence" hypothesis of Bhaduri et al. The rate of household mobility was not insignificant, however. Downward mobility was higher than upward mobility in both the villages.

The persistence of high stability of households amidst the process of polarization indicates that involution is operative in the villages. However, so far as the change in landownership is concerned, the pace of involution is lower in Hassanpur than in Dhaneshwar - in Hassanpur the average size of holding slightly increased and, in addition, stability of households was lower.

Inheritance was the main source of landownership in both the villages, which indicates that inheritance is the predominant cause of change in landownership over generations. Land market was still underdeveloped in the villages. However, during a particular generation, change in landownership was caused mainly by transaction of land. The
findings suggested that differentiation in both the sociological and materialist senses operates in the villages, but the sociological differentiation is much stronger. In other words, the process of differentiation is not conducing economic development by increasing savings or investment.

The objective of Chapter 6 was to trace the changes in occupations of households and employment pattern of household members in the study villages. As regards occupation and employment, the main hypotheses underlying the involution and shared poverty approach were as follows. As population grows at a high rate in a rural society, occupation multiplicity of households increases, although the main occupations may remain stable for a long period. The household members are increasingly engaged in a variety of activities in order simply to subsist. With the increasing pressure of population, outmigration of labours increases. Unemployment may not increase, but underemployment definitely increases over time in that the rate of participation and the rate of work-duration may be high but returns to labour gradually decline.

The results of the field survey revealed that most of the households in the villages remained stable in terms of their main occupations during 1972-91. But the proportion of stable households was much higher in Dhaneshwar (73 per cent) than in Hassanpur (57 per cent). Occupational multiplicity increased by 5.77 per cent in Dhaneshwar and 32.35 per cent in Hassanpur. The rate of participation among the adult
males was higher than 90 per cent during the period and it slightly increased in both the villages. A striking finding of the survey is that during 1972-91 a large number of persons migrated from Hassanpur to different countries, mostly to the neighboring ones, for employment. The outmigrated labourers constituted more than 38 per cent of total employed males and about 59 percent of households sent some member(s) abroad for work.

The duration of work was quite high in Dhaneshwar but low in Hassanpur. The employed males in Dhaneshwar on average worked for 278 days in 1991 and for more than 9 hours per day, but those in Hassanpur worked for 146 days and for 8.50 hours per day. The work-duration remained almost unchanged in Dhaneshwar during the period. But in Hassanpur it declined due mainly to increased use of power-tillers by the cultivators. The returns to labour were miserably low in both the villages, but lower in Hassanpur.

Thus, in so far as changes in occupation and employment are concerned, there is agricultural involution in both the villages. Occupational multiplicity and outmigration of labour increased and returns to labour declined more in Hassanpur, indicating that the pace of involution assessed in terms of the changes in occupation and employment was higher in Hassanpur than in Dhaneshwar.

Chapter 7 examined the changes in household production and income in the study villages. The objectives of the
chapter were to assess whether the productivity-related features of agricultural involution exist and to ascertain the pace of rural differentiation in the villages. Geertz observed that increasing population pressure enhances adoption of new technology in agriculture. As a result, he maintained, output per acre may increase but output per capita will remain constant or even decline. White argued that, with increased development efforts, the per capita productivity of the wealthier peasants may rise but the per capita productivity of the majority of households may not rise or even fall. This chapter intended to examine the aptness of these hypotheses. In order to trace the trend of household productivity, four alternative measures of agricultural production were computed: gross produce, value added, net output and net return. The findings of the survey explicated that adoption of modern technology in agriculture substantially increased in both the villages during 1972-91. As a result, the per acre gross output and the per acre value added increased and the per acre net output and the per acre net return declined in both the villages. But the per capita productivity, computed in terms of any of the four measures, declined in Dhaneshwar. However, the per capita productivity, computed in terms of all measures but for the net output, increased in Hassanpur. The findings suggested that, as far as change in agricultural productivity is concerned, agricultural involution is operative in Dhaneshwar but is not in Hassanpur. The findings also adumbrated that
the per acre net output and the per acre net return for the sizeclasses which contained sharetenants declined in both the villages, but more in Dhaneshwar, due to declining bargaining power of the tenants.

Chapter 7 has shown further that total and per capita income sharply increased in both the villages, but more in Hassanpur, due mainly to increase in income from various nonagricultural sources. Inequity in income distribution marginally declined in Dhaneshwar but increased in Hassanpur. The economic mobility was low in Dhaneshwar but quite high in Hassanpur.

Thus, it appears that in terms of the change in the per capita agricultural productivity there is involution in Dhaneshwar but the involutional tendency is yet to be discernible in Hassanpur. There was no differentiation as such in Dhaneshwar, but the Hassanpur households considerably differentiated. There was also no stagnation in any village in terms of change in per capita income.

The objectives of chapter 8 were to assess the level of food consumption and nutrition intake in the study villages and to examine the role of households in the process of overall economic development. Low level of per capita intake of food and nutrition is an important feature of involution and, therefore, assessment of food intake was needed to determine the extent of involution in the villages. The rural households can contribute to industrial development by
increasing savings for industrial investment and demand for industrial output. Chapter 7 has shown that per capita income markedly increased in the villages during 1972-91. One objective of chapter 8 was to find out whether increased income led to substantial increase of the saving rate and demand for industrial products.

The results of the field survey revealed that the average propensity to consume (APC) was very high—more than 80 per cent—in each village. The proportion of food expenditures to total consumption expenditures was also very high—50 per cent in Dhaneshwar and 60 per cent in Hassanpur. But the amount of intake of food and calorie was low. The average per capita daily intake of calorie was only 2045 kilo in Dhaneshwar and 1987 kilo in Hassanpur in 1991. The average calorie intake in each village was lower than the amount required by a person to remain above the absolute poverty line. The incidence of poverty was high in the villages. The proportions of people living below the extreme and the absolute poverty lines were 39 per cent and 46 per cent, respectively, in Dhaneshwar and 33 per cent and 48 per cent, respectively, in Hassanpur.

Despite high APC, demand for industrial products was low in the villages. The expenditures on industrial goods constituted 16.91 per cent of consumption expenditures in Dhaneshwar and 16.53 per cent in Hassanpur.
Although the number of deficit-afflicted households was higher than the number of surplus-endowed households in the villages, a considerable amount of surplus accrued in each village in 1991. The amount of surplus accounted for 27.76 per cent of disposable income in Dhaneshwar and 16.69 per cent in Hassanpur in 1991. But only a small portion of surplus was actually saved - 31 per cent in Dhaneshwar and 25 per cent in Hassanpur. In other words, savings constituted only 9 per cent of disposable income in Dhaneshwar and 4 per cent in Hassanpur. The major portion of surplus was used for non-productive purposes such as purchase of land, construction of luxury houses, investment in informal money market and investment in hoarding business. The amount of net savings was only 2 per cent of disposable income in each village. During 1972-91, a huge amount of surplus was generated in the villages. But savings constituted only 24 per cent of surplus in Dhaneshwar and 17 per cent in Hassanpur. About 70 per cent of surplus was used for construction of luxury houses and purchasing land in towns or cities.

It appeared from analysis in chapter 8 that in terms of the levels of food consumption and nutrition there is involution in both the villages and the extent of involution is higher in Hassanpur. In both the villages demand for industrial products and the saving rate were very low. The findings indicated that low demand for industrial products and low saving rate in the villages of Bangladesh may be the
important causes of persistence of economic stagnation.

In short, the study has come out with the following findings: First, the crucial features of involution are present in the study villages. The features which are common in both the villages include persistence of high stability of households amidst the process of polarization, high occupational multiplicity of households, emergence of a large number of non-agricultural income opportunities, and low intake of food and nutrition. The villages do not differ much in respect of these features of involution. However, during 1972-91, the per capita agricultural output declined in Dhaneshwar, the relatively developed village, while it increased in Hassanpur. On the other hand, outmigration of labourers was surprisingly high in Hassanpur while in Dhaneshwar there was no considerable outmigration. On the whole, involution is operative in a significant degree in both the backward and the relatively developed village, implying that the development activities contributed to the process of involution rather than accomplishing economic development proper. Along with increased adoption of modern technique of agricultural production in the villages, the benefits of increased urbanization in Dhaneshwar and huge outmigration of labourers in Hassanpur have intensified the involutional process. Second, the peasantry is differentiating in both the villages, but at a higher rate in Hassanpur. However, it is mainly the sociological differentiation, instead of the materialist differentiation,
which is operative in the villages, so that the differentiation process does not conduce economic development. During 1972-91, rural differentiation was not discernible in Dhaneshwar, but it was pronounced in Hassanpur. Finally, during 1972-91, per capita income substantially increased in the villages. But such income increase has not contributed to industrial development, since neither the savings nor the demand for industrial products have shown any appreciable increase in the villages.

The findings from only two villages can not reflect the pattern of change of the whole economy. Moreover, the finding that per capita income considerably increased in the study villages during 1972-91 seems to distinguish them from most of the villages in Bangladesh. During the period, village Dhaneshwar immensely benefited from rapid expansion of the adjacent urban centre and Hassanpur from huge outmigration of labourers. These are the major factors to cause increase in per capita income in the villages. It is very likely that these benefits did not accrue to most of the villages in Bangladesh during 1972-91. These notwithstanding, the villages of Bangladesh in general demonstrate appalling homogeneity in respect of the socio-economic conditions. Given this, it can plausibly be assumed that in a large number of villages the processes of change as observed in the study villages operate. The processes have profound implications for development. As discussed at the outset, so long as involution operates, the economy does not
develop. In fact, involution is both a symptom and a cause of underdevelopment: symptom of underdevelopment, because the process operates only when the economy does not develop, and cause of underdevelopment because transformation of the economy is not possible in an involuted economy. Added to this is the growth-blocking differentiation process. The interplay of the two processes has produced a deep-rooted bottleneck to development in Bangladesh.

Some of the changes in the Bangladesh economy which are sometimes perceived as the sign or the precursor of development are actually the manifestations of involution. Increase in urbanization unaccompanied by proportionate pace of industrialization, expansion of markets and growth of shops in the rural areas when production is not increasing, excessive development of the infrastructures even when it is found not to have been inducing production increase, increase in adoption of modern technology in agriculture when neither the net return nor the per capita output rises, increase in employment in the non-traditional activities when the per hour returns to labour decline, etc., lead only to sharing of poverty among the relatively poor villagers and conspicuous consumption and unscrupulous use of wealth by the rich, and not to increase of 'real' growth rate. These changes do not reduce poverty, except for a short while, either. They only help and also induce the common villagers to remain at the subsistence level.

In order to develop, the economy has to exterminate or at least abate the introversive tendency of the economy as
manifest in the involutional process. This requires drastic shift in orientation of development programmes. Among the development programmes which are being implemented at present, few are aimed at alleviating poverty temporarily and still fewer are designed to promote economic growth. Most of the programmes are launched to bring about such changes in the economy as unnecessary expansion of roads and transport, expansion of non-productive urban centres, undue growth of markets and shopping centres, massive construction of luxurious houses and increased use of consumer durables. As a result, the development efforts of the state have failed to foster growth even during a long period, nor did they mitigate poverty on any significant scale. Instead, they have intensified the process of involution in the economy, heightened the pressure of inflation, and enhanced leisure and extravagance of the newly-created elite class of the society. In order to dilute the involutional process and realize self-sustained growth, emphasis has to be shifted from non-productive development activities to the activities which directly redound to growth increase. In doing so, priority should be given to the growth-oriented activities which do not collide with the objective of poverty alleviation, although increased investment in the growth augmenting projects even at the cost of poverty-ameliorating schemes may become unavoidable to alleviate poverty in the long run. Alongside with such reorientation of development activities, effective measures, be they coercive if needed,
should be adopted to channelise the rural surplus into industrial investment.

A licit and tenable generalization of the findings and implications of the present study requires a more extensive study to be carried out in a representative sample of villages. A set of panel data collected from the cohort households of the villages at different points in time with a fairly large gap in between should be generated to obtain the national pattern of the dynamics of the rural economy of Bangladesh.