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Relevance and Implications of Some of the
Economic Theories on Present Day
LDCs ^{Industry} ~~Industrialisation~~

DILIP KUMAR ROY*

May 1990



বাংলাদেশ উন্নয়ন গবেষণা প্রতিষ্ঠান

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R E F E R E N C E S

1. INTRODUCTION

Interest on development economics has declined in the last quarter of this century. In fact, economics students of western world are no more interested to register in development economics course. There are indications about the deteriorating prospects of development economics science in the writings of Dudley Seers (1979), Paul Streeten (1981), Albert Hirschman (1981) reprinted in Theofanides (1988). Does it now relate only to the less developed economy? Is it due to the conflicts of interest between the developed and under-developed world? This conflicting interest reached a peak between the two world regions since mid-seventies after the oil price hike by OPEC. As a result, progress of substantial and sophisticated work on development economics has been slowed down. The western countries' interest is to impose trade barriers while developed countries advocate for elimination of these barriers.

On the contrary, Sen (1983) is more positive on the state of development economics and indicates its desirable orientations. W.A. Lewis (1984) insists that "Development Economics is not at its most spectacular, but it is alive and well" The analysis of Theofanides (1988) further corroborates the view.

In the light of above contexts, it may be useful to look into the theories of development economics for their relevance to the problems of economic development of the poor countries in order to find an appropriate industrialisation strategy.

The major approaches to the theory of economic development for industrialisation in less developed countries are broadly classified as:

- i) Conventional high growth models
- ii) International structuralist model
- iii) Current strategy on economic development
 - poverty/basic needs oriented strategy
 - Employment-oriented strategy

The purview of the paper is limited to the above models while examining their impact on labour-intensive industrialisation in LDCs for simultaneous increase in employment and output.

2. HIGH GROWTH MODELS

Classical, neo-classical and keynsian theories, Harrod-Domar Model, dual-economy model etc. are some of the prescriptions for high growth economy. Some of them are discussed here.

(a) Classical scenario

Economic development is an endogenous process in the classical model. With regard to industrial development, it does not stimulate labour-intensive industrialisation in LDCs because accumulation is the only way for industrial development by the capitalists. Shortages of capital, raw materials, skilled labour are bottlenecks to industrial development in LDC's. The wage determination will be settled by the "iron law of wages" in this model. But wage rates are largely determined by the institutional forces including trade union pressures. Labour and capital are hardly homogenous. Different types of labour and capital would affect growth differently. The classical concept of full employment and industrialisation is hardly adequate for LDCs.

(b) The Keynesian Theory

Keynesian economists advocate for the limited state action in the economy to provide full employment. Income is generated by investment via the process of multiplier, and so is consumption and saving. In the Keynesian theory, an expansion of money supply will reduce interest rate, increase the level of investment and output and leads perhaps to a secondary effect on prices.

Industrialisation and employment generation are to be achieved through the increase of aggregate total demand increasing directly government expenditures or by government policies that indirectly encourage private investment (e.g. low interest rate on business loans, tax allowances, investment subsidies). As long as there is unemployment and excess capacity in the economy, the supply of goods and services will respond automatically to this higher demand. A new equilibrium will be established with more income and higher levels of employment.

Marginal propensity to consume is very high for low income groups in LDCs. The problem is also due to lack of saving and investment. Supply constraints in the form of shortage of capital, raw materials, intermediate products, skilled labour combined with unorganised loan markets, shortage of foreign exchange will hinder the growth of industrialisation. So simply increasing money demand, money income cannot help to achieve industrialisation in LDC's. Moreover, most LDCs have some form of dualism in money market by its organised and unorganised sector. The creation of additional jobs in the urban capital intensive sector through Keynesian demand oriented policies to reduce unemployment may cause urban unemployment to rise because every urban created job may induce more job seekers to migrate from the countryside. The problem of unemployment can hardly be solved in the Keynesian fashion by increasing aggregate demand.

(c) Harrod-Domar (HD) Model

The variables chosen by HD are the broad aggregates e.g. investment, capital and output. It is assumed that capital and labour are used in a fixed technical or behavioural relationship, and that output is related to the capital stock by the capital-output ratio. Economic growth is explained as the combined result of the rate of saving and the resultant physical capital accumulation on the one hand and the capital-output ratio on the other hand. Technical progress is not specially incorporated in the model and it is a fixed coefficient model (constant capital-output ratio).

As regards industrialisation in LDC's, the application of the HD model is beset with numerous difficulties. The model is too aggregative and hence does not provide the bases for a detailed quantitative study, nor does it highlight the policy of structural changes for industrialisation. The assumption of a fixed coefficient of production may also be questioned. It is equally possible to doubt the assumption about the absence of trade.

(d) The Neo-classical theory

The industrialisation through profit maximisation (objectives of the Neo-classical model) may create high cost to the economy. The model of savings, capital accumulation and economic development (defined as the maximum output growth) demonstrate that the higher capital/labour ratios (i.e. capital intensive production methods) will generate larger profit shares and higher saving rates. It is obvious that industrial development will be come about by relative capital intensive methods of production. The suitability of marginal productive theory to dictate factor prices raises some doubts in LDCs, where profit rate is attained in such a way as to commensurate with an interest rate and where increase on labour productivity is brought about through substitution of capital for labor in production process or by importation of expensive labour-saving machinery and equipment. Moreover, capital in this model are one-factor, which is highly aggregative. The employment implications of this model in LDC's will bring frustrating results as the investment per unit can absorb less labour force.

(e) Dual-Economy Model

The dual-economy of LDCs is analysed through transfer of surplus labour from subsistence agricultural economy to urban sector to promote LDCs economic development (Lewis, 1971).

The idea is that increase in the share of profits in the capitalist sector will increase income and surplus through greater accumulation of capital. This surplus can now be reinvested and the process will be repeated until all the surplus labour would eventually be exhausted. Real wages tend to rise along with increase in productivity and the economy will enter into a stage of self-sustaining growth.

This approach advocates for capital intensive industrialisation as the capitalist profits will be reinvested in more labour-saving capital equipment to generate large profit and higher saving. This technology has to be imported in LDC's and it militates against the strategy of labour intensive techniques. The model assumes that the rate of industrialisation is higher than the rate of increase in supplies of labour underestimating the growing population of LDC's and the underlying flow of labour from agriculture to industry. The model can be disapproved for labour-intensive industrial development in developing countries.

3. International 'Structuralist' models

Economic development is not only a matter of eliminating obstacles and supplying various 'missing' components like capital, foreign exchange, skills and management. The world is to be understood in terms of an organisation of power; a world system in which economic process are among the major manifestations of power. Dependence theorists use the term underdeveloped instead of less developed as to them, development of one country has historically entailed the underdevelopment of the other. Historically, the development of capitalism in Europe led to imperialism and colonialism which created a wealthy and strong centre (the imperial power) and a weak, poor periphery which mainly consisted of colonies. The poor countries of today despite their political independence, have become economically dependent upon the developed metropolies because of

their historical past reinforced by the neo-colonial ties of trade, aid and transfer of technology. They are compelled to export primary commodities and import manufactured products even of the same commodities.

So as trading partners, the LDC's are dependent upon the developed countries because the goods they usually produce (mainly primary commodities) are income inelastic while the goods they want, they cannot produce themselves. Such a situation had led to the "unequal exchange" between the centre and the periphery (Emmanuel, 1972). The LDC's are further exploited and made more dependent upon the developed countries with the growth of international capitalism and multinational corporations who in their global search for more profit can easily mop up surplus from LDC's as they can direct their investment from high profit to low profit areas. The economies of the underdeveloped world have become the components of global capitalism in that they produce for the global capitalist market and transfer the surplus from their predominantly agrarian economies to the metropolitan centres of the capitalist world. Hence capitalism is primary responsible for the continuous underdevelopment of the economy.

The internal structure of the nations is also characterised by a system of centre-periphery linkages. These internal structures of underdevelopment operate to preserve the existing processes through which the surplus generated in the local economy is transferred to the economy of the dominant country. a dependent nation will have its own developed sector, acting as the periphery's centre. It is this sector that is responsible for extracting the locally generated surplus. Because of its own dependent peripheral status vis-a-vis metropolitan centre, it must transfer the major portion of this surplus to the centre metropolis. Indeed, to be sure, it keeps a proper share of this surplus as compensation for the service it performs as "bridgehead" of the dominant metropolitan nation. Whatever locally generated surplus it keeps is either reinvested

in the same externally oriented enterprises or is consumed in the form of imported luxury items. Such a process, in view of the local capitalist sector, prevents the growth of an independent self-propelling national economy.

The structural effects of such a system are seen in the prevention of the growth of indigenous enterprises and creates a market to meet the demand of the people who are included in the higher income groups in LDC's. Furtado (1973) in his Brazilian model asserts that the structural tendency of Brazil is to exclude the mass of the population from the benefits of accumulation and technical progress. Industries producing for the rich minority enjoy a high level of profit and will create investment boom with a requirement in capital and modern technology to increase rapidly. Consequently new jobs per unit of investment declines and the need to keep up the flow of new products increases catering to the rich minority. This situation favours the higher income groups creating more income inequalities.

It emerges from the above analysis that one can find in an underdeveloped economy, inadequate production of goods necessary for mass consumption, import to luxury goods which creates balance of payments problems. The choice of technology and manufacturing products will be as such as are unsuitable for LDC's. Thus the technology which is capital-intensive (often imported) usually creates more unemployment and poverty and accentuates the existing inequalities in income distribution. The indigenous elite class in collusion with international capitalism perpetuates the self-producing, static, neo-colonial structures of LDC's. Gunder Frank (1969) argues that the hope of the underdeveloped nations lies in socialist revolution. a state-led socialist development can resolve the structural heterogeneity of the LDC's. Industrialisation will produce manufactures of the mass demand while agricultural revolution will increase production to satisfy the food needs of the population.

4. Current Models of Economic Development

The current thinking on economic development concentrates on employment-oriented strategy and poverty or basic needs oriented strategy.

There is a close relationship between high levels of unemployment and underemployment, widespread poverty and unequal income distribution. The proportion of the underemployed labour force is approximately the same as the proportion of the population classified as destitutes^a (ILO, 1976, p. 11). One of the major mechanisms for reducing poverty and inequality is the creation of additional jobs, more productive and adequately remunerated for the very poor. It would be wrong to assume that everyone who does not have a job is necessarily poor, as there may exist some voluntary unemployment. Employment must be an essential ingredient in any basic-needs/poverty-focused development strategy.

Definition of basic needs:

The definition of what constitutes a set of basic needs may vary from country to country. But there are also common grounds for certain minimum requirements essential to a decent life.

Basic needs are defined as the minimum standard of living which a society should set for the poorest groups of its people. The satisfaction of basic needs include the following elements (ILO, 1976). "First, foods, shelter and clothing and certain household furniture.

^aThe destitutes comprise those people in Asia having per capita income equivalent to US \$ 50.

Second, they include access to essential services such as safe-drinking water, sanitation, public transport, health and education. Third, it implies that each person available for and willing to work should have an adequately remunerated job. Fourth, it would further imply the satisfaction of needs of a more qualitative nature: a healthy, human and satisfying environment, and popular participation in the making of decisions that affect the lives and livelihood of the people and individual freedom. Education and good health will facilitate participation and participation in turn will strengthen the claim for material basic needs".

The main thrust of a basic needs strategy must be to ensure an effective mass participation. Grass-roots participation in economic activities can contribute to improvements in living standards and meeting basic needs. Economic participation of the grass-roots may involve income earning opportunities, active participation in production-decision making activity compatible with their needs and their capabilities.

The Basic needs (BN) approach and its implications on industrialisation and employment

There is no conflict between basic needs approach and accelerated industrialisation to which LDC's give prime importance. Rather there is extremely interrelationship between the meeting of basic needs, industrialisation and accelerated structural change. Singh, Ajit (1979) in his analysis found that accelerated industrialisation and a substantially redistributive fiscal policy must be the two pillars of any effective basic needs program. Industrialisation serve agriculture either by producing modern inputs for it or by processing output from it. Income generated in the industrial sector will stimulate the demand for agricultural sector. However, there would be close integration between capital intensive and labour intensive industries in the sense that the development of one will go alongside with that of the other. Social profitability criterion might be applied to encourage the labour intensive enterprises.

There will be a great advantageous conditions for development of the new pattern of industrialisation in accordance with the basic needs approach. More interestingly, the new pattern of industrialisation would be the employment oriented industrialisation. So, considering the direct and indirect effects together on the new pattern of industrialisation, there is no doubt that employment oriented industrialisation will be accelerated by the basic needs approach.

5. CONFLICT AND CONGRUENCE ARGUMENTS BETWEEN EMPLOYMENT AND OUTPUT EXPANSION IN INDUSTRIALISATION

(a) Conflict Arguments

It has been argued that a tendency to use modern capital-intensive techniques in manufacturing industries is at least partly responsible for the widely noted lag of industrial employment growth behind industrial output growth, or, in other words, labour absorption capacity of manufacturing sectors has slowed down for new investment as a result of its capital-intensive character. The phenomenon of rising labour productivity in association with higher capital-labour ratios can be also explained from the equation (3) obtained from linear, homogenous production function, $Q = f(K, L, t)$. Assuming natural technological progress, the relationship of output per worker (Q/L) with technical change and changes in the capital/labour ratio (K/L) is expressed as (Todaro, 1981, p. 154).

$$Q/L = Z(t) (K/L) \quad (3)$$

where t is a trend term denoting technological change and $Z(t)$ is assumed constant.

Generally, an observed divergence between employment-output growth arises from the growth in labour productivity. If productivity is raising independent of the scale of production, a gap arises between the growth of output and the growth of employment.

The growth in labour productivity may arise over time as a result of improved quality of labour and capital inputs or better organisational and managerial techniques. Thus output may grow with a constant (or falling) input of labour, or the same output may be maintained with less labour. The productivity of a specific input may arise if others are substituted for it in response to a change in relative prices e.g. if capital or skilled workers are substituted for unskilled labour, the number of workers will fall.

In practice, technical progress involves increasing labour productivity and thus generates higher rate of growth of output than that of employment. The growth of productivity may be independent of output growth if technical progress is 'disembodied', affecting existing capital equipment as much as new one and, therefore, unrelated to the rate of investment.

The productivity may increase with the rate of growth of output, especially if new technology is embodied in the machinery and equipment installed to expand capacity affecting only new investment. The greater the rate of investment, the greater would be the increase in labour productivity. Hence for any increase in the growth rate resulting from an increase in the investment ratio, there will be a less than proportionate increase in the rate of growth of employment.

If labour productivity is positively related to the scale of production, or in other words, if economies of scale is associated with the level of production, measures which speed up the growth of output will increase the growth of employment less than proportionately. The gap between output and employment will further be increased if the economies of scale are brought about by more capital intensive activities to the extent that they tend to have decreasing input costs as size increases (increasing return to scale).

On the other hand, the economies of scale may be brought about through greater utilisation of fixed assets and administrative staff and through the possibility of introducing new techniques with lower minimum unit costs. There may be economies of scale for an industry as a whole if the economy or the government respond to its growth by providing better transportation, power, financial services and other infrastructural facilities.

The empirical evidence on Bangladesh manufacturing industries shows that the rate of growth of output is less than the rate of growth of employment (Roy, 1984). Correspondingly we have noticed a decline in the employment-output ratios in different manufacturing industries over the years. The implication is that output growth must be several times the desired rate of employment growth.

Therefore it seems that an employment-output growth trade-off occurs if it is not possible to increase the growth of employment and output simultaneously at a same rate. The seeming strict conflict does not apply if some policies can bring maximum employment growth while achieving a given output growth target.

(b) Congruence Argument

As stated earlier, output and employment objectives are generally consistent at the employment-oriented industrialisation policy. More jobs mean more income implying a greater demand for more labour-intensive products and they ultimately lead to higher growth rates of both national output and aggregate employment.

(1) Increases in labour productivity are desirable but increases in total factor productivity are even more important. Improved education, better training and better management are all desirable to increase labour productivity, but increases in labour productivity as a result of the substitution of capital for labour in production

process or as a result of the importation of sophisticated and expensive labour-saving machinery and equipment may be less satisfactory because total factor productivity may in fact be reduced and thereby average costs of production may increase. The average costs of production may rise even through average labour costs fall as a result of the underutilized productive capacity as the local market is too small for the efficient utilisation of this sophisticated equipment.

(ii) There is no trade-off between the employment and output objectives at the general policy level if the labour intensive industries use scarce resources as efficiently as in capital-intensive industries. That is to say, if labour use is increased in association with changing techniques of production, employment creation need not decrease output. The available evidences suggest that there exist techniques in many industries and in many processes which are both labour-intensive (i.e. high labour-capital ratio) and efficient users of capital (i.e. high output-capital ratio). In these cases, maximum output and employment are consistent. Moreover, a higher isoquant can be reached through the investment of capital saved from the use of labour intensive technology in manufacturing industries. The output-capital ratio is used as one measure of the 'efficiency' of the production technique with respect to the scarce factor, capital implicitly assuming a labour surplus situation. It should also be noted that the lower capital cost per unit of output to a sufficient degree so as to maintain the prevailing wage.

In the above context, the employment-output conflict vanishes at least in a static sense and the gap between employment and output growth rates will disappear if labour productivity in labour-intensive industries is close to that in capital-intensive industries.

(iii) The choice of product-mix may have an impact on the magnitude of employment-output growth relationship. If the demand for labour intensive commodities is high, an employment-output trade-off may not arise. The labour-intensive goods and processes will have a comparative advantage in world markets and hence will be the natural choice for LDCs. A number of developing countries appear to have succeeded in increasing both employment and output by concentrating on the production and export of labour intensive goods. Evidence for Taiwan, Korea, Hong Kong etc. suggests that output and employment expansion can go hand in hand if an export substitution phase of development is followed. This involves moving into sectors in which the country has a comparative advantage. There is also an evidence² that marginal factor productivities are significantly higher in the export sector than in the non-export sector. Therefore, in the above contexts, the gap between the growth rates of output and employment may not appear.

(iv) It is felt that the labour intensive techniques can be associated with technical progress. Preliminary evidence from Kenya and China (Morawetz, 1974, p. 502) suggests that some disembodied technical progress may be possible in association with labour intensive techniques, which bring the possibility that the conflict between output and employment may not appear in reality.

(v) The variation in factor prices has potential implications for choice of production technique only if a range of production techniques of varying factor intensities exist within a sector.

The substitution among different factors within the Bangladesh manufacturing sectors indicates that alternative techniques of production of varying labour intensity exist within a sector. So factor-price distortions may influence the employment-output growth ratio through the choice of techniques.

The recent study of Byrnie et al. (1983) on Sierra Leone (a small West African country) reveals that there are usually both small and large-scale firms operating side by side within the same sector, but they are subject to different factor prices. The small scale, more labour-intensive techniques (i.e. higher labour-capital ratios) were associated with higher output-capital ratios. Consequently, if capital is assumed to be the scarce factor, there is no conflict between output and employment since labour intensive production, which promotes employment, will also maximize output by efficient use of scarce factor, capital.³

In large scale industries also, we cannot rule out the possibility of different feasible alternative techniques of production of varying labour intensity. It is possible that labour-intensive technology is feasible in some large scale manufacturing industries. If they are efficient users of capital, the scarce factor (i.e. higher output-capital ratios), then employment-output conflict will disappear, and the trade-off problem will be minimised if the productivity in labour intensive industries is almost equivalent to that in capital intensive industries. Within Taiwanese manufacturing industries, there are many large-sized⁵ firms that are found to be labour-intensive and do not show efficiency problems in terms of the use of scarce factor, capital in maintaining the current wage rates (Ho, Yhi-Min, 1980).

It is also argued that the employment-output trade-off may be reduced through an intermediate policy between the extreme capital-intensive and labour-intensive strategies. This can be achieved by an intermediate technology which may imply some increase in capital intensity from the extreme labour-intensive technology. The small-scale establishments using intermediate technology can utilize both capital and labour productivity and often generate more output as well as more employment for a given investment and lead to a considerable increase in average income.

In such an intermediate technology, the labour productivity must equal to at least the prevailing wage rate in the country. As the capital intensity and endowment levels of the country will increase, labour productivity and hence the average income (i.e. wage) will also move upwards.

6. LABOUR-INTENSIVE INDUSTRIALISATION STRATEGY

To pursue the strategy, the production pattern may involve necessary changes to generate relatively more employment for the poor and to produce goods and services required to meet their basic needs of the poor. More employment to the poor means more income to them, which in turn implies a greater demand for locally produced basic consumption goods. The shift in the composition of demand tend to generate higher levels of productive employment to the extent that the new output mix is characterised by greater labour intensity. Moreover, the new conditions should increase the incentive to search for and use more appropriate technologies. The shift in the production pattern and accelerated structural change in industrialisation pattern may also help to achieve international trade specialisation on labour absorption through export of products that are labour intensive and use techniques which employ a large amount of labour per unit of investment.

It is assumed that the LDC's having labour abundant could be said to have a comparative advantage in labour-intensive commodities over a relative scarcity of labour and abundance of capital, only if their (LDC's) pattern of their exports are determined by their labour intensities. Accelerated industrialisation in the LDC's requires faster expansion of internal demand. 'Basic Needs' development strategies by ensuring a more equal distribution, would lead to increased industrial demand.

Such a development strategy will become contingent on economic growth. Lal, Deepak (1979) stresses that efficient growth which raises the demand for labour is probably the single most important means available for alleviating poverty in the third world. The reform of the existing price structure in many developing countries would aid the move towards the selection of more labour intensive industries (rather than just labour-intensive techniques in existing industries) as would be the reversal of conventional policy emphasis on import substitution in favour of export promotion. So the conventional wisdom is right in emphasizing that this increased demand for labour will be generated by efficient growth which makes use of the comparative advantage of the abundant labour in the capital and natural scarce poor countries. It seems to contend that economic growth will be the result rather than the goal of a basic needs strategy when the strategy is properly planned and implemented. Not all economists (Godfrey, 1982, Gulhati and Uday, 1962) are optimistic about the export-led industrialisation strategy specially for those developing countries whose export share in total output is very small. In that sense, sales to world market are not likely to become an engine of growth. Growth rates in manufactured exports of developing countries have already begun to fall due to the deterioration of international economic climates. Relative a small group of middle income countries with substantial expenditure in manufacturing and marketing, have succeeded in the world market. To the contrary, Balassa (1980) emphatically argues that countries at lower stages of industrial development may take the place of the newly industrialising countries in exporting products that require chiefly unskilled labour. New industrialising countries will vacate space by moving higher up to the labour-saving technological change. The increase of wage levels in the new industrialising countries is an indication of capital depending technology. The author (Roy, D.K., 1984) elsewhere has shown that the labour-intensive industries increase both output and employment simultaneously. There were also indications in Professor Tinbergen

study (1982) that labour-intensive activities maximise national product in the early phases of development and it contributes maximally for reduction of unemployment. Through inter-connected process of more production, more employment and more consumption, labour-intensive industrialisation strategy will increase the consumption level of the poor countries where the consumption levels of most of the people are very low. It emerges that labour-intensive industrialisation strategy can simultaneously increase production, employment, as well as consumption level of the poor with an efficient growth of the economy.

7. SUMMARY AND CONCLUSIONS

The applications of the theories of economic development as discussed here, are hardly relevant to stimulate labour-intensive industrialisation in LDCs. Since 1976, 'basic-needs' approach is evolved for the market economics of LDCs. There is an extremely important interrelationships between the meeting of basic needs, industrialisation, and productive employment opportunities of the poor. Employment-oriented industrialisation is compatible with the 'basic-needs' strategy and greater self-reliance involving efficient use of local resources.

The congruence and divergence arguments between output growth and employment growth objectives as provided by a number of economists are discussed. The sources of labour productivity which makes output growth than employment growth are also discussed.

The policy or emphasis only on output growth ignoring employment growth due to a sophisticated capital-intensive technology is less satisfactory in Bangladesh which is confronted by massive unemployment and poverty. While employment creation is an important objective, the question has to be discussed whether encouragement of labour intensive industries would turn out to be compatible

with the growth objective. Labour intensive techniques are available in a large number of industries and in both large and small firms. Such industries carry out exports of labour-intensive manufactures in which the country has comparative advantage. They are also efficient users of capital. Marginal factor productivities are higher in the export industries than in the non-export industries. The gap between output and employment growth rates will be minimized if productivity in labour intensive industries is close to that in capital-intensive industries.

Labour-intensive industrialisation generates a more employment which implies a greater demand for domestically product basic consumption goods characterised by greater labour intensity. The shift in the production pattern may also help to achieve international trade specialisation through export of products that are labour-intensive and use techniques which employ a large amount of labour per unit of investment. Efficient economic growth will be the result through the inter-connected process of more production, employment, consumption.

As the income and endowment levels of the country move upwards, the pattern of domestic demand and exports will also change without effecting its competitive position, and both income and employment will increase simultaneously.

NOTES

1. See Byerless et.al. (1983); Roemer et.al. (1976); Stewart, F. and Streeten (1973) etc.
2. Feder (1982).
3. The quality aspect of the product still remains. The cost of quality improvement will decrease in industries enjoying increasing returns to scale. Labour-intensive industries are likely to have increasing returns to scale because in a country like Bangladesh, labour-intensive manufactured products have their comparative advantage in the foreign market and the domestic demand for domestically produced manufactured products tend to concentrates on labour-intensive products (see Roy, 1984). It is also claimed as stated in L.J. White (1978, p. 36) that quality need not be affected by technique.
4. In this study, establishments with a total of 50 employees or more are classified as large firms, between 10 and 49 medium firms, and under 10, small firms, (Ho, Yhi-Min, 1980).

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