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AN ANALYSIS OF THE BASIC NEEDS APPROACH IN ITS
APPLICATION TO REGIONAL ECONOMIC DEVELOPMENT,
WITH SPECIFIC REFERENCE TO CISKEI

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CHAPTER 1 : INTRODUCTION

Economic development was traditionally viewed as an essentially "narrow" economic issue, requiring a rapid increase of real per capita income for its achievement. Consequently, development has been defined in terms of the maintenance of economic growth, and conventionally measured in terms of Gross National Product, certain of its components, and their rates of increase. This attitude was associated with the predominance of Keynesian economics, with its emphasis on broad economic aggregates, in the 1950s, which was a time when widespread attention was first paid to the problems of development and underdevelopment. "There was a wide consensus that economic growth was the measure of success, and the countries of the world were ranked in 'league tables' according to the level and rate of growth of their income per head."¹

Today, however, economic development is no longer exclusively linked to economic growth; whereas the former increasingly embraces concepts pertaining to "quality of life", the latter simply continues to measure increases in output and productive capacity. Accordingly, Todaro defines development as follows: "Development is not purely an economic phenomenon. In an ultimate sense, it must encompass more than the material and financial side of people's lives. Development should, therefore, be perceived as a multidimensional process involving the reorganization and reorientation of entire economic and social systems. In addition to improvements in incomes and output, it typically involves radical changes in institutional, social and administrative structures as well as in popular attitudes and, in many cases, even customs and beliefs..."²

The adoption of economic growth as the chief measure of development was largely based upon the evidently doubtful assumption that either growth would automatically "trickle down" to benefit all sections of the population, including its poorest members, or if the benefits of economic growth proved to be unequally distributed, this could be overcome by corrective government action. At the same time, it was occasionally argued that redistributive policies would be harmful to long-term development by reducing savings, investment and entrepreneurial incentives, and, thereby, the rate of economic growth (and thus development itself).

Practical experience has demonstrated that these assumptions were not generally valid, and that highly unequal growth, as well as substantial differences in the economic performance of various geographic regions and sections of the population, were observed in many countries over prolonged periods of time.³ Despite historically high levels of growth, large sections of the population in developing countries have remained poor, and frequently both their absolute and relative economic position have deteriorated. Thus, Ghai observes: "In the developing world, only a few countries have been able to pioneer a growth process which has brought substantial benefits to the poor. In the great majority of countries, not only has growth failed to bring about any tangible improvements in the living standards of the poverty groups (usually but often inaccurately defined as the bottom 40 per cent) but it has often led to their absolute impoverishment."⁴ Not only did the benefits of growth fail to "trickle down" to the poorest sections of the population, but government action to counteract inequalities proved to be neither flexible nor always effective. Similar distributional problems have also been encountered on a regional, or geographic, basis. Furthermore, the failure to find any empirically consistent correlation between unequal income distribution and high growth rates, has called the purported need for income inequality as a condition for high rates of economic growth into question.⁵

As a result, there has been a widespread call for a redefinition of economic development, in terms that would include the elimination of absolute poverty in particular. Accordingly, Paul Streeten comments: "Development must be redefined as an attack on the chief evils of the world today; malnutrition, disease, illiteracy, slums, unemployment and inequality."⁶ Likewise, H. Myint writes: "The old pessimism concerning their economic growth is now succeeded by the new pessimism that economic growth by itself may not alleviate the problem of poverty in the underdeveloped countries and that the process of rapid growth may by-pass or even worsen the situation of the poorer section of the people in these countries."⁷

The preoccupation with economic growth as a measure of development has had a profound effect on the evolution of regional development theories in general. On the one hand it resulted in the subsequent proliferation of theories concentrating upon regional growth; on the other hand it gave

rise to theories focusing upon locational factors and the direction of production away from agriculture towards manufacturing and service activities. Indeed, development theory in general came to concentrate on the achievement of rapid urbanisation and increases in manufacturing output, while agricultural and rural development were frequently neglected. Furthermore, the functional relationship between location theory and regional growth was often overlooked in theoretical discussion, thus ignoring the essential nature of economic development in many practical instances.

As stated above, development policies based upon such limited theoretical precepts have frequently led to disappointing results, especially for failing to eliminate absolute poverty. This has recently precipitated certain new directions to development policy, including closer attention being given to the urban informal sector⁸; a call for the adoption of appropriate technology⁹; a focus on small businesses as the means of employment and production¹⁰; and, more recently, the satisfaction of basic needs. One outcome has been the redefinition of economic development to include the reduction or elimination of poverty within the context of a growing economy.

The Basic Needs approach, in particular, recognises that so long as the poor remain deprived of the essentials required for an economically productive life, they would neither contribute to nor benefit from economic growth, but rather remain outside the economic process for all practical purposes. Overall economic development cannot occur unless it reaches all sections of the population, and this is not possible if the basic needs of large groups of people are not met. Todaro suggests: "All people have certain basic needs without which life would be impossible. These 'life-sustaining' needs include indisputably, food, shelter, health and protection. When any of these is absent or in critically short supply we may state, without reservation, that a condition of 'absolute underdevelopment' exists. A basic function of all economic activity, therefore, is to provide as many people as possible with the means of overcoming the helplessness and misery arising from a lack of food, shelter, health and protection. To this extent, we may claim that economic development is a necessary condition for the improvement in the 'quality of life' which is 'development'. Without sustained and continuous economic progress at the individual as well as the societal level, the realization of the human potential would not be possible."¹¹

Conventional development theory (including regional growth and location theories) implicitly ignore this "condition of absolute underdevelopment" by virtue of their underlying assumptions of homogeneous factor inputs and the typically resulting decreasing returns to scale. Thus individual progress (for example, in terms of the satisfaction of basic needs) is also ignored and it is assumed that methods of production can be simply introduced anywhere and at any time with equal success. But all inputs are not qualitatively homogeneous, and unless certain "thresholds" of development have been reached (e.g. in terms of Basic Needs satisfaction) it may be impossible to employ people productively within the economy. Even highly abstract economic analysis has recognised this point, paradoxically overlooked in many development theories. For example, Graaff writes: "In general, the distribution of outputs among final consumers will affect the efficiency of labour - which means it will affect the classification of inputs... [Now] we have to recognize that a man's productivity may depend on what he has consumed in the past, and on what he consumes out of current output. When it does, we have no alternative but to distinguish (in both social and private transformation functions) between physically identical units of output going to different consumers."¹²

The acceptance of the necessity for a "critical supply" of "life-sustaining needs" implies a development policy based on increasing returns to scale. The consumption of such basic goods and services as inputs may well, at subsistence level, result in proportionately greater productivity and, hence, increasing output at rising marginal rates. This principle was, for example, recognised as long ago as 1890 by Alfred Marshall, when he wrote: "It may be noticed... that a small quantity of a commodity may be insufficient to meet a certain special want; and then there will be a more than proportionate increase of pleasure when the consumer gets enough of it to enable him to attain the desired end... This case corresponds to the fact ... that the capital and labour already applied to any piece of land may be so inadequate for the development of its full powers, that some further expenditure on it even with the existing arts of agriculture would give a more than proportionate return."¹³

The satisfaction of the basic needs described by, for example, Todaro as "critical", is more than likely to be at a level where average productivity is low. An increase in Basic Needs satisfaction may well result in a more than proportionate increase in per capita output, by way of the greater productivity thus induced. Such a critical minimum level of satisfaction is functionally analagous to Rostow's "preconditions for take-off".¹⁴ As long as a society (or a region) remains so deprived of its basic needs that widespread productive employment is impossible, economic development cannot materialise in a comprehensive manner. However, once such a threshold has been passed, the "preconditions for take-off" would have been achieved, and sustained economic development becomes possible.

This condition should (but frequently does not) form the basis of the "Low-level Equilibrium Trap" model¹⁵, where it is stated, usually without qualification, that unless a society achieves a critical level of per capita income growth, "income depressing forces" will continually operate to return its economy to a position of subsistence or stagnation. Hence a "critical minimum (growth) effort" is said to be necessary to pass this point of return, so that self-sustained economic growth becomes possible. Myint comments: "Whatever its drawbacks, the 'take-off' theory at least suggests by means of historical examples that this [critical minimum] effort has to be sustained for two or three decades during which fundamental reorganizations in the institutional and productive structure should be taking place. On the other hand, the 'critical minimum effort' theory does not concern itself with these important qualitative problems of the changes in economic and social organization necessary for sustained economic development."¹⁶ An institutional vacuum is thus said to characterise the (unqualified) "Low-level Equilibrium Trap" model, which might appear relevant in some cases but not in others. In other words, the model is lacking in potentially telling empirical content.

Failure to achieve essential reorganization in the economy may be the cause of failure to pass the critical threshold necessary for sustained development. Writing on the economic development of South Africa, Truu notes: "The historical development of South Africa seems to have been such that the economy has evidently failed to evolve along a natural path, where subsistence farmers adopt specialisation and enter wage

employment in gradual steps. Instead, unskilled rural labour has been rather abruptly introduced into industrial production and city life, by no means unwillingly, but at considerable social cost in both the traditional and modern sectors of the economy. However, the elimination of precisely such negative externalities (as well as the creation of positive externalities) represents potential policy action, which is compatible with both efficient resource allocation and rapid growth of output. Perhaps the current interest in small business, appropriate technology, informal sector activity and basic needs strategy represent a search for the "missing link" in the evolution of our economy."¹⁷

Similarly, it is argued in this thesis that the satisfaction of basic needs may provide such a "missing link" in economic development policy, especially in a regional context. The failure of comparatively high rates of economic growth in underdeveloped regions to produce significant advances in economic development may well be that growth theory and policy have neglected the fact that a certain critical level of Basic Needs satisfaction is a necessary condition for economic development. Only when such a threshold of Basic Needs satisfaction has been reached, will the population of a "poor" region be receptive to the conventional economic stimuli which have been responsible for sustained growth and successful development in economically more advanced societies.* Alternatively, the Basic Needs approach adopted here seeks to provide an answer to the question : why have some societies or regions remained economically underdeveloped, even in an overall context or general environment of sustained economic progress?

The importance of the critical level of Basic Needs satisfaction for economic development represents the central theme of the present dissertation. After this Introduction, an analysis of the Export Base regional growth theory follows in Chapter 2. Location theory is discussed in Chapter 3, together with an attempted integration of location

*This argument should not be seen as "revolutionary", it is evidently subsumed in traditional Paretian welfare economics, for example, as a widely accepted explanation of a positively sloped segment along an otherwise concave welfare frontier, or the Production Possibility Frontier from which it is derived. [See, for example, Graaff, J., de V., Theoretical Welfare Economics, (Cambridge University Press : Cambridge, 1963), pp. 59-63, especially p. 61].

and regional growth theories in the Principle of Cumulative Causation. In Chapter 4, an attempt is made to reconcile the Export Base theory and the Principle of Cumulative Causation. Basic Needs theory and the measurement of basic needs are discussed in Chapter 5, while in Chapter 6 a strategy for meeting the critical basic needs is considered. In Chapter 7, an attempt is made to show the complementary nature of economic growth and Basic Needs satisfaction. Finally, Chapter 8 sets out the broad Basic Needs conditions in Ciskei, an economically less-developed region in a more affluent South African context, largely as a case study for a potential Basic Needs strategy.

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CHAPTER 2 : THE EXPORT BASE APPROACH

2.1 THE EXPORT BASE MODEL

The Export Base Model, which considers regional exports to be the principal cause of regional growth, developed largely from empirical studies which indicated that many regions developed historically as a result of the exploitation of natural resources for export to other regions. As external demand for a region's natural resources expanded, so exports increased, transport links improved, further exports and firms producing for local consumption emerged, and capital investment flowed into the region.¹ Regional growth differences are partly the result of the uneven distribution of natural resources, but for the Export Base approach to be regarded as a general theory of regional growth it was also necessary for it to explain the continued and sustained expansion of a region; to illustrate why regional specialisation, particularly in products other than those based on raw materials, occurs; and to postulate the conditions under which a region will grow or decline.

The central assumption of Export Base theory is that exports are the sole autonomous element of expenditure, all other elements being functions of income. For region i :

$$Y_i = (E_i - M_i) + X_i \quad \dots(2.1)$$

$$E_i = e_i Y_i \quad \dots(2.2)$$

$$M_i = m_i Y_i \quad \dots(2.3)$$

$$X_i = X \text{ (exogenous)} \quad \dots(2.4)$$

where: Y_i = gross regional income of region i
 E_i = gross expenditure of region i
 M_i = total imports of region i
 X_i = total exports of region i
 e_i = marginal propensity to spend for region i
 m_i = marginal propensity to import for region i

Substituting equations (2.2) (2.3) and (2.4) into (2.1) and simplifying:

$$Y_i = \frac{\bar{X}_i}{1 - e_i + m_i} \quad \dots(2.5)$$

It follows that regional income is a multiple of the level of exports (provided the marginal propensity to spend domestically ($e_i - m_i$) is less than 1) and the reciprocal of the ratio of regional exports to total regional income is the multiplier. The level of regional income is determined by the size of the export base and the multiplier [(2.5)], and the rate of growth of regional income is determined by the rate of growth of a region's exports, i.e.:

$$y_i = f(x_i) \quad \dots(2.6)$$

where: y_i = rate of growth of output in region i
 x_i = rate of growth of exports from region i

Exports are assumed to be determined exogenously and hence the level and rate of growth of regional income is determined by factors outside the region.² All activities not producing for export are induced by the growth of export activities.

Regional growth is linked to the performance of the export base, which can decline, remain constant, or expand. If a region is to grow, its exports must increase, and if, for some reason, a section of the export base is declining, this will have to be more than counteracted by the growth of other exports. The growth of a region's export base depends upon an increase in demand, which may result from an increase in the income of other regions, a change in tastes, an improvement in the production cost position of the region's exports relative to that of competing regions, technological innovations, or the development of new exports. The demand for a region's exports hinges not only upon the income of the regions to which it exports, but also on the extent of its absolute or comparative advantage in producing export products, and transport costs. The external demand for a region's exports is determined exogenously, but both production and transport costs are determined internally. Regions therefore strive continually to reduce production and transport costs so as to improve the competitive positions of their exports and their economic well-being. As regional exports grow, so external economies such as a skilled labour force and specialised marketing organisations develop and improve the competitive position of a region's exports. Such external economies may evolve around the region's export base and so reinforce its dependence upon existing exports rather than changing the export base structure. This

dependence is further reinforced by capital inflows into the region, which are most commonly directed at the development of export industries.³

Industries producing inputs (including services) for export industries, and products demanded domestically by consumers employed in the export industries, will develop around the export base. Residentiary industries⁴ producing for local consumption depend upon demand within the region, and this demand originates from those employed in the export sector. The growth of residentiary industries is therefore determined by the growth of the export base. Over time, such industries may themselves produce for export and the export base of a region may therefore change. However, the growth of a region will always be limited by the growth of the autonomous variable, exports, while all economic activities not for export, particularly inputs of commodities and services, are induced by the expansion or decline of exports.

The more open a region, the more important are changes in the demand for exports in determining regional growth. Increased demand for exports and rising export prices will lead to increased regional income and output and an increase in factor prices relative to those of other regions. Production factors used in the production of exports will be encouraged to migrate to fast-growing regions, and, *ceteris paribus*, regional growth will continue until the increase in export demand diminishes, or factor shortages arise. "Notice how the growth process tends to become cumulative in these export base models. The stimulus to export demand has both a multiplier effect on regional income and possibly an accelerator effect on investment as well ... In addition, higher factor prices relative to other regions will draw in labour and capital. The inflow of labour will raise the demand for those goods which are produced and consumed locally, such as transportation, trade, personal services and government services. Subsidiary industries supplying specialist services to the export sector will also emerge as growth proceeds. These form part of the full range of agglomeration and localisation economies which, alongside any internal economies of scale existing in the export industries, will give further stimulus to the export sector by reducing production and distribution costs. Over time, we may see subsidiary industries become less dependent on the original export sector and they may begin to export in their own right."⁵ Consequently, regional growth

may be uneven, coming in spurts of increased investment in both export and residentiary industries.

The Export Base Model views a single region as part of a system of regions, and the rate of growth of a region will depend upon the growth of its exports to other regions, and, consequently, on the rate of increase in demand for the group of regions as a whole. As a region grows, so local savings increase. But these savings can only be invested in the export sector up to a certain limit, after which investment will be directed into other local industries. It follows that demand, and in particular the demand for exports, is the key to growth, and factors internal to the region (such as shifts in the consumption function, domestic investment, or changes in the level of government spending) are induced by the development of the export sector, or are considered to be insignificant. This is not to say that Export Base theorists deny that regional growth can result from investment in industries producing for demand internal to the region (residentiary industries), but, rather that such investment is usually induced by an autonomous expansion in the demand for exports.

A region's export base is an important determinant of its sensitivity to national economic fluctuations, as changes in the level of income in the regions to which it exports affect its income through changes in the level of exports. Regional sensitivity to national economic fluctuations will depend upon the income elasticity of demand for the region's exports, with regions specialising in products with high income elasticities subject to greater income fluctuations than those specialising in products with low income elasticities. Clearly, the wider the range of a region's exports, the lower its income elasticity is likely to be, and the less its sensitivity to national economic fluctuations.

A region's export base is also a significant factor in the pattern of regional urbanisation, as points of economic concentration will develop around the distribution of the export base industries. "Nodes grow up because of special locational advantages that lower the transfer and processing costs of exportable commodities. Nodal centers become trading centers through which exports leave the region and imports enter for distribution throughout the area. Here special facilities develop to implement the production and distribution of the staples. Subsidiary

industries to service the export industry, as well as specialised banking, brokerage, wholesaling, and other business services concentrate in these centers and act to improve the cost position of the export."⁶

2.2 CRITICISMS OF EXPORT BASE THEORY

Despite its strongly empirical origins, Export Base theory has been criticised for being too narrow to be a general theory of regional growth. Export Base models are expressed in terms of "the region" and "the rest of the world" and so the importance of inter-regional linkages is ignored. But it is highly unlikely that the effect of an increase in exports on regional income can be determined if such linkages are overlooked. For instance, the amount of income that leaks out of the region in the form of imports is neglected.

The Export Base Model is concerned only with the demand for the exogenous factor, the export base, but the definition or measurement of what comprises "the export base" would, in reality, be extremely difficult. In a multi-commodity world, the effect of a change in exports on residentiary industries will vary from one part of the export sector to another. Industries that have strong backward and forward linkages that require close proximity to the export industries will have a greater impact on regional income than industries with low linkages or with linkages not requiring proximity to the export industry. Consequently the effect of a change in exports will depend upon the type of export sector which changes, but this is neglected by the Export Base Model's consideration of only a generalised export base.

The Export Base Model concentrates exclusively upon demand and ignores the importance of supply in regional growth. But the postulated division into "the region" and "the rest of the world" means that the source of demand for exports is ignored when different sectors would in fact cater for external markets of varying size with resultant differing impacts of changes in demand. In addition, residentiary activities may provide vital inputs for export sectors, and consequently be an essential element in regional growth. The demand for exports is assumed to be the only autonomous variable whereas, in the long run, variables such as government expenditure, technological progress, and other growth impulses internal to the region, may be important determinants of regional

growth. The neglect of internal growth factors is more serious the larger the size of the region studied. As the size of the region increases, so the relative importance of exports declines and that of internal growth factors increases. But the possibility of a region reaching a position where it is capable of generating autonomous self-sustaining growth is ignored.

The larger a region, the more significant is the multiplier feedback from other regions likely to be, and the greater the need for an inter-regional analysis. The export/regional income ratio [(2.5)] is the reciprocal of the multiplier, but it is inversely related to regional size. It follows that the size of the multiplier will vary according to the dimensions of the region studied, with expanding regions having a falling rate of export growth. The problem is further complicated by the fact that the marginal propensity to import may also vary inversely with regional size, and such a variation may counteract that of the export/regional income ratio.⁷

By contrast, the Neoclassical model in its application to regional growth predicts that regions running import surpluses grow faster than those running export surpluses. But the Export Base theory implies that an increase in exports will result in a faster rate of regional growth. Rapidly growing regions will therefore run export surpluses except: when a region starts from a position of deficit;⁸ and when increasing exports are offset by higher induced imports.⁹ "Unless the marginal propensity to spend is greater than unity, export base theory is applicable only to regions with excess capacity and unemployment. If regions do not have this spare capacity, attempts to expand the export base as a means of raising the rate of growth will be self-defeating, since they will come up against the full employment barrier."¹⁰ If a fast-growing region is to be a net exporter of capital (as in the Export Base case) it is necessary for the region to have a savings rate high enough to both finance rapid internal growth and to export capital to other regions.

In sum, the Export Base Model can be criticised on the grounds that it merely describes the historical process of regional growth as observed in some regions, instead of analysing the underlying conditions determining regional growth or the demand for exports. Although it attempts to

introduce a spatial dimension into growth theory, the role of factors internal to the region and determining the demand for exports, are ignored. Furthermore, internal supply factors, autonomous investment, and inter-regional factor flows are neglected as determinants of regional growth when, as will be discussed in the following pages, such factors may be of considerable importance.

2.3 EXTENSIONS OF THE EXPORT BASE MODEL

2.3.1 Tiebout¹¹

The significance of exports for regional growth and, hence, the question of whether or not a region is capable of endogenous self-sustained growth, was central to the debate between Douglas North and Charles Tiebout in the Journal of Political Economy during 1955 and 1956.¹² North examined regional development within the USA and suggested it could best be explained in terms of the traditional Export Base theory, with increases in exports being the only autonomous source of regional growth. Tiebout argued, on the other hand, that the Export Base theory was too simplistic, and reasoned that regional growth could also arise from an endogenous increase in demand within the region.

While the level of income may depend upon the level of both the dependent and the autonomous variables, Tiebout denied that there was any justification for making exports the sole, or even the most important, autonomous variable. He proposed that: "Such other items as business investment, government expenditures and the volume of residential construction may be just as autonomous with respect to regional income as are exports."¹³

The larger a region (in terms of the size of its economy), the smaller will be the quantitative importance of exports as a proportion of total regional income, and the less realistic it is to assume that exports are the sole autonomous source of changes in regional income. While a change in a region's exports may result in a change in the level of its income, it is also possible for a region to grow with exports remaining constant, but with an increase in internal autonomous activities. The larger a region, the more likely it will be that factors affecting regional income growth may be found within the region's borders. Central to the debate

was the problem of the size of the region being considered. The larger the region, the less important the export base, until, as Meyer points out: "It is quite obvious that an economy can exist without exports and can grow without a growth of its exports, as must be true for the world economy taken as a whole."¹⁴

Tiebout suggested that Export Base theories ignore the importance of inter-regional multiplier feedback effects. A small region exporting to other larger regions is unlikely to be a major importer of those regions' exports. But a large region exporting to small neighbouring regions is likely to also import some of those regions' exports. It thus follows, that if the income of one region rises as a result of an increase in its exports, then its own imports of other regions' exports will also rise in turn, leading to an increase in their income and thus to a subsequent increase in their imports. In this manner, there would be a multiple increase in regional income, and the larger the region, the more powerful this multiplier will be. On the other hand, the exports of a small region will depend upon the incomes of its export markets, but the income of its export markets is unlikely to depend significantly on the income of the small region itself. The larger a region, the more the income of its export markets will depend upon its own income, and "... one is left in the uncomfortable position of having exports in part a function of domestic income."¹⁵

While the development of an export base may be essential for regional growth in the short run, the possession of a cost advantage over other regions in the production of export commodities will determine the development of such a base in the long run. Given long-term factor mobility, such an advantage in production costs will hinge on the development of residentiary industries producing inputs for the production processes within the region. Unless residentiary industries can supply the export industries and those employed in them with many of their necessary inputs and consumption needs, such inputs and consumption goods will have to be imported, with resultant increased production costs and a lowering of any cost advantage the export industries may have over other regions. In the long run it may well be the development of a region's residentiary industries that determines its export and growth performance, and not vice versa.

Finally, Tiebout argues that optimal growth will not necessarily be achieved through maximising exports. He suggests that a region's limited resources of factors, markets, transport etc., will be divided between export and residentiary activities, and if too few of the resources are allocated to either sector, the region will not be maximising per capita income. Given an optimal division of resources between these sectors, it is possible that if the export sector is too large relative to the residentiary sector, regional income will be increased by allocating fewer resources to the export sector and more to the residentiary sector. In this way it is possible for a region to grow by reducing exports rather than increasing them as required by Export Base theory.

2.3.2 Hartman and Seckler¹⁶

Hartman and Seckler attempted to reconcile the North/Tiebout controversy by showing that a region is capable of both exogenous and endogenous self-sustained growth. Tiebout argued that the export base should not be seen as the sole source of regional growth and suggested that factors internal to the region may be equally important. North countered that while internal demand and supply factors could lead to regional growth in the short run, in the long run, growth was determined by the export base. Hartman and Seckler concluded that both external and internal factors could determine the rate of regional growth.

They suggested that "the sine qua non of economic growth is the act of investment. Investment ultimately determines both the supply of and the demand for commodities."¹⁷ It follows that growth theory should attempt to resolve the problem of determining that rate of investment which will ensure equality of supply and demand. Hartman and Seckler depart from the traditional comparative-static Export Base Model and present a dynamic investment model of regional growth.¹⁸ They begin with the proposition:

$$Y_t = C_t + I_t + X_t - Mc_t - Mk_t \quad \dots(2.7)$$

Where: Y_t = income, C_t = consumption, I_t = investment, X_t = exports net of imports of goods used in export production (i.e. local value added), Mc_t = imports of consumer goods, and Mk_t = imports of capital goods used in the production of regionally purchased output, all at time t .

Consumption in time period t is a function of income in the previous time period, i.e.:

$$C_t = bY_{t-1} \quad \dots(2.8)$$

Imports of consumption goods are a function of the level of consumption, i.e.:

$$Mc_t = cC_t \quad \dots(2.9)$$

The level of exports is autonomous, i.e.:

$$X_t = \bar{X}_t \quad \dots(2.10)$$

Hartman and Seckler note: "The first four equations formulate familiar regional income relations - a regional income identity, a propensity to consume, a propensity to import and autonomous exports. This part of the model indicates that as exports increase or decrease regional income will increase or decrease by some multiple where the traditional multiplier is reduced by the import leakage."¹⁹

Imports of capital goods are a function of the level of investment, i.e.:

$$Mk_t = kI_t \quad \dots(2.11)$$

Domestic investment is a function of the change in consumption net of imports of consumer goods, and the change in exports, i.e.:

$$I_t = K [(C_t - Mc_t) - (C_{t-1} - Mc_{t-1}) + (X_t - X_{t-1})] \quad \dots(2.12)$$

Substituting equations 2.8 to 2.11 into 2.12:

$$I_t = K \{ [b(1 - c) Y_{t-1}] - [b(1 - c) Y_{t-2}] + [X_t - X_{t-1}] \} \dots (2.12a)$$

Substituting equations (2.8) to (2.12a) into (2.7) and simplifying:

$$Y_t = \bar{X}_t + (1 - k) K [X_t - X_{t-1}] + b(1 - c) [1 + (1 - k) K] Y_{t-1} - (1 - k) K b(1 - c) Y_{t-2} \dots (2.7a)$$

Thus income in time period t is a function of exports in time period t , changes in exports between time period t and the previous time period, $t-1$, and the levels of income in previous time periods. In this way, regional income in any time period can be derived period by period from the level of exports and income per period.

Solving equation (2.7a) Hartman and Seckler arrive at the general difference equation of regional income:

$$Y_t = \frac{X_t}{1 - b(1 - c)} + \frac{K(1 - k)}{1 - b(1 - c)} [X_t - X_{t-1}] + a_1 (x_1)^t + a_2 (x_2)^t \dots (2.13)$$

where a_1 and a_2 are constants, and x_1 and x_2 are the roots of the quadratic equations.

Income in any time period is therefore a function of initial conditions, autonomous exports, and parameter values. It follows that an autonomous increase in exports results in an increase in investment [(2.12)], which in turn leads to a further increase in income [(2.7)]. An increase in income leads to an increase in consumption [(2.8)], and a resultant further increase in income [(2.7)] and further investment in the following period [(2.12)]. Via this multiplier/accelerator relationship, the initial autonomous increase in exports results in a much larger increase in income than the initial increase. Hence: "It is intuitively plausible that the autonomous increase in exports could set off a period of induced growth where investment increases income, increases in income induce investment and so on."²⁰

From equation (2.13) the growth path of regional income consists of two parts: firstly, an autonomous growth path described by the first two elements of the equation, i.e. $\frac{X_t}{1-b(1-c)}$ and $\frac{K(1-m)}{1-b(1-c)} [X_t - X_{t-1}]$,

these being the simple export multiplier and the multiplier/accelerator effect on income resulting from changes in exports; secondly, an endogenous self-sustaining growth path described by the last two elements of the equation, $a_1 (x_1)^t$ and $a_2 (x_2)^t$, where the constants a_1 and a_2 depend upon the values b, K, c, m , and the initial conditions.

The question which arises is whether the regional economy will follow the growth path described by the autonomous factors or the endogenous factors. In other words, is regional growth dependent exclusively on autonomous elements as suggested by North, or is it capable of self-sustaining endogenous growth as proposed by Tiebout?

Since the constants a_1 and a_2 are both positive, the last two elements of equation (2.13) will only show a positive rate of growth if the roots x_1 and x_2 are greater than unity.²¹ With the introduction of import leakages from the region into the model, the values of b and K are required to be even larger if endogenous growth is to occur. Both autonomous and endogenous growth are possible, but whether endogenous growth actually occurs or not, will depend upon the values of b, K, m and c within the region.

The regional growth model proposed by Hartman and Seckler contains both an autonomous and an endogenous growth path [(2.13)]. Depending upon the values of the endogenous and autonomous elements, a region may experience any one of several states of growth. For instance, in a stationary state, equation (2.13) would read:

$$Y_t = \frac{X_t}{1 - b(1 - c)} \quad \dots(2.14)$$

and regional income would equal the level of exports multiplied by the export multiplier. This is the same as that suggested by the Export Base theory. But in a state of endogenous growth, equation (2.13) would read:

$$Y_t = \frac{X_0}{1 - b(1 - c)} + a_1 (x_1)^t + a_2 (x_2)^t \quad \dots\dots(2.15)$$

where X_0 is a constant and the export multiplier/accelerator is zero.²² Here the level of income would equal the level of exports multiplied by the export multiplier, plus the endogenous growth of income. Export Base theory would be in error in calculating the rate of regional growth by an amount equal to the endogenous growth of income.

In a state of exogenous growth via export expansion, with endogenous growth impossible, equation (2.13) would read:

$$Y_t = \frac{X_t}{1 - b(1 - c)} + \frac{K(1 - k)}{1 - b(1 - c)} (X_t - X_{t-1}) \quad \dots\dots(2.16)$$

and regional income would equal the level of exports multiplied by the export multiplier, plus the multiplier/accelerator effect of changes in exports. The Export Base theory would be in error in calculating the rate of regional growth by an amount equal to the multiplier/accelerator effect of the change in exports, i.e.:

$$\frac{K(1-k)}{1-b(1-c)} (X_t - X_{t-1})$$

Hartman and Seckler's model therefore demonstrates the defects of the traditional Export Base theory where income is determined only by the level of exports and the export multiplier [(2.14)]. Export Base theory ignores the possibility of endogenous growth [(2.15)] and the export multiplier/accelerator effect [(2.16)].

The above analysis poses several important problems. Firstly, it fails to produce an equilibrium rate of regional growth as found, for instance, in the Harrod-Domar models. Unlike the closed economies of Harrod-Domar models, where the equilibrium growth rates are determined by the exogenous supply of savings, in the case of a region, the supply of savings is endogenous, flowing freely in and out of regions within a nation in response to investment opportunities. Regions may be net importers or exporters of savings indefinitely and, as a result, there is

no clear equilibrium or "warranted" rate of growth for a region. The desirable rate of growth for a region can only be determined empirically.

Secondly, the model questions the suitability of analysing regions delineated geographically. The more "closed" a region, the smaller import leakages will be, and hence, the smaller the values of b and K in equation (2.13) will have to be for endogenous growth to be possible. Consequently, the more "closed" a region, the greater the chance of endogenous growth, and the growth path of regions will depend largely on whether they are delineated so as to be "open" or "closed".²³

In terms of equation (2.13), import-reducing activities merely raise the level of income (i.e. short-term growth), whereas activities which increase the rate of growth of exports, raise the rate of growth of income (i.e. long-term growth). If a new industry locates within a region, the level of regional income increases, but once this increase has been absorbed by the economy, the region will return to its original rate of growth. Such an increase will have a once-only impact on regional income, whereas an activity which permanently raises the rate of growth of exports will raise the long-term rate of growth of income.

A regional growth model should include a theory of structural change resulting from changing levels of demand. Hirschman²⁴ suggested the concept of "thresholds", where domestic production replaces imports for sectors linked by backward and forward linkages to basic industries in developing regions. A threshold is that level of import demand at which domestic production becomes economically feasible, or where the output of a basic industry reaches a level that encourages the establishment of domestic processing facilities. Once demand increases beyond this threshold and domestic regional production is feasible, not only is the level of regional income raised, but also the rate of growth, for: "Implied in a threshold is a level and, also a rate of growth, since the decision to locate would be an expectational one based on future capital earnings potential."²⁵ Once a region develops beyond the thresholds at which various new activities become economically feasible, this stage of growth may be characterised by the development of import replacing or induced activities, and growth is possible without increased exports.

In sum, Hartman and Seckler's regional growth model could be said to resolve the North/Tiebout debate by suggesting that both exogenous and endogenous regional growth are possible. Because of import leakages from a region, the conditions for endogenous growth may be such as to make it unlikely, but endogenous growth is nevertheless possible and should not be ignored. Any general theory of regional income growth should consider both the autonomous and induced components of investment. Finally, such a general regional growth theory should allow for structural changes within the economy of a region, as these too may be important sources of growth.

2.4 POLICY IMPLICATIONS OF EXPORT BASE THEORY

From the above analysis of regional growth, several conclusions may be drawn. Regions should be defined in terms of a common export base rather than in terms of geographical unit, as regional growth revolves around a common export base. Regional growth is determined by the growth of the export base, so in order to understand regional growth, the locational factors that enabled the development of the export base must be examined. The export base is the primary determinant of regional income and consequently, of the amount of residentiary, secondary and tertiary activities that will develop, the character of subsidiary industries, population distribution, the pattern of urbanisation, and regional sensitivity to national income fluctuations.

Regional dependence on exports is reinforced by local attempts to reduce export costs, and by capital inflows, which tend to be invested in the export base. Because of locational advantages, the export base of some regions is manufactured products. But this need not be the case, and secondary and tertiary industries may develop as the region grows, with a consequent widening of the export base. Regional growth will tend to be uneven, as it depends upon an increase in exports and induced investment in export industries and other kinds of economic activity. Finally, as regional income grows, so local investment will spread from the export sector to other activities, some of which will themselves become export industries.

The long run policy conclusion of Export Base theory is, like that of the Neoclassical theory, that, given long-run factor mobility, regional per

capita incomes and production will converge, so that no regional policy measures are necessary. But historical experience has shown that such a conclusion is either invalid, or will occur in a time period that is unacceptably long. Despite its severe limitations as a theory of regional economic growth, the Export Base theory nevertheless yields several important conclusions for regional economic policy. If regional policies are to promote the growth of underdeveloped regions, then they should be directed at the export base. Regional growth is determined by the rate of growth of exports [(2.6)], and for the rate of growth to be increased, the growth of exports should be encouraged. An increase in a region's exports can be brought about by policies designed to improve its terms of trade, thereby lowering the price of its exports relative to those of competing regions. Such policies would include any instruments designed to lower production costs and export prices, such as regional export subsidies, the encouragement of technical innovations, increased productivity and lower transport costs. Alternatively, efforts can be directed at widening the export base, by encouraging new export industries, thereby raising the total level of exports. Regions with an export base with an inelastic demand should be encouraged to widen their export base to include exports with an elastic demand. In this case a change in the region's internal economic structure is called for, and the direct encouragement of regional exports may be inadequate.

Policies can also be directed at increasing the export base multiplier [(2.5)] by altering the marginal propensity to spend domestically ($e_i - m_i$), either by increasing the marginal propensity to spend for region i , (e_i), or decreasing the marginal propensity to import (m_i). Such a policy would necessitate the encouragement of residentiary industries producing for local consumption. In this way, import leakages from the region would decline, domestic expenditure would rise, and the multiplier effect of a given level of exports, X_i , on regional income would be increased.

Finally, for self-sustaining endogenous growth to be possible, it may be necessary for a certain level or "threshold" of economic development to have been achieved. In an underdeveloped region such a threshold may not have yet been attained and economic policy should be directed at its achievement. This concept shall form the economic justification for the Basic Needs approach discussed in Chapters 5 and 6.

2.5 NOTES

1. This capital investment includes improving production processes and developing service industries for the export sector.
2. Presumably by the incomes of regions importing region i's exports, and their marginal propensities to import.
3. Within its wider national boundaries, a region faces a trading area free of restrictions, and so the theory of comparative advantage is sometimes used to explain regional production patterns and specialisation in particular exports sectors. In terms of the Heckscher-Ohlin theorem, regions will specialise in the production of those products that make intensive use of their relatively abundant factors and will export these products to other regions. Such a theory must obviously assume that inter-regional factors flows do not normally occur, or else the concept of factor abundance is meaningless in the regional context. While this assumption can reasonably be made with regard to raw materials, it is less reasonable for labour and capital, which, especially in the long run, may be fairly mobile between regions.
4. Residentiary industries may be defined as industries producing for demand internal to the region.
5. Armstrong, H., and Taylor, J., Regional Economic Policy and its Analysis, (Philip Allan: Oxford, 1978), pp. 36-37.
6. North, D.C., 'Location Theory and Regional Economic Growth', Journal of Political Economy, vol. 63, 1955, p. 250.
7. Richardson, H.W., Elements of Regional Economics, (Penguin: Harmondsworth, 1969), p.20, notes: "An often quoted drawback of these (export base) models is that the size of the export base is an inverse function of the size of a region. It is sometimes implied that this is a crucial objection to base theory since we can more or

less obtain any multiplier value we desire by varying the scale of the region studied. But multiplier values are in fact higher for large regions. A large region will tend to have a smaller export base, but it will also have a low \underline{m} (marginal propensity to import), and this will tend to raise \underline{K} (the multiplier); conversely a small area will not only have a high export-income ratio but also a high \underline{m} both of which will tend to reduce \underline{K} . Though the variation of the importance of the export base with size of area remains awkward for the usefulness of base theory an offsetting factor is the covariation of \bar{X}/Y and \underline{m} ."

8. In this case it may, in the short run, have an improving regional balance of payments, but still remain in deficit.
9. This requires that the marginal propensity to spend be greater than one, which is only possible in conditions of explosive growth.
10. Richardson, H.W., Regional Economics, (Weidenfeld & Nicolson : London, 1969), p. 339.
11. Tiebout, C.M., 'Exports and Regional Economic Growth', Journal of Political Economy, vol. 64, 1956, pp. 160-164; and Tiebout, C.M., 'Rejoinder', Journal of Political Economy, vol. 64, 1956, p. 169.
12. See also North, D.C., 'Location Theory and Regional Economic Growth', op.cit., pp. 243-258; and North, D.C., 'A Reply', Journal of Political Economy, vol. 64, 1956, pp. 165-168.
13. Tiebout, C.M., 'Exports and Regional Economic Growth', op. cit., p.161.
14. Meyer, J.R., 'Regional Economics : A Survey', American Economic Review, vol. 53, 1963, p.32.
15. Tiebout, C.M., 'Exports and Regional Economic Growth,' op. cit., p.162.

16. Hartman, L.M. and Seckler, D., 'Towards the Application of Dynamic Growth Theory to Regions', in Richardson, H.W., (ed.), Regional Economics : A Reader, (Macmillan: London, 1970), pp.98-105.
17. Ibid, p.99.
18. They make no attempt to specify an equilibrium rate of growth because of the inherent difficulties in a regional context. "In a closed economy that rate is determined in conjunction with the marginal propensity to save à la Harrod Domar. In an open economy, such as a region, the problem is much more difficult. For here one not only must enter import and export 'leakages' into the system, but the whole question of a savings-determined 'equilibrium' rate of growth becomes hazy." Ibid., p.99.
19. Ibid., p.100.
20. Ibid., pp.100-101.
- 21 For this condition to be fulfilled, the values of b and K must be relatively large. See Samuelson, P.A., 'Interactions between the Multiplier Analysis and the Principle of Acceleration', Review of Economics and Statistics, Vol. 21, 1939, pp. 75-78.
22. Because exports are constant.
23. For example, if regions are delineated in terms of common trading relations instead of geographically (i.e. import leakages are small) then endogenous growth will be more likely.
24. Hirschman, A.O., The Strategy of Economic Development, (Yale University Press: New Haven, 1958).
25. Hartman, L.M. and Seckler, D., op. cit., p.105.

CHAPTER 3 : LOCATION THEORY AND REGIONAL GROWTH

In an economy in which manufactures comprise a large part of total Gross Domestic Product, it is necessary to analyse the factors affecting the individual decisions of firms to locate within existing spatial patterns, before regional growth can be fully understood. In other words, the causes of existing distributions of economic activity must be examined and, if proven to be unsatisfactory, methods of altering the prevailing patterns should be investigated. Perloff, Dunn, Lampard and Muth view the importance of location theory for an understanding of economic growth as follows:

"Location theory suggests that growth in a given area's volume of economic activities is directly related to two factors: its access at competitive costs to the inputs of production and its access at competitive costs to markets for the outputs of this production. The quantity and quality of a region's resources are therefore significant for growth; and because so much of manufacturing involves the fabricating of processed materials, with many stages of value added, the availability of intermediate inputs may be equally or more significant. The size of the regional market and the proximity (in terms of transport cost) of national markets are also important considerations. The regions differ widely in these attributes. To understand the dynamic elements through which these relative regional advantages and disadvantages come into play, it is necessary to appreciate the principles behind location decisions in our economy."¹

Despite the obvious importance of location theory for regional growth, regional growth theories frequently ignore its importance. The Neoclassical growth theory abstracts from the whole concept of space, while Export Base theory and its extensions do not specifically include elements of location theory other than by way of general references to regional comparative cost advantages. Before regional growth theories which do include locational elements can be examined, it is necessary to first analyse the general factors affecting location and their importance in determining the location of manufacturing activity.

3.1 GENERAL PRINCIPLES GOVERNING LOCATION

Location theory attempts to analyse the importance of the economic factors influencing the distribution of economic activity in space. Although distribution is obviously affected by factors of a historical, cultural, topographical as well as economic nature, location theory examines only the purely economic determinants of location and, hence, has sometimes been accused of abstracting from many real world factors.²

In selecting his optimal production or trading site, the profit-maximising entrepreneur will choose a location which enables him to maximise the difference between total revenue and total cost. Both revenue and costs differ for alternative locations in accordance with variations in access to, and the price of, inputs (i.e. factors affecting supply) and in market access (i.e. demand) for the products concerned.

If access to production factors is the principal determinant of location, the product is said to be input-oriented. If access to the market is the principal determinant, the product is said to be market-oriented. In the former case firms will tend to locate at the source of inputs, and in the latter, at the market. Sometimes neither input factors nor the market play a dominant role in the location of a firm and the location of the firm is then described as "indeterminate". In such cases firms may locate at either the market, or the source of inputs, or an intermediate location. In the extreme case, where it does not matter where a firm locates, we say that it is "footloose". A "spectrum" along which location decision-making may be classified, can be identified. At one extreme there are those activities which maximise their access to inputs (primary, intermediate and final). At the other extreme are those activities which maximise their access to markets (primary, intermediate and final). In between are activities that choose a location intermediate to inputs and markets; those that locate at either the market, or the source of inputs, or an intermediate point, depending upon particular circumstances; and those activities that are "footloose" and may locate anywhere.

3.2 FACTORS AFFECTING LOCATION

3.2.1. Transfer Costs

The cost of obtaining the inputs required for production and of distributing output to the markets differs for alternate locations, and is, therefore, an important determinant of location decision-making. The importance of transfer costs may depend on the type of product considered. At one extreme, transfer costs are unimportant in determining location. Such a situation may arise, firstly, when transport costs are significant, but no transfer alternatives exist, and, secondly, where transfer alternatives do exist, but transfer costs are unimportant in determining location. The first situation may occur where an immobile essential input, for which there are no substitutes and only a single source, is required in production. The second situation may exist where transfer costs make up only a very small fraction of the total value of the product, so that the effect of transfer costs on the choice of location is unimportant. In terms of transfer costs the choice of location of such firms is unlimited, and the final choice is determined by location factors other than transfer costs.

Except in the two extremes of a fixed or indeterminate location, transfer costs have an important influence on a firm's location. Even in cases where inputs or outputs are immobile, transfer costs will influence the location of the firm if alternative input sources and output markets exist. For example, an extractive industry oriented towards the material-source will select that location giving greatest total access to both the raw material and its potential markets, provided alternative sources of raw materials exist. But for the vast majority of industries, inputs and outputs are mobile, and so location decisions must be based upon a favourable resolution of the transfer costs of both inputs and outputs. The entire economic landscape is a potential production site and factors other than transfer costs may influence the final location decision.

The importance of transfer costs for location is determined by the ratio of the transfer costs per unit of distance of inputs to those of outputs. If the ratio is high, then it is likely that the activity will be input-oriented, while a low ratio will result in market-orientation.

This transfer cost ratio is in turn dependent upon two factors - the relative weight of inputs to outputs, and the relative perishability of inputs compared to outputs. Weight losses from the input to the output stage will mean relatively higher input transfer costs per unit of distance than output transfer costs, and will, therefore, favour an input-oriented location. Conversely, weight gains in the production process will favour market-oriented locations. If inputs are perishable while output is not, the time factor involved in transportation will encourage input-oriented locations.³ Output perishability will encourage market-oriented locations.

Transfer costs are an important determinant of the location of economic activity and so it is not surprising to find that transfer costs have played an important historical role in the determination of the distribution of economic activity. Sites that were favourable in terms of later out-moded methods of transport have often retained their advantageous position. As new modes of transport were developed they were used to connect the existing areas of concentration which had arisen as a result of previous methods of transport.

3.2.2. The Location of Inputs and Markets

The location of firms is not only determined by transfer costs, but also by the location of input sources and markets. Strict market- or input-orientation can only occur if markets or input sources exist at single points in space. In fact, inputs and markets are seldom located at single points and are distributed over wide areas. This is particularly true in the case of markets for consumer goods. People do not all locate at one or a few points in space, but instead live over wide areas in varying degrees of concentration. Consequently, even market-orientation can only be relative, in the form of an approximate transport centre providing for an areally distributed market - the extent of this distribution depending upon population density. A similar situation may exist for the supplies of inputs if production requires inputs that are distributed over a wide area. This applies especially to industries dependent on agricultural inputs that are produced over a wide area. Again, input-orientation can only be relative in the form of an approximate transport centre drawing from an areally distributed set of input factors.

The effect of these factors is that the importance of input-orientation and market-orientation for firms using inputs located over a wide area, or producing for a scattered market, is weakened. But the importance of input- and market-orientation for firms located at one point in space, or producing for markets at one point in space, is strengthened. Of particular importance in these latter two categories are firms making use in the process of production of intermediate inputs produced at one specific point, and firms producing intermediate products for a single firm located at some point.

Population densities tend to be unevenly distributed in economic space and population is concentrated more in some areas than in others. Hence, markets are larger in those localities where population is densely concentrated than where it is not. Similarly, economic activity is concentrated more in some localities than others, and to the extent that firms supply intermediate inputs for other firms, the supply of inputs is likewise concentrated in specific localities. But population density is brought about by the existence of economic activity, and, therefore, densely populated localities and areas of concentrated economic activity usually coincide. The existence of areas of concentration is the outcome of past location decisions. To the extent that previous decisions created areas of concentration, future location decisions will be orientated towards these existing points.

3.2.3. The Size of the Firm (Internal Economies of Scale)

The size of a particular firm, and resultant economies of scale, are an important determinant of the location of the firm. For a given state of technology, firms will have to produce particular levels of output in order to produce most efficiently (in the sense of minimising average costs). But the larger the level of output necessary for the firm to benefit from economies of scale and produce most efficiently, the fewer will be the possible input sources (for input-oriented firms) or markets (for market-oriented firms) available to the firm as possible location sites. Within an economy there exists only a fixed number of input-sources and markets. If large-scale production is required for maximum efficiency and the firm is market-oriented, then firms will have to locate where they can serve a large market. If the market is evenly distributed over the country, then firms producing the same products, and

requiring large markets, will be few and widely dispersed. But if small-scale production is required for maximum efficiency, then firms producing the same product will be relatively numerous and located in close proximity over the market area. If the market is unevenly distributed across the country then firms will be more numerous in areas of high market concentration than low. When maximum efficiency requires large markets, firms will locate only at points of high market concentration. Similarly, for input-oriented firms, the requirement of large-scale production will mean that only relatively few firms can locate near to an input source with limited supplies of inputs. Small-scale production will mean a larger number of firms can locate at each input source.

3.2.4. External Economies of Scale

External economies of scale are cost-savings originating from sources external to a firm, such as increased efficiency within an industry as a whole. Specialisation within an industry may enable individual firms to benefit from internal economies of scale. This results in lower costs for other firms within the industry for which they provide intermediate inputs. Similarly, the growth of an industry may lead to the establishment of specialist services catering for the industry, joint research projects, organised markets for output etc., which reduce costs. External economies need not only arise from growth within a particular industry, but also from within dissimilar firms, which together may lead to external economies such as organised raw material markets, improved transport networks, increased availability of skilled labourers, specialised services, electricity and water.

Not all external economies require that firms be located together. Economies such as improved research and technology may be available to firms wherever they are located. Others, such as economies resulting from improved transport networks, or the provision of electricity and water, may only be available if several firms concentrate within an area. External economies may be either mobile or immobile. If immobile and the result of concentration within a specific area, then they are known as agglomeration economies.

3.2.5. Agglomeration Economies

Agglomeration economies are external economies of scale arising from the concentration of economic activity within a given geographic area and are therefore the result of past location decisions. To the extent that they influence future location decisions, the concentration of economic activities becomes a cumulative process. The localisation of economic activity may lead to external economies, thus lowering production costs and attracting new firms which in turn generate further economies and attract more firms; and so the process continues, with economic activity becoming increasingly concentrated.

Agglomeration economies go much further than the benefits of specialisation and exchange, and once the localisation of economic activity begins, additional attractions or economies emerge, inviting greater concentration. For example, urban areas have large elastic supplies of labour which enable firms to increase employment without necessarily having to raise wages. The greater volume and variety of employment opportunities offered by areas of economic centralisation attracts labour, and is particularly attractive to skilled workers because of the greater opportunities for using their skills. Furthermore, because of economic growth, incomes within urban areas tend to rise faster than in slow-growing areas of lesser concentration. Consequently, firms face a relatively larger supply of skilled and unskilled labour than they would in, say, an undeveloped rural area. Moreover, areas of economic concentration provide firms producing new products with the largest possible market in the shortest possible time, which is particularly important for small firms. As urban areas expand, so communication channels, which tend to radiate outwards from the centre, are improved, and urban areas become the best points of communication with the rural areas.

Agglomeration economies attract producers because of the advantages they offer both for supply and demand. The external economies generated by specialisation and concentration are attractive to producers from the side of supply because they decrease costs. But the concentration of labour also provides advantages on the side of demand because of ever-increasing markets, both in size and variety. Consequently, labour is attracted to production localities and in turn provides producers with

a market for their output. Increased output attracts more labour, which provides a larger market that attracts more producers, and so the process continues and the concentration of economic activity results.

As urban areas grow and incomes rise, so a greater volume and wider range of goods and services are demanded. These goods and services are frequently provided by firms attracted to the urban areas by agglomeration economies and demand for their products - in particular for those services where direct contact between the producer and consumer is essential. Consequently, the services sector in particular will tend to be concentrated within the urban areas. With an increase in income, so the income elasticity of demand for services tends to increase relative to that for goods (an Engel-Curve type situation) and at high income levels the services sector becomes the fastest growing. Since the services sector requires direct contact between producers and consumers, it will locate in urban areas (from which certain services may also be provided to the surrounding areas) and so at high income levels the rapid growth of urban areas is reinforced. Any tendency towards reducing the size of areas of concentration which may arise from manufacturing activities now being induced to move to dispersed locations may be more than compensated for by the growth of the services sector.

Agglomeration economies are particularly attractive to small firms unable to generate significant internal economies themselves. Concentration within specific localities enables small firms to enjoy the advantages of scale which large firms may be able to generate internally. They are able to experience the specialised services which are only possible when provided for a large market.

While localised concentration of economic activity may produce significant external economies of scale, likewise, overconcentration within a particular locality may lead to diseconomies of scale and increased costs of production. Such diseconomies include high land rentals, high wages because of labour shortages, high cost of local government, traffic congestion and pollution. To the extent that these diseconomies outweigh the agglomeration economies, so urban areas will lose their attractive appeal as location sites and their cumulative growth will be hampered.

Agglomeration economies represent an important factor in the growth of economic regions. Some external economies may be common to and benefit all regions. Others are immobile and make the locality within which they develop more attractive as a site of location than areas where such economies fail to develop. To the extent that the economies are immobile, they may result in regional cost differences which can be the cause of inter-regional growth divergences. *Ceteris paribus*, new firms are attracted to low-cost regions where they can take advantage of localised agglomeration economies and existing firms wishing to expand will do so within the same localities. The result is that higher rates of growth will be experienced in areas where agglomeration economies exist than where they do not. Consequently growth within regions becomes cumulative - a process that will be dealt with more fully in the next section. Since immobile agglomeration economies usually coincide with areas of high population density (and therefore large markets) they will reinforce tendencies towards market orientation.

If external economies are not immobile, then they need not give rise to inter-regional cost differences, as all regions can benefit equally from the lower costs they provide. Accordingly, location decisions will be based upon factors other than mobile external economies of scale.

3.3 APPLICATIONS OF LOCATION PRINCIPLES

Using transfer costs as the primary locational determinant for a firm, Weber⁴ proposed that the least-transport-cost location will be somewhere between the market and the sources of raw materials, or, under the condition that the weight of the product or one of its inputs exceeded the combined weight of the others, at the market or one of the material sources. Palander⁵ suggested that the least-transport-cost location would be at a point between the market and material sources if transport costs were uniform over distance. But if they were variable (which he argued they usually are) then location would be either at the market or the material sources. Hoover⁶ strengthened this latter conclusion by submitting that transfer and loading costs would lead to location at either the market or material sources, even if transport costs are uniform. This conclusion would hold unless there is a transshipment point between the market and material sources, in which case the transshipment point may be the least-transfer-cost location.⁷

Both Palander and Hoover concluded that a firm's market area is determined by the rate at which the delivered price of its good increases with distance from the production point. Consequently, high production costs and rapidly increasing transport costs per unit of distance will result in firms producing the same products having small market areas and being located in close proximity to one another. But transport costs that fall over distance will lead to large market areas and a wide dispersion of firms producing the same product.

Weber attempted to incorporate the concepts of agglomeration economies and low labour costs at points of economic concentration so as to arrive at a position of least-total-costs. But he suggested that a firm would only locate at a point where agglomeration economies or low labour costs were present if the advantages outweighed the increased transport costs implied by the move from the least-transport cost location.⁸ Weber therefore takes into account transfer costs for inputs and outputs, labour costs and external economies of scale. The location of the firm is determined by the point of minimum total costs in terms of the trade-off between distance from inputs and the markets, advantages of locating at sources of cheap labour, and the advantages and disadvantages of agglomeration economies and diseconomies for all possible points of location. But Weber separates the points of agglomeration, labour concentration and the market, when it is likely they will all be located at the same point. Markets are normally largest at points of labour concentration and labour usually concentrates at points of economic activity - which is where agglomeration economies are likely to exist. Consequently the point of greatest agglomeration economies, labour concentration and the largest market, is likely to be one and the same, and the attraction of a point other than the least-transport-cost location (namely the point of the market and agglomeration economies) to be greater than Weber suggested.⁹

Palander and Hoover ignored the impact of economies of scale and agglomeration economies on the location of a firm¹⁰ and so were essentially advocating least-transport-cost rather than least-total-cost theories. However, the importance of economies of scale was taken into account in the determination of a firm's market area. Increasing returns to scale will lead to prices at the point of delivery falling as the market area increases and so firms producing the same product will have

large market areas and be widely dispersed. If transport costs per unit of distance fall over increased distance, as Palander suggests, this tendency will be reinforced. Conversely, for decreasing returns to scale, the delivered price would rise quickly with distance and producers will be encouraged to produce at intermediate locations between existing firms to serve areas with high delivered prices. Thus, production points would tend to be relatively close together and market areas relatively small.

Least-cost location theories conclude that firms will tend to locate at material sources or markets, rather than intermediate points (unless they are transshipment points). This tendency is reinforced by the fact that the concentration of firms at markets and material sources means that these points are those of high labour concentration (and therefore relatively low labour costs) and agglomeration economies. Not only will markets and material sources be the least-transport-cost location, but should be the least-total-cost location as well. The degree of concentration of firms producing the same product at a market or material source will depend on the size of each firm's market area. This in turn depends on the rate at which their delivered prices increase with increased distance from the point of production and the increase in market size.

The importance of transport costs were also emphasised by Lösch¹¹ and Christaller¹², who attempted to rectify the failure of least-cost theories to deal with the importance of demand in location decisions. Prices rise the further a good is being sold from its centre of production, because of transport costs, and, hence, demand falls. The result is that producers and service-centres will be evenly spaced, each having an identical market area, hexagonal in shape¹³ and making normal profits. The size of the market area is determined by the level of demand required by each industry or service to make normal profits. Different market sizes will exist for all industries and service sectors and where production points overlap areas of economic concentration will be found¹⁴, the size of the area depending upon the number of overlapping production localities.

Lösch and Christaller used the effect of transport costs on prices and demand to arrive at a well-ordered system of production localities. But

they ignored other locational principles - particularly the importance of economies of scale. The larger the market area a good or service covers, the more it may be able to benefit from internal economies of scale and so prices may actually fall (or rise less slowly than the increase in transport costs) as distance from the point of production increases. Furthermore, the concentration of economic activity (and, hence, population) at a particular location may generate demands for new services not previously required. Concentration may provide external economies which attract further producers and so increase the rate of growth of the centre and increase demand for goods and services. But this source of growth is neglected by the focus on factors affecting the demand for goods and services, rather than their supply. Consequently, the forces of concentration towards a locality are underestimated by ignoring the attraction of agglomeration economies and external economies of scale, and an unrealistic vision of evenly-dispersed production is given. Moses¹⁵ endeavoured to produce a general theory of location that would allow for both demand and supply factors. To achieve this he attempted to introduce the spatial variant into the theory of the firm by allowing for spatial variations in production costs and prices at alternative inputs, and for a non-linear production function (i.e. increasing and decreasing returns to scale). He concluded that there is no one single optimal location point and that the optimum location varies with the level of output. It will be pure coincidence if the point of optimum location and the point of minimum transport costs are the same. The optimum location is seen to depend upon the price of inputs at their source; upon the effect of transport rates on the cost of inputs and the final product; on the geographic position of materials and markets; the properties of production functions; and the demand (revenue) function.

Moses therefore strove to overcome the failings of least-cost models - their neglect of spatial variations in prices and quantities of inputs that might exist at alternative locations; the assumption of a linear homogenous production function (constant returns to scale); the disregard for spatial differences in production costs; and, hence, the conclusion that the optimum location will be at the point of minimum transport costs. Instead he attempted to include all locational principles in the locational decision - transport costs, locational differences in prices, the geographic location of inputs and markets, constant, increasing and decreasing external- and internal-returns to

scale, and demand factors. The optimal location of the firm was consequently seen to vary with output levels, and, hence, to depend upon both supply and demand conditions.

Greenhut¹⁶ attempted to synthesise the least-cost and revenue maximising approaches by providing for both cost and revenue to be considered in selecting locations. He considered cost factors (including transport and production costs), demand factors (including the locational interdependence of firms and the market-form operating), cost-reducing factors (personal and economic), revenue-increasing factors (personal and economic) and "psychic" factors such as risk-taking. He concluded that location will take place where the difference between total cost (including personal cost) and total revenue (including personal or "psychic" income) is greatest. Like Moses, Greenhut suggested that the optimal location of a firm varies with output levels, and, hence, with supply and demand conditions. But he did so for different reasons: whereas Moses used a simple neoclassical model of profit maximisation, Greenhut departed from the purely economic determinants of location and emphasised the role of "personal" and "psychic" factors in the location decision.

The inclusion of non-economic factors, such as "personal preferences" and "psychic" income, into the location decision suggests that firms will tend to locate at existing points of concentration so as to minimise risks and maximise "psychic" income. Because of uncertainty and an inability to accurately calculate maximum total profits, firms may rather settle for "satisfactory" profits and these are most likely to be found at points of existing economic concentration where markets are large and external economies of scale are experienced.¹⁷ Firms may not locate at the optimal profit-maximising location if they believe it to involve greater risks than alternative locations. In particular, new locations for particular industries involve greater risks than existing locations.

3.4 IMPLICATIONS OF LOCATION THEORY FOR REGIONAL GROWTH

The location of a firm depends upon transfer costs, the location of inputs and markets, internal and external economies of scale, and agglomeration economies. But these factors are themselves often the outcome of earlier location decisions. Transport networks normally link

existing areas of economic concentration, while the location of markets and manufactured inputs depends on where labour and manufacturing industries have located in the past. External and agglomeration economies are, likewise, the product of previous decisions to locate in close proximity to existing firms. Thus present location decisions are largely dependent upon decisions made in the past, and to the extent that those decisions provided existing areas with advantages over others, the cumulative nature of these areas of concentration is reinforced.

Based upon the assumptions of a spatially uniform distribution of demand and production costs, the location of firms may be expected to be dispersed across a region either evenly or at least in many various degrees of concentration. But, given variable transport rates per unit of distance, and transfer costs, firms will tend to locate either at existing markets or input sources. Except for raw materials, many of the inputs required by firms are produced by other firms and, hence input sources will frequently be areas of existing economic concentration. Because of external economies and agglomeration economies, existing points of concentration will also tend to be points of low-cost production. Furthermore, the concentration of population in areas of high economic activity will mean that these points are also larger markets for products than areas of low population density. Accordingly, both cost and demand factors will encourage the further centralisation of economic activity at points where it has previously converged.

Contrary to Lösch's idyllic world, (in which the firms of every industry are distributed in even patterns across the region), the forces of location suggest that firms will be distributed unevenly in space. Existing areas of economic activity have strong attractive powers as locational sites, while undeveloped areas have little attractive appeal. Consequently, areas of economic concentration will continue to expand and the location of firms to become even more concentrated. The implications for regional economic growth are considerable. Within a country or economic area, manufacturing activities and services will tend to be unevenly dispersed, with some areas of concentration and development, and others largely devoid of economic activity and, consequently, undeveloped. Even within regions some constituent localities will be developed and others undeveloped.

In an economy in which manufacturing and services comprise a large proportion of Gross Domestic Product, economic growth will depend largely on growth in these sectors - and regional growth, on where it is located. Location theory suggests this growth will be confined largely to existing areas of economic concentration. Thus fast-growing regions and areas within regions will continue to grow, while areas within which there is little economic activity, to stagnate. Economic growth is therefore cumulative in nature - a conclusion that will be expanded upon in the following pages.

3.5 .THE THEORY OF CUMULATIVE CAUSATION

Neoclassical and export-base theories attempt to explain regional development disparities in terms of factor endowments - those areas favoured by climate, natural resources and population will develop more rapidly than those less favourably endowed. Consequently, development depends largely upon historical accident. Such theories may be adequate for land-based activities such as agriculture and mining where resource endowment determines the crops to be grown and the minerals to be mined; but as a general explanation of the development of manufacturing activities (which account for the greatest part of regional and national development disparities) resource endowment alone is insufficient. The factors influencing the decision of a firm to locate in one region rather than another are ignored when they may be vital in the determination of regional growth. Just as location theory ignores regional growth, so regional growth theories frequently neglected factors affecting location.

Hence the location of firms and regional growth cannot be considered separately. But the location of manufacturing activities within a region cannot be explained by that region possessing a large quantity of capital, as such capital endowment arises only because manufacturing activities located there in the first place. Nor can the uneven distribution of those "footloose" industries where transport costs are unimportant¹⁸ be successfully explained by location theory, except to suggest they will be "market-orientated". But this again begs the question, for the market exists only because manufacturing activities located there historically in the first place.

The Principle of Cumulative Causation attempts to provide a synthesis between Location and Regional Growth theories, and to explain persistent spatial differences in levels of economic development as measured by per capita income, employment and industrialisation. It is concerned with the conditions leading to, and perpetuating, regional growth differences, the polarisation of economic activity in specific regions within a national economy, and/or in specific centres within regions. The basic premise of cumulative causation is that regional growth is self-reinforcing by nature, so that developed regions will continue to develop, while underdeveloped regions will decline still further. The process of cumulative causation is double-edged, working in both an upward and downward direction, resulting, unless regulated, in greater regional inequalities. Armstrong and Taylor observe: "The polarisation hypothesis [cumulative causation] differs from other models in three ways. First it is primarily concerned with the conditions leading to the reinforcement of growth differences between regions. Second, it stresses a wide range of different mechanisms which could contribute to the perpetuation of regional growth differences. Third, one hesitates to call the polarisation hypothesis either a theory or an hypothesis. It is really a group of ideas, concepts and bits-and-pieces culled from numerous theories."¹⁹

Myrdal²⁰ suggests that economic theory in general is unsuited for a study of regional or national development, because it is based explicitly or implicitly on the assumption of stable equilibrium - that economic forces will tend to counteract one another so as to bring the system to a state of rest. Instead, a disturbance may produce reactions which tend in the same direction as the primary change, causing the system to move even further from the initial position than the primary change suggested.

The cumulative process resulting from a disturbance to the system can come to an end as a result of an offsetting exogenous change of equal strength, or policies designed to counteract the movement. Such counter-balancing forces are not, however, the natural outcome of the system implied by the notion of stable equilibrium. The position reached is unstable, since any further changes can lead to a cumulative movement in the direction of the new changes. If at any point in time the economic system is at rest and all the forces acting upon it tend to counteract one another, then such a situation exists purely by chance and

is not one of stable equilibrium. A change in any one of the forces acting upon the system will bring about changes in other forces and "start a cumulative process of mutual interaction in which the change in one factor would continuously be supported by the reaction of the other factor, and so on in a circular way."²¹

The principle of cumulative causation renders futile any attempt to isolate a single overriding factor "causing" regional development disparities, as all such factors are interlinked. For the same reason any division into "economic" and "non-economic" factors is inappropriate and this may sometimes necessitate a break from traditional economic theory. At the same time it means that economic development via the cumulative process can result from policy measures applied to any one of the many factors in the system, although the results of such policies may differ depending upon which factor they are applied to. Because of cumulative causation, the total effects of policy-induced changes may exceed the costs and magnitude of the policies themselves, and, consequently, justify the immediate sacrifices such reforms may entail.

The principle of cumulative causation may be more readily applied to the problem of regional development and underdevelopment within national boundaries than stable equilibrium theory. Of crucial importance is the need for a region to develop an initial advantage over other regions, for once a region begins to develop, the nature of the economic system enables it to continue to grow at the expense of other regions in the economy, through the process of cumulative causation. "The result is a vicious spiral of economic growth which may enable a region to continue to grow rapidly long after its initial advantages have withered away."²²

Regional growth differences are the outcome of both internal and external economies of scale. In the same way as a fast-growing firm may gain a competitive cost advantage over its rivals through the existence of internal economies of scale, so too many regions as a whole gain competitive cost advantages over other regions through the existence of external economies of scale. In both cases, growth will be cumulative.

External economies of scale are reductions in average costs and are the consequence of the interrelated nature of economic activities. They

consist of localisation economies and urbanisation (agglomeration) economies. Localisation economies arise from the geographical concentration of firms with strong input-output linkages in the same industry. The concentration of firms that individually produce for the different stages of production in an industry allows specialisation to take place. Consequently, there is an increase in efficiency and a reduction in the average costs of production. Localisation economies that might develop are: the establishment of specialist services catering for various industries; the joint-sharing of facilities; subcontracting in the production process; joint research and innovation within an industry; the creation of a skilled labour pool; and "in a world distinctly not perfect in formation flows, such geographical concentration strongly reduces the risk and uncertainty of industrial activity and innovation."²³ But not all external economies require that firms locate within close geographical proximity of one another. The more mobile are the external economies, the less powerful will be the attraction of geographical concentration, and the more developed transport and communication networks are, the more mobile will external economies be likely to be. To the extent that localisation economies are mobile, the weaker will tendencies for geographical centralization be; but the more immobile they are, and the more they reduce average costs, the greater the incentives for the spatial concentration of economic activity.

Urbanisation or agglomeration economies are the outcome of the geographical centralization of a large number of economic activities not necessarily all in the same industry. They arise from the concentration of services catering for many industries - such as transport; well-organised labour markets; large pools of skilled labour; social infrastructure; government, legal and commercial services; and financial institutions - as well as producers of inputs for several industries. Urban centres provide large markets and so are particularly attractive to market-oriented industries (especially service industries), and, in addition, provide many social and cultural activities which may influence the location decisions of entrepreneurs. Furthermore, the rate of innovation and invention is positively related to the growth and size of urban centres,²⁴ which means further reductions in production costs, and further incentives for industrial concentration.²⁵ The more immobile they are, and to the extent that they reduce average costs,

agglomeration economies provide a powerful inducement for the concentration of economic activity.

Localisation and agglomeration economies together play an important role in bringing about the concentration of economic activity within certain localities or regions. This concentration has a cumulative effect on the economic growth of a region, which, because of increasing specialisation and economies of scale, becomes increasingly attractive as a production locality. The crucial point is that market forces are cumulative by nature and tend to increase rather than decrease regional inequalities. Left unchecked, market forces would result in industrial, commercial and financial activities concentrating in certain regions and localities only, leaving the rest of the national economy relatively untouched by industrial development. Areas of economic concentration are determined by the initial location of activities, often for advantages which later cease to exist, but which are superseded by the cost advantages of economies of scale. The importance of an initial headstart in determining the growth of a region is once more emphasised.

The increasing attractiveness of existing areas of economic concentration give rise to "backwash effects" which act to the benefit of developed localities and to the detriment of undeveloped regions. The efficiency of developed localities as centres for production and the high levels of demand within these areas makes them attractive investment sites offering high returns. Consequently, capital will flow from the less-developed to the developed regions - the banking system being an important instrument in this process as it takes savings away from the underdeveloped regions and invests them in the developed regions where the demand for investment and the returns are much higher, while the risks are much lower. Higher wages in the developed regions and the additional social facilities (such as schooling, entertainment etc.) which they offer, will persuade workers to migrate from the underdeveloped to the developed regions, where employment opportunities are greater and more fruitful. Of vital importance in this regard, is that it is the most efficient, enterprising and young workers who tend to emigrate, and so the backward region's ability to catch up with the developed regions is further reduced by an unfavourable demographic distribution²⁶ and a diminishing local market.

As labour leaves the underdeveloped region and is employed in the developed region, "the first effects of this migratory process would be a reduction in the demand for final output in the depressed region and an increase in such demand in the prosperous region. Consequently, a negative employment-output multiplier process is set off in the depressed region, while the opposite occurs in the prosperous one. In Keynesian dynamics, the wage adjustments wrought by the respective labour markets are too slow to compensate for interregional differences in employment opportunities, which tend to become cumulative in the course of time. Consequently there is no automatic tendency towards the interregional equalisation of wage levels. Furthermore, there would be no compensating flow of capital in a direction opposite to inter-regional movements of labour The consequence of migration would therefore be the entrenchment of prosperity in the already prosperous and of depression in the already depressed region."²⁷

The cumulative effect of interregional migration is reinforced by the selective nature of such migration. In an examination of regional migration in South Africa, Truu observes: "Migration itself is usually a matter of selection; those who leave a certain region do not normally constitute a representative sample of its population. If out-migrants happen to be positively selected, then the first workers to leave the depressed region would be those with the best prospects of finding employment (or better-paid jobs) in the prosperous region. In other words, while workers with special skills depart, those without them remain. As there is bound to be some complementarity in the employment of skilled and unskilled labour, inter-regional migration may thus aggravate unemployment (or prevent wages from rising) in the depressed region. Positively selected out-migration would therefore lead to a conclusion broadly similar to that yielded by the Keynesian hypothesis."²⁸

Production in the developed regions will tend to be more efficient than in the less-developed regions, because of internal and external economies of scale, and so inter-regional trade may lead to the destruction of small and handcraft industries existing in the underdeveloped regions and thwart the emergence of new ones. The result is that underdeveloped regions remain largely agricultural and unable to meet the needs of their growing populations.²⁹ Even if the industries in the underdeveloped

regions are not destroyed by interregional trade, they remain inefficient compared to the expanding industries of the developed regions.

Unless poorer regions are aided by the central government, communications and transport networks, public utilities, infrastructure and medical and educational facilities will be inferior to those in rich regions and further contribute to the growth of regional inequalities.³⁰ The high quality of such services in the developed regions will be conducive to growth, while the poor standard in the underdeveloped regions will hamper any such prospects and the outcome for growth is cumulative in nature. For underdeveloped regions their "entire systems of valuations would take on such an imprint of poverty and backwardness that they would become even less susceptible to the experimental and ambitious aspirations of a developing society ... All these frustrating effects of poverty, operating through other media than those analysed by traditional economic theory, are interlocked in circular causation, the one with the others and all with the biases [I] referred to in the working of migration, capital movements and trade. The opposite effects of rising economic levels in the centres of expansion are in a similar fashion also inter-connected in a circular causation, continuously sustaining further expansion in a cumulative fashion."³¹

Because of "backwash effects" development in the developed areas exists at the expense of the underdeveloped regions. Contrary to the predictions of classical economic theory, factor flows and regional trade lead to further growth in the already developed regions, and hinder the prospects of growth in underdeveloped regions. This generates widening regional development disparities, and the wider these differences, the greater the strength of the "backwash effects".

In addition to the "backwash effects" operating to the detriment of the underdeveloped regions, so-called "spread effects" may work in their favour. As economic concentration within particular localities occurs, so transport and communication links with other regions can be expected to improve and enterprising firms within the developed regions can investigate new investment opportunities within the less-developed regions. At the same time, the growth of the prosperous areas leads to an increased demand for the products of the backward regions. For instance, the growth of an urban area induces increased demand for

agricultural products in the surrounding region, while the growth of any locality may spread to other districts where conditions are favourable for the production of the raw materials and other inputs required by the industries in the expanding locality. If the induced demand is sufficiently large to overcome the "backwash effects" from existing development centres, it may result in these areas becoming new centres of economic expansion.

This tendency is reinforced by cost-increasing external diseconomies of scale which may arise, after a point, from the cumulative development of economic activity within certain regions.³² In contrast the underdeveloped regions will experience growing external economies in the form of a surplus of labour and underutilised social infrastructure. The result is that areas of economic concentration will, after a certain level is reached, become increasingly unattractive as investment sites, while conversely the underdeveloped regions become increasingly attractive. But many of these economies and diseconomies are external to individual producers (social costs) and may not be fully reflected in private costs and prices. Consequently, "spread effects" will not cause underdeveloped regions to become as attractive as would otherwise have been the case.

"Spread effects" work through the process of cumulative causation so as to narrow regional inequalities and to some extent counter the cumulative nature of "backwash effects". Whether the positive aspects of the "spread effects" on backward regions will be sufficient to neutralise the negative "backwash effects" is uncertain, but under no circumstance should the two counteracting forces be seen as providing the basis for stable equilibrium. "In the marginal case the two kinds of effects will balance each other and a region will be 'stagnating.' But this balance is not a stable equilibrium, for any change in the forces will start a cumulative movement upwards or downwards But ordinarily, even in a rapidly developing country, many regions will be lagging behind, stagnating or even becoming poorer; and there would be more regions in the last two categories if market forces alone were left to decide the outcome."³³

The extent to which "spread effects" will counteract "backwash effects" (and, hence, the extent to which regional disparities will narrow or

widen only slowly) depends in some measure upon the level of economic development in the country in which the regions are located. Regional development disparities will tend to be much wider in poor rather than rich countries, and to widen still further in poor countries while diminishing in rich. These trends will frequently be reinforced by the activities of the central governments in the countries concerned. The higher the level of economic development within a country, the stronger the "spread effects" will be. "... a high average level of development is accompanied by improved transportation and communications, higher levels of education, and a more dynamic communication of ideas and values - all of which tends to strengthen the forces for the centrifugal spread of economic expansion or to remove the obstacles for its operation..."³⁴

The object of regional economic policies within a country should be to encourage "spread effects" within poor regions so as to offset the "backwash effects" and progress towards regional equality through a cumulative process. Myrdal suggests: "The neutralisation of the backwash effects, when a country reaches a high level of development where the spread effects are strong, will itself spur on economic development, and so become an important factor in the cumulative process. For with the extinction of abject poverty on a large scale goes a fuller utilisation of the potentialities of the human resources in a nation. This is one of the reasons why rapid and sustained progress become an almost automatic process when once a country has reached a high level of development... In contrast, part of the curse of a low average level of development in an under-developed country is the fact that the spread effects are weak. This means that as a rule the free play of the market forces in a poor country will work more powerfully to create regional inequalities and to widen those which already exist. That a low level of economic development is accompanied as a rule by great economic inequalities represents itself a major impediment to progress. It tends to hold the underdeveloped countries down. This is one of the interlocking relations by which in the cumulative process 'poverty becomes its own cause.'"³⁵

In summary, because of the process of cumulative causation, regions or localities which develop historically may continue to grow even after the conditions necessary for their initial development have ceased to exist - and may do so even at the expense of other regions. Economic development

will concentrate within specific regions which have historical advantages with respect to development and subsequently gained the advantages of internal and external economies of scale and "backwash effects". Regions which have not developed in the past will remain under-developed because of their disadvantages relative to developed areas as production sites and the harmful consequences of "backwash effects". Consequently, poorer countries, where "spread effects" are weak, will tend to contain large, widening, internal development disparities, while in richer countries such disparities will tend to be narrowing.³⁶ In poor areas poverty, and the inefficient utilisation of resources which it implies, will limit the area's potential for economic growth. In rich areas a fuller utilisation of resources and, hence, a greater capacity for economic growth, will be possible. Myrdal concludes: "That there is a tendency inherent in the free play of market forces to create regional inequalities, and that this tendency becomes the more dominant the poorer a country is, are two of the most important laws of economic underdevelopment and development under laissez-faire."³⁷

3.6 NOTES

1. Perloff, H.S., Dunn, G.S., Lampard, E.E., and Muth, R.F., Regions, Resources, and Economic Growth, (John Hopkins: Baltimore, 1960), p.75.
2. For example, McCrystal, L.P., City Town or Country, (Balkema: Cape Town, 1969), p. 30, suggests: "Location theory is based upon the assumption of rational decisions being made by entrepreneurs in the light of the full knowledge of the facts. But the history of the early growth of regions indicates that this was seldom, if ever, the case. Certainly in the newly-settled countries, much seems to have depended upon where the settlers landed.... This has been the pattern in Australia, New Zealand, the United States of America and South Africa. Little in the way of detailed assessments of the resources of the various parts of these countries was made before deciding to establish a settlement at a particular place. Usually it was the superficial attraction of a bay which was behind the decision as to where to land and/or settle. This largely accounts for settlements at Sydney, Cape Town, Boston and New York, to name but a few. Sometimes the early choice was not a very good one - generally not based upon a knowledge of the facts, it would be pure chance if it were.... the important point here is that random chance or a very superficial view of resource endowments, dictated the pattern of early settlement. Moreover, where settlement has been based upon the exploitation of a valuable resource, technological developments or the exhaustion of the resource may remove almost entirely the raison d'etre of the settlement. Yet such is the nature of human affairs that these initial 'irrational' decisions or the exploitation of resources, which later disappear, are the kinds of things upon which the spatial structures of modern economies have been based."
3. For example, fruit-canning industries.
4. Weber, A., Theory of the Location of Industries, (translated by C.J. Friedrich), (University of Chicago Press: Chicago, 1928).

5. Palander, T., Beiträge zur Standorts theorie, (Almqvist och Wiksells Boktryckeri: Uppsala, 1935).
6. Hoover, F.M., Location Theory and the Shoe Leather Industries, (Harvard University Press: Cambridge Massachusetts, 1937); and Hoover, F.M., The Location of Economic Activity, (McGraw-Hill: New York, 1948).
7. But these least-cost theories neglect demand factors in the determination of location. A general theory of location should consider factors affecting both demand and supply, and so by concentrating only on factors affecting supply the least-cost theories are applicable only to the special-case where demand is uniformly distributed over space. Nor do they consider that there may be a divergence between private and social costs involved in alternative locations and that the least-cost location for a firm may not be the least-cost location for society.
8. The greater the labour costs as a proportion of total production costs, the greater will be the savings per unit of output brought about by locating at a point of labour concentration (i.e. low labour cost), and, hence, the more likely the firm will be to locate at the source of cheap labour than minimum transport costs.
9. Especially for small firms which can benefit from external economies that are often internal to large firms.
10. Hoover does, however, suggest that if location away from the market or material source does occur, then this indicates that the industry is not primarily concerned with minimising transport costs and that some other factor (such as cheap labour, or agglomeration economies) has influenced location. But such factors are considered to be secondary to least-transport costs. But in fact - especially in labour-intensive firms and small firms for which agglomeration economies are particularly important - these other factors may be more important than transport costs. To the extent that points of agglomeration economies and relatively cheap labour costs (high labour concentration) are in reality likely to coincide with material sources, transshipment points and markets, the tendency for location

to concentrate at these points will be reinforced - and Hoover's neglect of these factors makes little difference to his conclusions.

11. Losch, A., The Economics of Location, (translated by W.H. Woglom), (Yale University Press: New Haven, 1954).
12. Christaller, W., Central Places in Southern Germany, (translated by C.W. Baskin), (Prentice-Hall: Englewood Cliffs, 1966).
13. The hexagon is the shape with the highest demand per unit of area and minimises the total distance from its centre to all points within the market area, while at the same time being able to cover an entire spatial area.
14. Whereas in least-cost location theories the point of location is that of minimum costs, in Christaller and Losch's demand-oriented theories the point of location is that of maximum demand or revenue. While least-cost theories concentrate on aspects affecting the supply of products and ignore demand, these demand-oriented theories concentrate on the demand for a product and ignore supply. Consequently, they are applicable only to the special circumstances where costs are unaffected by location. Not only are cost factors ignored, but demand is unrealistically assumed to be evenly distributed across an "isotropic plane". Cost factors are only considered to the extent that transport costs limit the size of market areas by their effect on price (and therefore demand). Although areas of concentration where production points will overlap are explicitly recognised, the agglomeration economies surrounding this concentration and their effect on prices are ignored. Furthermore, this acceptance of points where production and services will be concentrated and points where it will be sparse, is contrary to the initial assumption of an "isotropic plane". But concentration of population in those areas where production and services are located must automatically change the demand pattern across the spatial area. In fact, if normal profits are still to be made, the concentration of population in certain sectors should mean smaller market areas and the closer distribution of firms producing identical products in those areas where population is concentrated than in those where it is sparse.

15. Moses, L.N., 'Location and the theory of production', Quarterly Journal of Economics, vol. 72, 1958, pp. 259-272.
16. Greenhut, M.L., Plant Location in Theory and in Practice, (University of North Carolina Press: Chapel Hill, 1956); and Greenhut, M.L., Microeconomics and the Space Economy, (Scott Foresman: Chicago, 1963).
17. This observation is supported by the conclusions of sales maximisation theories of location [see Baumol, W.J., Business Behaviour, Value and Growth, (Macmillan: New York, 1959)], and the so-called "satisficing" theory of location [see Simon, H.A., 'Theories of Decision-Making in Economics', American Economic Review, vol. 49, 1959], pp. 253-283.
18. When the weight of the final product is less than that of the material inputs and where transport costs comprise an important part of total costs, then firms will tend to locate at the input source. When the weight of the final product exceeds that of the inputs, firms will locate at the market. But in those cases where weight changes are insignificant, transport costs alone suggest that location may be a matter of indifference.
19. Armstrong, H. and Taylor, J., op. cit., p. 38.
20. Myrdal, G., Economic Theory and Underdeveloped Regions, (Methuen: London, 1957).
21. Ibid., p. 16.
22. Armstrong, H. and Taylor, J., op. cit., p. 39.
23. Ibid., p. 40.
24. Pret, A.R., 'Industrialisation, initial advantage and American metropolitan Growth', Geographical Review, vol. 55, no. 2, 1965, pp. 158-185.

25. Armstrong, H. and Taylor, J., op. cit., p. 41, note: "This may seem a little strange. Yet the stimulus to invention relies on more than just personal genius. In part it also depends upon the demand for inventions by industrialists and on the interplay of industrialist and inventor. One invention will often call for others before it can be put into operation. Above all, urban areas offer excellent conditions for invention, innovation and the diffusion of innovation."
26. At the same time, poorer regions most often have higher birth rates than rich regions, which adds to the already unfavourable age-distribution in the poorer regions. As a result, poor regions have relatively larger populations relative to the total working population than rich regions i.e. the level of dependents to workers is higher.
27. Truu, M.L., 'Some Effects of Regional Migration', South African Journal of Economics, vol. 41, no. 2, 1973, p. 100.
28. Ibid., pp. 100-101.
29. "And since agriculture goes into relative decline during the course of economic growth and releases workers in the process, the cumulative downward spiral in the relative futures of lagging regions is reinforced". McCrystal, L.P., op. cit., p. 32.
30. Myrdal, G., op. cit., p. 30, notes: "Economic theory has disregarded these so-called non-economic factors and kept them outside the analysis. As they are among the main vehicles for the circular causation in the cumulative processes of economic change, this represents one of the principal shortcomings of economic theory".
31. Ibid., p. 30.
32. Such as traffic congestion, high labour costs, high rent levels, pollution, increasingly high levels of public expenditure, growing shortages of housing and public services, etc.
33. Myrdal, G., op. cit., p. 32.

34. Ibid., p. 34.

35. Ibid., p. 34, emphasis added.

36. For empirical support of this contention, see Williamson, J., 'Regional inequality and the process of national development', Economic Development and Cultural Change, vol. 13, no. 4, 1965, pp. 1-84.

37. Myrdal, G., op. cit., p. 34.

CHAPTER 4 : THE EXPORT BASE MODEL AND CUMULATIVE CAUSATION -
A RECONCILIATION

Kaldor¹ and Dixon and Thirlwall² attempted to wed the Export Base Model and the Principle of Cumulative Causation, so that regional growth is both determined by the performance of the export base and is cumulative by nature. They attempt to link regional growth brought about by changes in the export base with feedback effects on the competitiveness of regional exports - and thereby on future export demand and regional growth. Essentially they argue that once a region gains a growth advantage it will sustain that advantage because of the increasing returns to scale (productivity growth) induced by that growth - the Verdoorn effect - which keep the region competitive in the exports which gave it its growth advantage in the first place.

The underlying assumptions of the model imply that regional growth in an open economy is determined by growth in demand, rather than by supply factors; that in the long-run the rate of growth of output is determined by the growth of autonomous demand;³ and that in a regional economy the chief autonomous demand factor will be demand from outside the region - the demand for exports.⁴

The rate of growth of output depends upon the rate of growth of exports.
For region i:

$$y_i = f(x_i) \quad \dots(4.1)$$

where: y_i = rate of growth of output in region i
 x_i = rate of growth of exports from region i
 f = elasticity of output growth with respect to export growth.

The rate of change of labour productivity resulting from increasing internal and external returns to scale is assumed to be determined by the rate of growth of output. The faster the rate of growth of output, the greater will be the rate of growth of labour productivity - Verdoorn's Law.⁵ For region i:

$$q_i = a_i + by_i \quad \dots(4.2)$$

where: q_i = rate of change of labour productivity in region i
 a_i = autonomous productivity growth in region i
 b = a positive constant known as the Verdoorn coefficient.

The rate of growth in the demand for exports is determined by the rate of domestic price inflation in the exporting region and by the rate of growth of income in "the rest of world".⁶ For region i:

$$x_i = dp_i + ep_j + gz_j \quad \dots(4.3)$$

where: p_i = rate of price inflation in region i
 p_j = rate of price inflation in "the rest of the world"
 z_j = rate of growth of income in "the rest of the world"
 d = price elasticity of demand for exports and is negative
 e = cross elasticity of demand for exports and is positive
 g = income elasticity of demand for exports and is positive

The faster the rate of growth of income in "the rest of the world", and the lower the rate of domestic inflation relative to "the rest of the world", the faster will be the rate of growth of domestic exports.

Both the rate of growth of income and price inflation in "the rest of the world" (i.e. outside region i) are assumed to be exogenously determined (by factors outside of region i). The rate of domestic price inflation can be defined as the difference between the rate of cost inflation (wage inflation plus the rate of change in the profit mark-up on wage costs) and the rate of change of labour productivity. For region i:

$$p_i = w_i + t_i - q_i \quad \dots(4.4)$$

where: w_i = rate of change in money wages in region i
 t_i = one plus the rate of change in the percentage mark-up on unit labour costs in region i.

Combining equations (4.1), (4.2), (4.3) and (4.4), the cumulative effect of an increase in exports on the rate of growth of output may be shown. Suppose, for example, that there is an increase in income in "the rest of the world". This will lead to an increase in the rate of growth of exports from region i (4.3), which in turn means an increase in the

rate of growth of output in region i (4.1), an increase in the rate of growth of labour productivity in region i (4.2), and a fall in the rate of domestic price inflation in region i (4.4). Consequently, there is a further increase in the rate of growth of exports from region i (4.3) and the whole circular process - which began with a change in autonomous demand - is repeated. The outcome of the circular process is that the increase in the rate of growth of output will be larger than that suggested by the initial increase (4.1).

Substituting (4.2), (4.3), and (4.4) into (4.1), and simplifying, the equilibrium rate of growth of region i can be derived. For region i:

$$y_i = \frac{f [d(w_i + t_i - a_i)] + ep_j + gz_j}{1 + f db} \dots(4.5)$$

In (4.5), d is negative, while all other values are positive, and, therefore, the equilibrium growth rate of region i is positively related to changes in a_i , e , p_j , g , z_j , f and b , but negatively related to changes in d , w_i and t_i . Regional growth-rate differences can be explained by regional differences in autonomous productivity growth (a_i), the rate of cost inflation ($w_i + t_i$), the price elasticity of demand for a region's exports (d), the cross elasticity of demand for a region's exports (e), the income elasticity of demand for a region's exports (g), the elasticity of output growth with respect to export growth (f), and the Verdoorn coefficient (b).

Depending on the regional values of the variables in equations (4.1), (4.2), (4.3), and (4.4), different regional growth rates can occur, and, in conditions of explosive growth (where every increase in output in the circular process is larger than the previous increase) regional growth-rate differentials can widen or narrow indefinitely. But, it is more likely that regional growth rates will be constant at some level, yet different. Although regional growth rates may not diverge, where they differ regional output disparities will grow over time. For example, suppose a region (region i) obtains, for some reason, an initial advantage in the production of an export good with a high income elasticity of demand. Given that the values of all the other variables are the same, region i will have a higher growth rate than that of another region whose exports have a low income elasticity of demand

[(4.5)]. Through the Verdoorn effect, productivity growth will be higher in region i , the rate of domestic price inflation will be lower, the rate of growth of exports will be higher and so on. Consequently, the region with exports having a higher income elasticity of demand will have a higher growth rate than other regions, and will maintain its initial competitive advantage through a more rapid increase in productivity than in other regions. In this way, regional development disparities will be widened through the process of cumulative causation in regional trade.

In equation (4.5) it can be seen that regional growth rates may differ because of regional divergences in any one of the parameters and variables. Two factors frequently cited as producing regional development disparities are regional differences in labour productivity relative to wage levels ("efficiency wages") and regional differences in income elasticities of demand resulting from favourable and unfavourable output compositions. Consequently, regional policies are often designed to lower labour costs (and thereby reduce "efficiency wages") and at creating favourable output compositions (so that the goods produced will have higher income elasticities of demand) in the underdeveloped regions.

Given a certain degree of labour mobility and collective bargaining on a national basis by an organised labour movement, there will be a limit to the extent by which regional wage levels may differ, but the rates of growth of labour productivity [(4.2)] will be higher the greater the rate of growth of regional output. Labour will tend to become relatively less productive in slow- than fast-growing regions, but productivity differences will not be compensated by wage differentials. In other words, "efficiency wages" will fall in fast-growing regions where productivity rises faster than the national average, and rise in slow-growing regions. For this reason relatively fast-growing regions tend to acquire a cumulative competitive advantage over slow-growing regions, as "efficiency wages" fall in the former and rise in the latter, even if money wages increase uniformly in both. "It is through this mechanism that the process of 'cumulative causation' works; and both comparative success and comparative failure have self-reinforcing effects in terms of industrial development. Just because the induced changes in wages increases are not sufficient to offset the differences in productivity increases, the comparative costs of production in fast growing areas tend to fall in time relatively to those in slow growing

areas; and thereby enhance the competitive advantage of the former at the expense of the latter."⁷

From equation (4.5) it can be observed that a regional wages subsidy designed to lower "efficiency wages" in underdeveloped regions and so assist their competitive position, will provide a once-only boost to growth within subsidized regions and will not permanently affect the rate of growth of money wages, nor, therefore, the rate of growth of output of the subsidized regions - unless the level of subsidy is continually raised at a faster rate than the growth in money wages. Regional wage subsidies amount to no more than an autonomous shock and can only affect the rate of growth of output if they favourably alter the existing parameters of the regional growth model. But regional wage subsidies will tend to protect and preserve the existing industrial pattern within a region and even hinder progression from an unfavourable to a favourable industrial base with a high income elasticity of demand.

It follows that regional policies aimed at altering the unfavourable industrial structure of underdeveloped regions to one in which exports have a high income elasticity of demand (i.e. policies designed to raise the value of g in equation (4.5)), may be more successful in raising the growth rate of underdeveloped regions than a policy of regional wage subsidies.⁸ Capital, labour and transport subsidies, tax incentives etc. should be used to attract industries with high income elasticities of demand to underdeveloped regions, rather than to artificially lower wages in underdeveloped regions. Alternatively, they may be used to encourage increased productivity growth and so lower "efficiency wages".

In the model outlined above, an attempt was made to link export base theory and the principle of cumulative causation by means of Verdoorn's Law. Exports provide the autonomous demand essential for regional growth, and by the addition of Verdoorn's Law, regional growth is cumulative and regional growth differences persistent. Regional growth advantages emerging from a comparative advantage in some export product are sustained by the increased labour productivity accompanying rapid growth of output. Hence, it is Verdoorn's Law that ensures the model is circular and cumulative and that once a region attains a growth advantage, it will maintain it.

Regional growth rate differentials are the outcome of differences in any one of the variables and parameters specified in the model, and, accordingly, regional policies could be directed at altering any one of these values. But such changes would have to be sustained or regional growth rates would return to their previous levels. Such structural change involves making underdeveloped regions more competitive, through a fall in "efficiency wages", and encouraging them to produce products with higher income elasticities of demand and Verdoorn coefficients.

4.1 CRITICISMS

The key to the cumulative and circular nature of the model is the Verdoorn coefficient; but this also constitutes one of the principal weaknesses, for it is not clear what the Verdoorn coefficient involves. The Verdoorn coefficient broadly embraces the influence of internal and external economies of scale and "backwash" and "spread" effects under the single concept of the growth of labour productivity. But in so doing, the unstable-equilibrium basis of Myrdal's model is lost. What in Myrdal's model is the outcome of "a complicated, but intuitively plausible, interaction of economic forces working in the same direction, is reduced to one simple less-acceptable function."⁹ The Verdoorn coefficient simply assumes that increased output leads to increased labour productivity and ignores structural differences in the economy. It is likely that growth in some sectors (e.g. labour-intensive industries) will have greater or lesser effects on labour productivity than other sectors (e.g. capital-intensive industries) and different Verdoorn coefficients would exist for different industry-mixes. But these factors are neglected in the model through the assumption of a single regional coefficient, and the different consequences of changes in output of diverse sectors overlooked.

By introducing the concept of the export base into cumulative causation, the model thereby suffers from the failing of all export base models, and is unable to explain exactly how the export base is determined, or how it will change over time. Because the export base is homogeneous, the importance of different output compositions is again ignored. Furthermore, while the model clearly demonstrates the circular and cumulative nature of regional growth where regional growth rate differences exist, it does not show how or why these differences emerge

in the first place. Consequently, rather than providing an explanation of why some regions have higher growth rates than others, the model shows that if such differences exist, then they will persist. But some "triggering mechanism" is required to bring about these differences and set the process in motion in the first place.¹⁰

Finally, the use of falling "efficiency wages" to explain the cumulative concentration of economic activity in fast-growing localities is unsatisfactory, for it is possible for wages to rise more rapidly than in other localities without offsetting increases in labour productivity and without an end to the cumulative process.¹¹ The failure of efficiency wages to fall may result in higher prices rather than slow growth - provided the price elasticity of demand for exports is low.¹² Furthermore, the assumption that regional growth rates depend upon efficiency wages assumes that regions produce in competition with one another. In the case of regions producing similar products, efficiency wages may be important. But in the case of regions with widely divergent output compositions, this need not be so.

From the above models and theories of regional growth it is clear that economic growth is cumulative by nature and will tend to locate in some areas rather than in others. Economically developed regions will tend to grow faster than economically undeveloped regions and, thus, levels of development will continue to diverge over time. The implication for economic policy of such a conclusion is crucial, for undeveloped regions will continue to maintain a position of relative deprivation unless policy measures to counter such a tendency are adopted. In other words, so long as there is no automatic tendency towards convergence in levels of economic development, economic intervention may be justified. In the following chapters it will be argued that so long as sections of a region's or nation's population remain deprived of certain basic needs, the economic development of that region or nation will be restricted, and will continue to remain so because of the cumulative nature of economic development. Thus economic policy may be directed at the satisfaction of such basic needs, thereby removing the constraint on economic development, and reversing the restrictive results of cumulative development within an undeveloped area.

4.2 NOTES

1. Kaldor, N., 'The Case for Regional Policies', Scottish Journal of Political Economy, vol. 17, 1970, pp. 337-347.
2. Dixon, R. and Thirlwall, A.P., 'A Model of Regional Growth-Rate Differences on Kaldorian Lines', Oxford Economic Papers, vol. 27, July 1975, pp. 201-214; and Thirlwall, A.P., op.cit., pp. 132-165.
3. This assumption is based upon Hicks, J.R., A Contribution to the Theory of the Trade Cycle, (Oxford University Press: Oxford, 1950).
4. Kaldor, op. cit., pp. 341 - 342, notes: "In the case of industrial activities ('manufactures') the impact effect of exogenous changes in demand will be on production rather than on prices. 'Supply', at any rate long-run supply, is normally in excess of demand - in the sense that producers would be willing to produce more, and to sell more, at the prevailing price (or even at a lower price) in response to an increased flow of orders. In this situation the adjustment process operates in a different manner - through the so-called 'foreign trade multiplier'. Any exogenous change in the demand for the products of a region from outside will set up multiplier effects in terms of local production and employment which in turn will adjust imports to the change in exports... Hicks [Hicks, J.R., op. cit., p. 62] coined the phrase 'super-multiplier' to cover the effects of changes of demand on investment, as well as on consumption; and he showed that on certain assumptions, both the rate of growth of induced investment, and the rate of growth of consumption, become attuned to the rate of growth of the autonomous component of demand, so that the growth in an autonomous demand-factor will govern the rate of growth of the economy as a whole... From the point of view of any particular region, the 'autonomous component of demand' is the demand emanating from outside the region; and Hick's notion of the 'super-multiplier' can be applied so as to express the doctrine of the foreign trade multiplier in a dynamic setting. So expressed, the doctrine asserts that the rate of economic development of a region is fundamentally governed by the rate of growth of its exports. For the growth of exports, via the 'accelerator' will govern the rate of

growth of industrial capacity, as well as the rate of growth of consumption; it will also serve to adjust (again under rather severe simplifying assumptions) both the level, and the rate of growth, of imports to that of exports."

5. Verdoorn, P.J., 'Fattori che Regolano lo Sviluppo della Produttività del Lavoro', L'Industria, 1949.
6. By "the rest of the world" is meant all areas where export products may be demanded. In the case of a region this will usually be the rest of the country, but may include other nations as well.
7. Kaldor, N., op. cit., p. 343.
8. See Cameron, G.C., 'Economic Analysis For A Declining Urban Economy', Scottish Journal of Political Economy, vol. 18, 1971, pp. 315-345.
9. Armstrong, H. and Taylor, J., op. cit., p. 48.
10. In Myrdal's model initial advantages such as resource endowment or "historical accident" provided this "trigger", while in this model it is presumably provided by the demand for exports. But what determines export specialisation in the first place, is unexplained.
11. See Richardson, H. W., Regional Growth Theory, (Macmillan: London, 1973), pp. 33-34.
12. Thus fast growing regions may be the prime generators of nation-wide wage inflation.

CHAPTER 5 : THE BASIC NEEDS APPROACH TO DEVELOPMENT

5.1 BASIC NEEDS THEORY

In Chapter I it was stressed that a clear distinction should be drawn between the concepts of economic growth and economic development. For while growth is a necessary condition for development if "development" is not going to simply involve a redistribution of existing wealth or income, it is not a sufficient condition. Economic growth for example measures increases in an economy's output capacity over time, while economic development embraces the wider concept of the impact of economic growth on the living standards of all those living within an area. Hence, economic development may be defined in several ways. Development may be viewed as the attainment of maximum economic growth (i.e. y_t) associated with industrialisation as its main instrument. A variant of this is the maximisation of per capita income growth. Hence, development is viewed as a statistical measure, and no assumptions are made about the actual distribution of wealth or income. Alternatively, development may be viewed as "the redistribution of resources and public services in favour of the poor".¹ Hence, development focuses on a target group (those who are poor), and it is with this approach that we shall be concerned in this chapter.

Evidence during the 1970's suggested that growth and redistribution-with-growth programmes in fact often produced growing inequality of income distribution between and within countries. Despite the achievement of historically high rates of economic growth in many parts of the world, large sections of the world's population remained poor - the poor being "those households whose incomes fall below a level necessary to satisfy the basic needs of their members in housing, nutrition and clothing"² - and frequently their relative poverty within countries increased. In 1978 the President of the World Bank estimated that some 800 million people (19 per cent of World Population)³, including 40 per cent of the people in the economically less-developed countries, continued to live in absolute poverty: "a condition of life so characterized by malnutrition, illiteracy, disease, squalid surroundings, high infant mortality, and low life expectancy as to be beneath any reasonable definition of human decency".⁴ Consequently, the emphasis of development strategy shifted towards the objective of providing goods and services to the poor; that is, providing them with their basic needs.

The first formal expositions of the Basic Needs Approach to development were the work of the International Labour Organisation (ILO) in the form of a document entitled Employment, Growth and Basic Needs: A One - World Problem,⁵ prepared for its World Employment Conference in 1976, and the Declaration of Principles and Programme of Action⁶ adopted at this conference. Cassen⁷ stressed that this focus on basic needs "appeared to follow naturally" from the evolution of development thinking during the 1970's, when emphasis shifted from economic growth towards the issues of poverty and income distribution after it became evident that previous development efforts largely by-passed the poor. As early as 1974 the Declaration of Cocoyoc⁸ stressed that the purpose of development "should not be to develop things but to develop man. Human beings have basic needs: food, shelter, clothing, health, education. Any process of growth that does not lead to their fulfilment - or, even worse, disrupts them - is a travesty of the idea of development."

The authors of both Employment, Growth And Basic Needs : A One-World Problem and the Declaration of Principles and Programme of Action acknowledged that previous development strategies had failed to automatically reduce poverty, inequality or unemployment even if high rates of economic growth prevailed, and the Programme of Action suggested that "strategies and national plans and policies should include explicitly as a priority objective the promotion of employment and the satisfaction of the basic needs of each country's population."⁹ Basic Needs are defined as follows: "First, they include certain minimum requirements of a family for private consumption: adequate food, shelter and clothing, as well as certain household equipment and furniture. Second, they include essential services provided by and for the community at large, such as safe drinking water, sanitation, public transport and health, educational and cultural facilities."¹⁰

While a few developing countries had adopted development policies which focused on issues directly linked with basic needs before 1976, in general the welfare of the poorest communities had received scant attention in development policies. Yet the Basic Needs Approach emerged primarily from the work of the ILO and the World Bank - international development agencies financed in greater part by the economically developed nations. This has sometimes led to the criticism that the developed nations are trying to divert attention away from the goals of

the proposed New Economic Order¹¹ by focussing attention on internal development rather than international issues. Although it does not follow that the governments of the developed world are more caring about the position of the poor in the underdeveloped nations than are their own governments, they have clearly shifted the direction of international development aid towards "developing countries which seek to expand their capabilities for meeting more effectively the basic needs of their people within the context of achieving self-sustaining growth."¹²

This shift in policy is reflected in World Bank lending programmes, where emphasis on infrastructural projects has been replaced in recent years by projects directly designed to increase the productivity of the poor. In 1967, 55 per cent of the Bank's lending was applied to infrastructural projects, but by 1977 this had fallen to 30 per cent. Lending for rural development, said to be negligible in 1967, increased to 20,6 per cent in 1977, and in sectors such as education and water supply, lending more than doubled. In addition, new sectors for development aid, such as nutrition, primary education, family-planning, rural development, and residential sites and services, were added.¹³ A minimum objective of World Bank projects is that 51 per cent of beneficiaries belong to the bottom 40 per cent of the population's income distribution, and that projects should be sufficiently low in cost to be replicable throughout the country. In fact, in 1977, 69 per cent of the beneficiaries of World Bank Basic Needs development projects were in the poverty target groups.

The motivation for this change in emphasis lies partly in the fact that the public of developed nations find such a policy appealing, as it was widely believed that a large part of development aid previously found its way into the pockets of corrupt officials instead of helping the poor. The Basic Needs approach is also favoured because of its emphasis on assisting the poor in as short a time as possible. Support also came from the belief that so long as the poor remain deprived of the essentials required for an economically productive life, they would remain outside the economic process and isolated from the benefits of economic growth. Overall economic development could only be said to occur if it reached all sections of the population, but this was perceived to be impossible unless the poor received at least those basic needs required for a productive existence.

Furthermore, to some the Basic Needs approach and the calls for a New Economic Order were seen as complementary rather than competing goals.

The emphasis of the Basic Needs approach on internal self-reliance, on changes in the composition of aggregate demand, consumption and production patterns, on the use of local resources and appropriate technology, has obvious implications for issues such as the international terms of trade, transfers of technology, and development aid. A Basic Needs policy may result in a lessening of dependence on developed countries' markets and technologies, an improvement in terms of trade and the better utilisation of development assistance. Ghai points out: "All this should reduce the dependence of the developing countries on growth in the industrialised world and in this sense a basic needs approach opens up the possibility of autonomous, self-sustained growth for the Third World which is currently ruled out by their dependent status. The systematic pursuit of a basic needs strategy by developing countries would thus appear to be a more potent means of realising the Third World demands for a restructuring of the world economy (though not necessarily always in the direction called for under the New International Economic Order) than endless, protracted negotiations."¹⁴

Basic needs can be specified according to two approaches. Firstly, an extensive list of basic goods and services and target levels of consumption of each of these items can be compiled from household expenditure surveys. This would include such items as food, shelter, clothing, clean water, sanitation, education, housing, fuel and lighting, furniture and household equipment, health, transport, recreation and entertainment, social security etc. But such a list merely indicates consumption patterns without distinguishing between the relative importance attached to these goods and services. Accordingly, an alternative approach is to order Basic Needs elements into hierarchies through the specification of a "core" bundle of goods and services. Such a specification must necessarily be arbitrary as it cannot be derived from any irrefutable principles, but has the advantage of emphasising deprivation in the most critical areas and concentrating efforts on attaining certain targets in these fields. Any such "core" needs must be country-specific, taking into account the particular circumstances, problems and resources of the economy concerned. While large differences in living standards exist between less-developed countries, the poorest groups in all of them are to varying degrees deprived of certain goods and services essential for a productive and healthy life. Hence, a core bundle of basic goods and services is likely to contain many common elements in almost all poor countries.

Such a "core" of basic needs, without which a satisfactory existence is deemed impossible, is bound to comprise food, shelter, education and health. To this "core" clean water and sanitation are sometimes added, but since both are essential for health-needs they may be included simply under the heading "health". Employment is sometimes also added, but, although an essential means towards attaining basic needs, and hence an important element in any basic needs strategy, it is not necessarily a basic need as such. The "core" may also be expanded or contracted depending on whether one includes both physical and psychic human needs. Concentration on physical needs would include only those items necessary for physical existence and hence even education may not be considered a basic need in this sense except to the extent that it is required for making decisions necessary for physical survival. At the other extreme psychic needs could be expanded to introduce requirements such as "basic human rights" and the conditions necessary for "psychological contentment". Given that, some 19 per cent of world population are considered to live in absolute poverty, attention will be focused on those "core" basic needs necessary for physical survival - food, shelter, education, health and sanitation.

All basic needs - even "core" needs - cannot always be satisfied simultaneously and so choices must be made and resources allocated accordingly. Indicators or measures should be defined for each basic need and used for regional or national comparisons of performance, reflecting the relative deprivation prevailing in rich and poor regions or nations, and the extent to which these are converging or diverging. Regional policy may then be directed at those areas where basic needs performance is especially poor. Obviously minimum levels of consumption of certain items such as food are essential for survival, but Basic Needs strategies are concerned with the achievement of "socially acceptable" levels of consumption rather than mere survival. The concept of basic needs should be seen in the context of a society's overall economic and social development and not merely as the minimum necessary for subsistence. Hence the notion of basic needs is a dynamic one. As development takes place, so the composition and level of what is considered to be the minimum "socially acceptable" levels of consumption is bound to change as well.

To determine the level at which Basic Needs targets should be set, value judgements and allowance for the particular circumstances of the economy

concerned must be made. Richards and Leonor argue that there are three characteristics which basic needs targets should share: "(1) they should be dynamic, i.e. they should be set in a relative manner although expressed in absolute terms; (2) they should be expressed where possible in terms of outputs rather than inputs (or a mix of the two), and of improvements in personal well-being rather than the coverage provided; (3) they should be the predictable results of programmes which are known to be effective."¹⁵ Basic needs for nutrition and health may possibly be determined on an objective or 'scientific' basis, but will also depend to some extent on climate, the occupations and customs etc. of the population in question. Targets for housing and education will be much more subjective and will also depend upon climatic, cultural and other similar conditions. Accordingly, any classification of needs into order of priority should be based upon factors such as social preferences, the external economies and linkages that exist between needs in the consumption of certain goods and services, the extent of deficiencies in prevailing consumption patterns, resources available, and the costs of meeting needs.

Ideally, such classification should be determined by "the people" themselves. Even if one considers basic needs to be those necessary for physical survival, they cannot be defined by an outsider on an objective, universally valid basis. While the nutritional requirements of an individual with a given life-style can be scientifically determined, any stipulation of minimum nutritional requirements amounts to an assumption of the type of life-style individuals should lead and the work they should do. With health, shelter and education, the problem is even more complex. Such stipulations require value judgements and therefore cannot be an objective matter. Accordingly, the stipulation of basic needs should be left to the individuals, communities and governments involved in their implementation.

This leads to a further problem, namely, whether the attitudes of the target groups ("the people") are conducive to the successful adoption of a Basic Needs strategy, or not. Severe poverty generally results in a reluctance to accept change, and, in particular, an attitude of risk aversion. While a Basic Needs strategy may offer potentially improved living standards in the long run, in the short run it may (in the eyes of the target groups) contain the risk of failure. For those living at the level of subsistence, failure may mean death or starvation. However, if a "threshold" level of Basic Needs satisfaction, at which the target

group reacts positively to the economic stimuli intended to promote sustained development, is achieved, the reluctance to accept economic change may be overcome, and an acceptable Basic Needs strategy adopted.

The Basic Needs approach is directed at alleviating the problem of poverty, but poverty is itself a complex social, economic and psychological concept. Poverty is perceived as being relative - people feel poor because their neighbours are rich.¹⁶ Similarly, basic needs can be considered to be relative, the target level of satisfaction depending upon regional and national factors. Accordingly, the problems of poverty cannot be separated from those of income and consumption distribution, and policies aimed at poverty alleviation through the satisfaction of basic needs must of necessity deal with one or both of these elements. At the same time the target levels for basic needs must be country- or even region-specific, and relative to a country's or region's capacity for meeting such needs. This capacity will depend upon the level of development attained and the availability of resources. It will also depend upon the desirability attached to equity of income and consumption patterns. Effectively then, basic needs are socially determined and while there are some specific levels of consumption universally considered necessary, few countries would presumably acquiesce in a situation where some sections of the population have vastly greater access to communal services and economic welfare than others.

Regional and national Basic Needs target levels should allow for diversity and special problems of a local nature. It may also be necessary to set different targets or even types of targets for rural and urban areas because of the vastly different social and economic conditions in these respective areas. For instance housing and sanitation are likely to have greater priority in urban than rural areas because of potentially greater problems of disease. Targets should not be used to perpetuate rural/urban inequalities indefinitely, but must be sufficiently flexible to allow for local conditions and circumstances. Nor should targets be considered permanent. Their levels should be constantly reviewed to allow for the dynamic nature of the economy and progress towards their satisfaction. As initial targets are attained, so they should be revised upwards in line with the aspirations of society.¹⁷ In Table 5.1.1 an example of targets and existing levels of basic needs is provided in the case of Madagascar. Each target is set in terms of outputs rather than inputs, and for Health and Water more than one target is set for each need.

Table 5.1.1 : Madagascar basic-needs targets and existing levels

Sector	Target for 2000	Existing level
Education	Universal enrolment of children aged 6-14	1975: enrolment 52% over-all, with rates by province ranging from 35 to 63%
Health	One doctor for 8 000 people	1976: one doctor for 11 600 people, with rates by province ranging from 5 700 to 21 200
	One hospital bed for 300 people	One hospital bed for 432 people, ranging from 370 to 526 by province
Housing	One room of 16.6 m ² for households of 1-4 members (larger households to have more rooms of roughly similar size)	1977: most two-person households live in less than 15 m ² , half of 5-6 person households have only one room, most larger households have only two rooms
Water	Urban areas: running water for all households	Urban areas (1975): at most 20% of the population have running water
	Rural areas: 71 litres per person per day not more than 15 minutes' walking distance away, there and back	Rural areas (1975): availability generally 20-40 litres per person per day, down to 10 litres in some areas

Source: Direction générale du Plan: Les besoins fondamentaux à Madagascar: Niveaux et modes de satisfaction des besoins (Antananarivo, 1978), pp. 142-145.¹⁸

Despite the problems surrounding the exact specification of Basic Needs targets, the fundamental concept is sufficiently clear. It is clear also that whatever the definition of basic needs, a large number of people fall below their accepted levels. Thus the ILO estimated¹⁹ that in 1972, 1 210 million people in the Third World were "seriously poor", of whom 706 million were "destitute".²⁰ It has been estimated that in 1975 life expectancy at birth in "poor" countries was 54 years, as opposed to 71 years in "rich" countries, with infant mortality at 124 as against 19 per 1 000 live births respectively.²¹ In the same year Gross National Product per head was \$290 in poor countries and \$4 710 in rich countries.²² At least 460 million people were estimated to suffer from a severe degree of protein energy malnutrition,²³ "scores of millions" lived under the constant threat of starvation; the number of illiterate adults was estimated to have grown from 700 million in 1960 to 760 million in 1970; "countless millions" suffered from "debilitating diseases" and lacked access to even the most basic medical services; and nearly 300 million people were unemployed or underemployed in the mid-1970's. Clearly large numbers of people, especially in the low and medium-income countries are failing to achieve the minimum of basic needs levels.

The achievement of Basic Needs targets depends upon the consumption of goods and services which are either purchased in the market from a household's disposable income, or are provided, free of charge or at a subsidised price, by public authorities. The ultimate objective is, therefore, the satisfaction of the basic needs of all households at the stipulated level through an appropriate combination of private consumption and publicly-provided goods and services.

It follows that Basic Needs targets should be divided into: a target level of household income necessary for the purchase of those goods and services comprising the private component of basic needs, such as food, and shelter; and target levels for publicly provided goods and services, such as safe drinking-water, sanitation, health and educational facilities. Exactly how this division of responsibility between the private and the public sectors in the production and distribution of Basic Needs goods and services is achieved will depend upon the economic system and policy of a country. Thus, in centrally planned economies more emphasis is likely to be placed upon public than private consumption

goods and services, while in market-oriented economies the reverse is likely.

But an important element of the Basic Needs approach is the significance attached to improved and redirected public services in overcoming the problem of poverty. This results from the belief that not all consumers may be sufficiently knowledgeable about basic needs requirements such as health and nutrition and this lack of information may preclude them from rational choice in spending such increments as may accrue to them upon reaching a specified income level. Furthermore, within households there are often maldistributional inequalities of consumption which may only be overcome through the direct provision of goods and services and not through an increase in money income. Some basic needs, such as sanitation and water supply, can only be met efficiently if provided on a large scale through public services. Consequently, while efforts to raise productivity and income are important, they may not be adequate in themselves, and the direct provision of essential goods and services may be a more efficient and rapid way of overcoming poverty.

Public participation may be direct in the form of cash grants or the free supply of goods and services to disadvantaged groups (such as the elderly, handicapped, and households headed by women); or it may be indirect in the form of taxes and subsidies designed to transform existing production and consumption patterns with a view to promoting the consumption of a target level of Basic Needs goods and services by the poor with a given level of money income. Some items may fall within both categories of private- and public-consumption simultaneously (e.g. education and health services), while others may fall in either the one or the other. Thus, in the cases of housing or water supply the state may assume sole responsibility for provision, or it may provide only the infrastructure while leaving the actual building of houses or the fitting of taps etc. to private enterprise. Alternatively, the provision may be solely in the hands of private initiative. The implication for resource allocation between the private and public sectors of the economy will therefore vary according to the nature of alternative Basic Needs strategies.

The importance of the public sector in the provision of basic needs should not be taken to mean that a Basic Needs strategy is primarily a "charitable" or "welfare handout" approach. The satisfaction of basic needs involves much more than governments providing free goods and services to those considered deprived. A crucial element of the Basic Needs approach is the necessity for creating productive employment that will yield an income adequate for their satisfaction. In other words, such expenditure should ideally be seen as self-financing investment in the long term. Unless households have a certain minimum income, the satisfaction of their basic needs is impossible. Even in fields such as health and education where public services play a very important role, it cannot be assumed that the poor will satisfy their basic needs requirements without a certain minimum level of income. Even if health and education services are provided free of charge, the individual does bear some cost. In the case of education there is the opportunity cost of earnings foregone while potentially productive members of the household are at school. In the case of health-care there is the cost of earnings foregone while treatment is being received and, perhaps, also travel and medication costs. Thus, even where public services play a major part in the satisfaction of basic needs, a minimum level of income is essential for their achievement. In the case of other basic needs such as nutrition, clothing and shelter, the need for a minimum income is even more acute.

But while employment and the minimum income levels generated are necessary conditions for the satisfaction of basic needs, they do not amount to a sufficient condition. Increased incomes alone does not ensure the satisfaction of basic needs and hence the role of the public authorities remains crucial. It may not be sufficient for people to have enough income to purchase enough food for subsistence: they should also consume the right kind of food if their nutritional requirements are to be met adequately. Similarly, it may not be sufficient that people attend school unless the education they receive is relevant to their employment opportunities and situation. Consequently, the government has an important education role to play in nutrition and in structuring the contents of formal education. Equally important is its role in establishing adequate and appropriate standards in health and shelter. Thus high quality expensive housing may require a long repayment period, whereas low cost housing would enable individual consumers to increase

their expenditure on other needs. In such a situation the role of public policy may be to lay down appropriate standards for housing, or to provide financial assistance and the technical information required for building.

Target levels for publicly provided consumption goods and services, such as health or education, should be fixed not only in terms of the private income necessary for their consumption, but also in terms of access and usage. Access implies availability in all localities, and targets should be set in terms of the distribution of publicly provided goods and services measured relative to space, distance or population numbers. For example, health services could be measured both in terms of doctors per thousand of population and average distance to the nearest doctor. But availability alone does not ensure usage. If a publicly provided good or service is thought to be inferior to that available at another locality, or if its price is beyond the means of potential consumers, it is bound to be underutilised. Access and usage therefore depend upon quality and cost and information as well as availability.

A target level of household income necessary for the satisfaction of those basic needs related to private consumption may be estimated from household surveys and stipulated targets of either a "core" bundle of goods, or a more detailed list of requirements. Such an approach has the advantage of being compatible with the principle of consumer sovereignty, in that minimum income levels are based upon expenditure patterns revealed in household surveys and not simply handed down from above. But household surveys reflect existing relative prices, income-distributions and tastes - which may well change as improved satisfaction of basic needs is achieved. Furthermore, the achievement of a minimum level of income is not a sufficient condition for the satisfaction of basic needs, for the existence of adequate income for an essential good or service cannot guarantee its purchase if it is not available in the market or within reach of consumers. In addition, no allowance is made by such an approach for social costs and benefits that may result from the consumption of goods and services, nor does it make any distinction between the respective importance of such goods and services. There may exist consumption externalities in the provision of various basic needs. For example, improved nutrition, shelter, education or water supply may all result in improved health as well. This means that fewer resources

have to be applied to the satisfaction of basic needs than would appear from aggregating individual requirements. For these reasons, the calculation of poverty lines or levels of subsistence can be seriously misleading: the resulting focus on a single income figure may fail to reveal the importance of the basic needs "core" actually required for a "decent" life.

While a rapid growth of output remains essential for the alleviation of poverty, it is also important to establish who benefits from the increased production. In most poor countries Basic Needs targets cannot be met by redistributing existing levels of output. A change in output-mix by itself is insufficient, the level of production itself must also increase. Hence a rapid rate of economic growth is an essential prerequisite of any Basic Needs strategy. This necessary increase in production can to an extent be achieved by increased employment and/or decreased underemployment through a more efficient allocation of productive resources. Increased employment is therefore both the means of producing more output and of providing the disposable income necessary to gain access to it.

The definition of basic needs in the Programme of Action alluded to the importance of "the participation of the people in making the decisions which affect them."²⁴ In programmes designed to increase employment and the provision of basic needs, the importance of community participation should always be considered. In poor countries in particular the central authorities cannot be expected to meet all the requirements of employment creation or the production and distribution of Basic Needs goods and services, and an important part will have to be played by the community itself. For instance, the government may not command the resources necessary to supply houses to all the poor at a price which they can afford, but it may be able to bear the cost of site-and-service schemes and leave the construction of shelters to the community concerned.

In view of resource constraints, community participation may also be necessary for the construction of schools, recreation facilities etc. In fact, in many other cases too, such as health and hygiene projects, the success of basic needs programmes may hinge upon the extent to which community participation is available and mobilised. However, the incidence of community participation and initiative is bound to be

unevenly distributed. Thus the deliberate provision of basic needs on this principle may actually result in the creation or maintenance of huge discrepancies in local living standards. In this sense, the Basic Needs approach is not always conducive to a more equal distribution of income.

In summary, the Basic Needs approach to development incorporates the instruments of "employment-oriented" and "redistribution-with-growth" strategies for combating poverty, but does so in a novel way. The importance of employment creation and wealth and income redistribution as policy instruments is stressed, but they are not seen as sufficient conditions for the elimination of poverty. The Basic Needs approach extends the concept of development to include non-material needs and through the notion of "core" basic needs provides an operational definition of poverty. Emphasis is placed on the necessity for meeting the basic needs of all individuals or families and the key role of public services in achieving this aim is stressed. Such a strategy calls for community participation whenever possible and the creation of the social and political conditions necessary for its success.

Essential for any Basic Needs strategy is the necessity to increase the incomes of target groups at least up to a minimum level within a specified period of time. Furthermore, the adequate availability of private and public goods and services required for consumption must be assured. Such targets should be achieved by methods conducive to maximum community participation and should include a number of permutations of growth, redistribution and the restructuring of production patterns through the use of appropriate technology and the production of a suitable output-mix. Attention is therefore focussed on the actual composition of production and income and on their beneficiaries, rather than simply on their aggregate measures in terms of GNP per capita. As Norman Hicks and Paul Streeten conclude: "Such a focus supplements attention to how much is being produced, by attention to what is being produced, in what ways, for whom and with what impact."²⁵

In sum, there exists a close relationship between employment, on the one hand, and the supply of basic needs, on the other. Job creation without the availability of basic goods and services will fail to raise living standards significantly, and may instead result in distorted patterns of expenditure. By the same reasoning, the provision of basic goods and

services without sufficient jobs will fail to generate sustained economic development, and simply amount to a subsidised social welfare programme. The simultaneous supply of jobs and provision of basic needs should, however, amount to a meaningful interaction between the variables, that is a workable strategy for development and the elimination of poverty.

The magnitude of the problem of satisfying the basic needs of all should not be underestimated. Nor is the solution likely to be swift, as there are many economic social and political problems which must first be overcome. For instance, in rural areas the problems of income and employment may be reinforced by existing land distribution patterns and customs which cannot easily be overcome for the implementation of agrarian reform. In education, again, the problem may lie not so much in increasing the number of schools or upgrading existing facilities, but in reducing dropout rates because of social attitudes, and in changing curricula so as to more accurately reflect the economic and social needs of society. In housing it may not be so much an aggregate resource constraint that is decisive, but rather the standard or type of housing that is considered to be socially acceptable. Considerable changes in social behaviour and customs may also be necessary before women are most productively drawn into the economic and educational systems. Religious and cultural barriers may also obstruct the introduction of new health, hygiene, nutritional and housing programmes. All these issues which involve a rearrangement of existing priorities must be faced if Basic Needs targets are to be achieved.

In this section basic needs (or the goods and services designed to satisfy them) have been loosely discussed in terms of their respective "private" and "public" components. This is a common distinction frequently encountered in current literature on the subject. However, from an analytical point of view, certain ambiguities attach to this classification, which may well obscure the economic significance and implications of basic needs and efforts to meet them. In the field of Public Finance it has long been the convention to functionally divide the spectrum of wants existing and goods (and services) produced in the economy into the three categories of "private", "public" (or "social") and "merit" wants or goods (and services).²⁶ In general, "private" goods are supplied by the market system where individual buyers are liable to the "exclusion principle", i.e. unless a person agrees to pay

the price of a good, he is excluded from its consumption. Price therefore serves as a rationing device in resource allocation. At the other extreme (pure) "public" or "social" goods cannot be supplied by the market mechanism in the conventional sense, seeing that they are jointly consumed by the entire population; the exclusion principle therefore does not apply here, and there are no objective criteria for resource allocation to such goods. The third category of "merit" goods occupies an intermediate position : while they may, in principle, be supplied through the market, purely private provision, which has to take account of short-term cost recovery, is likely to be insufficient in terms of prevailing social values. Alternatively put, "merit" goods are deemed to possess positive externalities, that is, benefits that society would forego if their production were left entirely to the private sector. Hence, as in the case of "public" or "social" goods above, some government intervention is usually regarded as justified and indeed necessary. "Even though the market could totally allocate such [merit] goods, they are considered so meritorious or important that a political consensus is reached whereby they are made available in certain minimal quantities to all members of the society."²⁷

From the viewpoint of utility (welfare) maximisation in general, it should be noted that both "private" and "public" goods (and therefore "merit" goods as well) enter into individual utility functions.²⁸ Obviously any particular output-mix of "private", "public" and "merit" goods will have its distinctive distributional implications, both in the short and long run - although they may be quite different.

For the discussion of strategies for meeting basic needs in Chapter 6, the above taxonomy provides a useful background guide, seeing that most writers on the subject tend to identify individual basic needs in formal rather than functional terms. The remainder of the present chapter is concerned with practical issues relating to the measurement of basic needs.

5.2 : THE MEASUREMENT OF BASIC NEEDS

Before any Basic Needs strategy can begin to be implemented, it is necessary to have an indicator by which the degree of deprivation or satisfaction of basic needs can be measured, towards which policy

measures can be directed, and by which their success or failure can be judged.²⁹ An essential part of the poverty-problem is the question of income distribution. In 1972 less than one-fifth of the world's population produced two-thirds of global output and one-quarter lived in countries producing less than 3 per cent of global output.³⁰ With the inclusion of China, nearly half the world's population received less than 7 per cent of global income. Within less-developed countries the richest 10 per cent of households on average received 40 per cent of personal income and the poorest 40 per cent of households 15 per cent, or less. Thus the unequal distribution of income world-wide is an essential part of the poverty-problem and on empirical evidence there is a close observed relationship between the levels of basic needs and GNP per capita. Sheehan and Hopkins³¹ attempted by means of an analysis of international cross-section data to assess the importance of seemingly relevant variables in explaining basic needs performance. They concluded that there exists a fairly broad positive relationship in performance between different basic needs. Hence a country which performs well for one basic need will generally perform well for other basic needs too, and, conversely, a country performing poorly in one will tend to perform poorly in other basic needs. A clear finding of their study was that per capita GNP is the most important single variable explaining the average level of basic needs satisfaction. This emphasises the importance of a major increase in the production of goods and services in less-developed countries if their material basic needs are to be satisfied.

But the use of GNP per capita or its rate of growth is as unsatisfactory a measure of basic needs satisfaction as it was of economic development, because such a measurement gives no indication of income distribution within an economy. Nor can it indicate whether some sections of the population are deprived of their basic needs while other sections' basic needs are adequately satisfied. GNP per capita is an arithmetic variable and indicates potential welfare: but for actual welfare, income distribution should be examined as well. Hence, while a rapid growth of output is essential for the alleviation of basic needs deficiencies, indicators of the composition and beneficiaries of increased output are required to supplement GNP data. To overcome such limitations, efforts have been made to "improve" or supplement the GNP per capita data as a measure of development, by introducing additional cost and benefit variables to arrive at a broader measure of welfare.³² But such

attempts also yield an unsatisfactory measure of basic needs, as they ignore the very foundation of the Basic Needs approach - namely, that raising per capita incomes alone is frequently insufficient for the achievement of development, because of inefficient consumption patterns amongst the poor and the lack of availability and access to public-consumption goods and services.

Accordingly, alternative efforts have been made to develop non-monetary "social indicators", measuring aspects of health, housing, nutrition etc. and other features of development that are not reflected in income based indicators.³³ Such alternative indicators, like the percentage of population with access to clean water, life expectancy at birth, or the number of persons per room, are normally related to the results of development - that is the extent to which basic needs are met - rather than with inputs, which may be inappropriate or inefficiently allocated. For instance, a measurement of education expenditure per person, or school enrolment rates reveals nothing about the allocation or productivity of such expenditure, while a measurement of literacy would indicate to some extent the success or failure of such expenditure or enrolment. Similarly, expenditure on housing reveals nothing about the extent to which the housing problem is being overcome or even whether the housing supplied can be afforded by the target poverty groups. This is caused by a general weakness of per capita data which is simply related to population numbers.

Some indicators measure the average level of satisfaction for the whole of society, while others take cognisance of the actual distribution of income and wealth. For example, the percentage of population with access to clean water accurately reflects the numbers with and without such a service, but the average amount of calories consumed per capita can be quite meaningless as a measurement of nutrition, as it fails to distinguish between the overconsumption of the rich and underconsumption of the poor. Similarly, average infant mortality rates or life expectancy at birth fail to reveal the range which may exist between the rich on the one hand and the poor on the other. Two countries may have identical average life expectancy and infant mortality rates, but quite different rates for the poorer sections of the community. Consequently, such indicators should ideally be presented separately for different income groups, revealing their distribution across the population.

Unfortunately such detailed data are very seldom available.³⁴

By nature, indicators measuring the results of development tend to reveal more about the distribution of development and the "quality of life" than do aggregate economic indicators. But such efforts have failed to produce a single alternative measure that is widely acceptable, because of problems of definition and the absence of any obvious way of translating all aspects of social progress into money values, or any other accepted common denominator, without disguising important distributional differences. For instance, to have the same index for a situation where literacy is low and infant mortality high, and another situation where literacy is high and infant mortality low, would imply a trade-off between literacy and infant mortality and require a complicated system of weighting which might be arbitrary and misleading.

Consequently, in the absence of a "composite index", difficulties arise in drawing general conclusions from a large number of indicators even if these are available. But such indicators may nevertheless sometimes be useful in judging social performance and the degree of satisfaction of individual basic needs. Indicators should be defined for each individual basic need, and efforts concentrated on a limited number of indicators covering the "core" needs discussed here. If necessary, more than one indicator can be defined for each need. Once defined, such "core" indicators may be used for regional or national comparisons, reflecting the relative deprivation in rich and poor regions or nations, and the extent to which these are converging or diverging. Policy may then be directed at those areas where basic needs performance is poorest.

The following indicators, taken together, may be suggested as a measure of "core" basic needs satisfaction:

- | | |
|-----------|---|
| Health | - life expectancy at birth (years) |
| | - infant mortality rate (per 1 000 live births) |
| Education | - adult literacy rate (per cent) |
| | - primary school enrolment (as a per cent of population between certain ages) |
| Nutrition | - calorie consumption (per head per day) |
| | - protein consumption (grams per head per day) |

- Shelter
 - number of persons per room
 - area per person (m²)
- Water supply
 - per cent of population with access to clean water
 - infant mortality rate (per 1 000 live births)
- Sanitation
 - per cent of population with access to sanitation facilities
 - infant mortality rate (per 1 000 live births)

On the whole, these indicators pertain to observed results rather than productivity of inputs, thereby showing the extent to which basic needs have been satisfied, rather than measuring the resources allocated for their satisfaction. Infant mortality is used above as a measure of access to clean water and adequate sanitation because of the high susceptibility of infants to sanitary and water-borne diseases. As a measure of the basic needs for shelter, neither number of persons per room nor area per person capture the quality of housing - only the relative extent of overcrowding. But in extreme climatic conditions the quality of housing may be of considerable importance and, hence, indicators such as the percentage of houses with concrete floors, or iron roofs could be added.

If an acceptable system of weighting could be devised, all these indicators might be combined into a single composite index for measuring basic needs. But the chances of a generally accepted weighting system being devised are remote. An alternative is to examine only one or two indicators which seem to correspond closest to basic needs satisfaction and to assume that their adequate fulfilment would mean that all other components of basic needs are satisfied as well. Ideally, such indicators should be simple, readily available, of general application, and measure outputs rather than inputs.

Such an alternative procedure seems to be supported by the findings of Sheehan and Hopkins³⁵ that there exists a "fairly broad consistency in performance between different basic needs." This conclusion is supported by the fact that several of the "core" basic needs are themselves inputs for satisfying other needs. For instance, nutrition, shelter, education, water supply and sanitation, while individually desired in their own right, all contribute towards improved health. In other words, basic needs are often characterised by a high degree of complementarity in

respect of both their ends and means, i.e. they typically generate externalities in consumption. It can, therefore, be argued that an indicator of health - such as life expectancy at birth - also represents a powerful single measure of the overall satisfaction of basic needs. Such a measure "... has the advantage of capturing the impact on individuals, not only of non-market factors but also of income net taxes, transfer payments and social services, without raising all the difficulties of income per head measures.... For these purposes it might be regarded as superior not only to a composite index of social indicators but also to GNP and to indices of income distribution."³⁶ Where life expectancies at birth may vary only marginally, a further supportive measure, such as literacy or primary school enrolment³⁷, can be added in order to further distinguish between the satisfaction of basic needs of particular regions or population groups.

It is possible to estimate the combined effect of health care, clean water, sanitation, nutrition, shelter and education on mortality, as a single measure of basic needs, but this would still be an average measure of a country's experience and cannot therefore distinguish between the extent to which such needs are satisfied for different sections of the population. Furthermore, the measurement of a single index of performance, such as life expectancy at birth, and improvements therein, does not readily reveal the possible sources of such improvements. Increased life expectancy at birth may for example result from lower infant mortality or from higher survival ratios after infancy, and a short life expectancy may in turn result from shortcomings in either of these areas. A single indicator cannot reveal the source of such shortcomings, nor can it suggest the appropriate policy measures - which may be improved education for mothers and potential mothers or improved sanitation and water supply in the case of a high infant mortality rate, or improved shelter and nutrition in the case of a high mortality after infancy. Consequently, there exists a danger that policy measures might be directed at the more obvious manifestations of poor health, such as hospitals, clinics, nurses etc., when the problem lies elsewhere. In other words, policies may be directed at the symptoms of inadequate basic needs satisfaction instead of their causes.

In spite of such shortcomings, so long as the dangers of interpreting single indicators in terms of single results or causes are avoided, they

may be useful. Single indicators or indices provide a crude but simple means for inter-regional or international comparisons of basic needs performance, which might not otherwise be possible if a multitude of indicators, each reflecting different levels of performance, were used. The problems of devising weighted composite indices are avoided, but most of their advantages obtained. Furthermore, while both life expectancy and adult literacy rates are generally available for most less-developed countries, many more detailed alternative measures, such as water and sanitation supply, are not.

Because of the lack of adequate international data, any comparison of basic needs performance is extremely difficult. When data exist, they tend to represent national averages and so ignore the problem of distributional differences within countries. Nevertheless, it is useful to examine some broad international data and to attempt to make some generalised comparisons and draw conclusions where possible. In Table 5.2.1 weighted indices of the two broad measures of basic needs performance, life expectancy at birth and adult literacy rates, are shown for the years 1960 and 1979 and 1960 and 1967 for five different groups.³⁸ With the exception of Nonmarket Industrial Economies and Capital-surplus Oil Exporters, this classification of course reflects international comparisons of development.

Adult literacy has in principle a maximum achievable rate of 100 per cent, while average life expectancy at birth would seem to increase little above an average of 74 years⁴³ despite extremely high levels of national prosperity. In both these areas the Industrial Market Economies appear, on average, to have approximately reached the maximum attainable levels, and basic needs within these countries could certainly be said to be satisfied on average. (However, within Industrial Market Economies distribution problems are likely to result in at least some parts of the population failing to satisfy their basic needs). With the exception of the Nonmarket Industrial Economies - which on the basis of a 1960 adult literacy rate of 97 per cent, and a life expectancy at birth of 72 years

Table 5.2.1³⁹ : Life Expectancy at Birth (years) and Adult Literacy Rate (per cent)

	Life Expectancy at birth (years)		Adult Literacy Rate (%)	
	1960	1979	1960	1976
Industrial Market Economies	70	74	98 ⁴⁰	99
Nonmarket Industrial Economies	68	72	97	94 ¹
Middle-Income Countries	53	61	53	72
Capital-Surplus Oil Exporters	46	56	14	50 ⁴²
Low-Income Countries	42	57	28	51

in 1979 appear, on average, to have achieved a satisfactory level of basic needs performance by 1978 - the level of basic needs satisfaction in the remaining three groups in Table 5.2.1 in 1979 is clearly inadequate. In 1976, 28 per cent of adults in Middle-Income Countries were illiterate, while in Low-Income Countries the figure was 49 per cent. Similarly, life expectancy at birth in Middle-Income Countries in 1979 was 76 per cent of that in Industrial Market Economies, while in Low-Income Countries life expectancy at birth was only 60 per cent of the Industrial Market Economies' level. Progress in the satisfaction of basic needs has clearly been made, on average, since 1960, but levels presumably remain unacceptably low in all but the Industrial Market Economies. Progress is most marked in the adult literacy rate of Oil Exporters, but this is due primarily to the extremely low base of 14 per cent in 1960.

In Table 5.2.2 six key indices of basic needs achievement (excluding housing) are shown for four groups of countries of different levels of development⁴⁴ for the mid-1970s. Improvements in these indices from 1960 levels are shown in Table 5.2.3.

The data in Table 5.2.2 show population-weighted averages for countries at various levels of economic development and, hence, the problem of internal distribution of indices within countries does not arise. Per capita GNP is used to show the level of economic development in conventional terms, and the remaining six indices provide some measure of economic development in terms of basic needs satisfaction for the four broad levels of development defined.

In the Developed Countries, all six of the available Basic Needs indicators are at average levels which can be considered satisfactory. In 1970 Sweden and Norway for example had per capita consumption levels of 2 810 calories and 86 grams of protein and 2 960 calories and 90 grams respectively. Both countries had low infant mortality and high life expectancy and so their basic needs for nutrition could deem to have been satisfied. In 1974 North America had an average consumption level of 3 490 calories and 104 grams of protein per capita per day. The corresponding figures for Japan were 2 840 and 86 and for Western and Northern Europe 3 420 and 93. Given the highly developed nature of all

Table 5.2.2⁴⁵ : Basic Needs Indices per Level of Economic Development

	Calorie Consumption (per capita per day)	Protein Consumption (gms per capita per day)	Life Expectancy at Birth (years)	Infant Mortality (per 1 000 live births)	Primary School Enrolment Rate (per cent)	Doctors per 100 000 people	GNP per capita (U.S.\$)
	1974	1974	1975	1975	1975	1975	1975
Developed	3 410	99	71	19	105	196	4 710
Semi-developed (non-oil)	2 910	79	64	60	102	106	1 440
Semi-developed (major oil- producers)	2 420	59	54	116	76	52	2 040
Less-developed	2 190	56	54	124	68	21	290

three regions it is unlikely that the basic needs for protein and calorie consumption were not met on average. Hence, while allowance should be made for body-mass, climate and type of activity, an average food intake of about 3 000 calories and 90 grams of protein per capita per day would seem to be adequate for most regions.⁴⁶ Consequently, an average consumption level of 3 410 calories and 99 grams of protein per capita in Developed Countries in 1974 seems more than satisfactory - in fact obesity rather than lack of nourishment may be a problem there. A primary school enrolment rate of 105 per cent exceeds the theoretical maximum attainable level of 100 per cent⁴⁷ and, given the high life expectancy and low infant mortality rates, 196 doctors per 100 000 people would seem adequate. While an infant mortality rate of 19 per 1 000 live births, as in the Developed Countries, could be reduced, a certain number of infant deaths will always occur for reasons unassociated with basic needs.

The above Basic Needs indicators are, of course, average, and disguise pockets of poverty even in the Developed Countries, where all basic needs would not necessarily be met. In addition, these indicators relate solely to "physical" needs and reveal nothing of "psychic" needs such as participation in determining one's needs, human rights, etc. Nor do they reveal anything about the quality of basic needs and so, for instance, the existence of near-universal primary education may hide defects in the contents or effectiveness of education.

But the same problems exist for all the other (than Developed) groupings of countries shown in Tables 5.2.2 and 5.2.3, which also clearly fall short of generally acceptable average level of physical basic needs satisfaction as well. The Semi-developed Countries fall into two distinct groups. While the Major oil-producing Countries have GNPs per capita much higher than other Semi-developed Countries, in terms of basic needs performance they are much closer to the Less-developed Countries. (This emphasises the point that economic growth alone is not a sufficient condition for the satisfaction of basic needs or the achievement of economic development.) For one particular Basic Needs indicator - life expectancy - the oil-producers are at the same level as the Less-developed Countries, but for the remaining five indicators they are only slightly better off than the Less-developed Countries and considerably worse off than the non-oil Semi-developed Countries.

In the non-oil Semi-developed Countries the primary school enrolment rate is not much lower than that of the Developed Countries and surpasses the theoretical maximum of 100 per cent. Calorie consumption per capita per day is probably satisfactory on average, but protein consumption is low. The major shortfalls would appear to be in health services, where there are on average 106 doctors per 100 000 people (compared with 196 in Developed Countries). This would seem to be supported by a significantly higher infant mortality rate (60 as opposed to 19 per 1 000 live births) and by the lower life expectancy at birth (64 as opposed to 71 years). However, these levels are considerably higher than in the Less-developed Countries where the infant mortality rate is 124 per 1 000 live births and life expectancy at birth is 54 years. Clearly none of the six Basic Needs indicators can be considered to be at a satisfactory level in the Less-developed Countries. Calorie consumption per capita per day was 64 per cent of that in Developed Countries and protein consumption only 57 per cent. In the Less-developed Countries 32 per cent of those concerned received no primary education at all and there were only 21 doctors per 100 000 people in 1975. (This comparison obviously suffers from a lack of suitable data for housing in the present context.)

It may be concluded that while basic needs were on average adequately met in Developed Countries (in 1975), for the rest of the world the situation was much less satisfactory. In the non-oil Semi-developed Countries the needs of nutrition and education were evidently reasonably well satisfied. In the case of health, the situation was considerably worse in non-oil Semi-developed Countries than Developed Countries, but, nevertheless, much better than in Less-developed Countries. In all areas of basic needs, the situation in the Less-developed and Major oil-producing Semi-developed Countries was far from satisfactory. In 1976 those countries classified in Tables 5.2.2 and 5.2.3 as Developed had a combined population of 994,7 million out of a total world population of 4 014 million.⁴⁸ This meant that only 24,8 per cent of the world's population lived in countries which, on average, could be said to have satisfactory levels of basic needs satisfaction. Approximately 350 million people lived in non-oil Semi-developed Countries where nutritional needs were, on average, reasonably well satisfied, but health conditions appeared to be inadequate. But some 2 669 million people, or 66,5 per cent of the world's population, lived in non-oil Semi-developed and Less-developed Countries where, even on

average, basic needs were far from satisfied. Even if the approximately 836 million people of the People's Republic of China are excluded, 57,7 percent of the world's population lived in countries where basic needs were not satisfied on average. (Again, it should be remembered that the need for shelter has not been included here.)

Table 5.2.3 shows the progress made between 1960 and 1975 (1974 in the case of calorie and protein consumption levels) in the six present Basic Needs indicators and the four groups of countries used in Table 5.2.2. The average annual growth rate of GNP per capita is included to compare progress in basic needs satisfaction with rates of economic growth.

Of the four groups of countries at different levels of economic development, the most rapid overall progress in meeting basic needs between 1960 and 1975 was made by the Semi-developed Countries - both non-oil and Major oil-producing. Over this period the same groups of countries also experienced the most rapid rates of increase in GNP per capita. In only two areas - life expectancy at birth and primary school enrolment - the non-oil Semi-developed Countries made relatively slow progress. But it can be seen in Table 5.2.2 that by 1975 these countries had achieved a high average level of performance in both these areas and so it is to be expected that the rate of improvement would decline as further progress would perforce taper off. Similarly, only a moderate rate of increase in calories and protein consumption was experienced over the same period, but by 1974 fairly high (though still inadequate) levels of satisfaction had also been reached.

In 1975 the Developed Countries had reached satisfactory levels in all these Basic Needs indicators, and so it is not surprising that there should have been only marginal changes in life expectancy, infant mortality and primary school enrolment rates.⁵⁰ Surprisingly, despite the very high levels previously achieved, calorie and protein consumption levels increased significantly. But this need not necessarily mean an improved level of basic needs satisfaction and may instead have introduced a new problem of ill-health. There was also a large increase in the number of doctors per 100 000 people despite the already high number and good health standards achieved - as revealed by the low infant mortality and high life expectancy.

Table 5.2.3 : Changes in Basic Needs Indices, per Level of Economic Development, 1960 - 1975⁴⁹

	Calorie Consumption (per capita per day)	Protein Consumption (gms per capita per day)	Life Expectancy at Birth (years)	Infant Mortality (per 1 000 live births)	Primary School Enrolment Rate (per cent)	Doctors per 100 000 people	GNP per capita growth (per cent per annum)
	1960-74	1960-74	1960-75	1960-75	1960-75	1960-75	1965-74
Developed	370	8	2,6	12	-3,4	24	3,9
Semi-developed (non-oil)	280	5	5,1	48	3,3	26	5,0
Semi-developed (major oil- producers)	390	5	11,4	45	26,6	19	6,3
Less-developed	10	-2	12,8	13	17,6	6	2,9

The Less-developed Countries made good progress in increased life expectancy at birth and primary school enrolment rates. But given the very low base for both these indicators in 1960, it is not surprising that progress should have been numerically easier for the Less-developed Countries than for the other groups of countries tabulated. But in other areas of basic needs performance the Less-developed Countries fared very poorly. In spite of a very low level of 15 doctors per 100 000 people in 1960, (compared with 172 in the Developed countries, 80 in the non-oil Semi-Developed Countries and 33 in the Major oil-producing Semi-Developed Countries), this figure had only risen by 6 by 1975. Similarly, infant mortality rates decreased by only 13 per 1 000 live births, despite the high level of 137 in 1960 (compared with a decrease of 48 and 45 in the non-oil and Major oil-producing Semi-developed Countries respectively). In nutrition, the performance of the Less-developed Countries was even worse. Despite very low levels of calorie and protein consumption in 1960, calorie consumption had improved by a mere 10 calories per capita per day by 1975, and protein consumption actually declined over the same period. This compares very poorly with a per capita increase in calorie consumption of 280 and 390 in both the non-oil and Major oil-producing Semi-developed Countries respectively, and a protein increase of 5 grams in both cases for the same period.

Between 1965 and 1974 the Less-developed Countries had, on average, a considerably lower rate of growth of GNP per capita per annum than the other categories of countries - 2,9 per cent compared with 3,9 per cent for Developed Countries, 5,0 per cent for non-oil Semi-developed Countries and 6,3 per cent for the Major oil-producing Semi-developed Countries.

While a high rate of economic growth is not a sufficient condition for satisfying basic needs, it is, nevertheless, essential for the success of any Basic Needs strategy if a simple redistribution of already inadequate resources and output is to be avoided. Hence, the slow rate of economic growth over the period 1965 to 1975 meant that the Less-developed Countries also had insufficient resources for significant progress in the satisfaction of basic needs.

On the whole it is clear that the gap between rich and poor countries in basic needs satisfaction is very large and in many cases in fact

increased during the period 1960-75. While the data in Tables 5.2.2 and 5.2.3 are admittedly crude and aggregative (and exclude housing), masking internal differences in basic needs satisfaction, it is, nevertheless, clear that previous development strategies have failed to meet the basic needs of the majority of the people in the Semi- and Less-developed Countries. While there are undoubtedly countries within each development group which have made better progress in basic needs performance than others, it is clear that further attempts to meet the basic needs of all but the Developed Countries are necessary. Even within the Developed Countries there will be some people for whom basic needs satisfaction is not achieved, but here the problem is essentially one of redistributing existing resources and providing better access to such resources for all. But in the Semi-developed and Less-developed Countries, the basic needs performance of the vast majority of people is inadequate in the sense of reflecting economic scarcity and, hence, strategies specifically dealing with these problems must be devised in order to improve the situation.

5.3 NOTES

1. Ward, M., 'Homeland Development? Planning in the Ciskei', in Selwyn, P., (ed.), Southern Africa : The Political Economy of Inequality, (Institute of Development Studies: Brighton, 1980), p. 16.
2. Sandbrook, R., The Politics of Basic Needs: Urban aspects of Assaulting Poverty in Africa, (Heinemann: London, 1982), p. 3.
3. World Bank, World Development Report, 1980, (Oxford University Press: New York, 1980), p. 110.
4. McNamara, R. S., in World Bank, World Development Report, 1978, (World Bank: Washington, D.C., 1978), p. iii.
5. ILO, Employment, Growth and Basic Needs: A One-World Problem, (ILO: Geneva, 1976),
6. Ibid., pp. 189-217.
7. Cassen, R. H., 'Basic Needs: an appraisal', Conference on 'Economic and Demographic Change: Issues for the 1980's', International Union for the Scientific Study of Population, (Solicited Papers: Helsinki, 1978), p. 3.3.2. - 1.
8. Statement issued at the end of a seminar organised under the joint auspices of UNCTAD and UNEP on "Patterns of Resource Use, Environment and Development Strategies". Cited in Ghai, D. P., Khan, A. R., Lee, E. H., and Alfthan, T., op.cit., p. 6.
9. ILO, op. cit., p. 191.
10. Ibid., pp. 191-2.
11. United Nations Resolution 3202, S-VI, May 1974, in Langley, J. A., (ed.), Ideologies of Liberation in Black Africa, 1856 - 1970, (Collings: London, 1979), pp. 814-835; and Dag Hammarskjold, What Now - Another Development, The 1975 Dag Hammarskjold Report on

Development and International Co-operation, (New York: 1975).

12. "Statement by DAC Members on Development Co-operation for Economic Growth and Meeting Basic Human Needs", adopted by the Development Assistance Committee (DAC) High-Level Meeting on 27th October 1977, in OECD, Development Co-operation - 1977 Review, (OECD: Paris, 1977).
13. A more detailed breakdown of World Bank projects may be found in Haq, M., ul., 'Changing emphasis of the Bank's lending policies', Finance and Development, vol. 15, no. 2, June 1978, pp. 12-14.
14. Ghai, D. P., Khan, A. R., Lee, E. H., and Alfthan, T., op. cit., p. 6.
15. Richards, P.J. and Leonor, M.D., (eds.), Target Setting for Basic Needs, (ILO: Geneva, 1982), p. 4.
16. For example, Pigou [Pigou, A. C., The Economics of Welfare, (Macmillan: London, 1932), p. 90], suggests: "... a large proportion of the satisfaction yielded by the incomes of rich people comes from their relative, rather than their absolute amount."
17. A suggested guideline for setting target levels is to use existing consumption levels for a particular group within the society, such as the national average, and to try to ensure that all groups in the society achieve a minimum of this level.
18. Richards, P.J. and Leonor, M.D., op.cit., p. 12.
19. ILO, op. cit., p. 22.
20. The poverty lines for these estimates were \$80 and \$90 respectively for Latin America; \$115 and \$59 for Africa; and \$100 and \$50 for Asia.
21. Table 5.2.2.
22. Table 5.2.2.
23. ILO, op. cit., p. 3.

24. Ibid., p. 191.
25. Hicks, N. and Streeten, P., 'Indicators of Development: The Search for a Basic Needs Yardstick,' World Development, vol. 7, 1979, p. 577.
26. See, for example, Musgrave, R. A., The Theory of Public Finance, (McGraw-Hill: Tokyo, 1959), pp. 6 - 14; and Herber, B. P., Modern Public Finance, Fourth Edition, (Richard, D. Irwin : Homewood Illinois, 1979), pp. 45 - 49.
27. Herber, B. P., op. cit., p. 49.
28. Musgrave, R. A., op. cit., pp. 85 - 86.
29. In this section data will be drawn mainly from the World Development Reports of the World Bank for the years 1978 to 1981, as well as Sheehan, G. and Hopkins, M., Basic Needs Performance : An Analysis of Some International Data, (ILO : Geneva, 1978), covering the period 1960 to 1979.
30. ILO, 'Employment, Growth and Basic Needs : A One-World Problem', op. cit., p. 4.
31. Sheehan, G. and Hopkins, M., op cit., pp. 39-96.
32. See Hicks, N. and Streeten, P., op. cit., pp. 568 - 570 for a summary of these attempts.
33. Ibid., pp. 570 - 577, provides a detailed analysis of these efforts.
34. See World Bank, World Development Report, 1981, (Oxford University Press : New York, 1981).
35. Sheehan, G. and Hopkins, M., op.cit., p. 98.
36. Hicks, N. and Streeten, P., op.cit., pp. 578-579.

37. Adult literacy measures the effects of education rather than the inputs, and so is probably a better indicator of the extent to which the basic need for education is met than primary school enrolment. But measures of literacy are often inaccurate because there is no consistent definition of literacy between countries, and, hence, primary school enrolment data are often used as well.
38. For a detailed composition of these classifications see, World Bank, 'World Development Report, 1981', op.cit., p. 133.
39. Ibid., pp. 174 - 175 and 178 - 179. All figures are weighted averages of the five different classifications.
40. Adult literacy rate for 1960 for Industrialised Countries taken from Sheehan, G. and Hopkins, M., op. cit., p. 33.
41. Figures unavailable.
42. 1975 figure, taken from World Bank, 'World Development Report, 1980', op. cit., p. 155.
43. In 1978 Japan had an average life expectancy of 76 years, and even Sweden and Norway, despite impressive social security systems and high levels of development, achieved a level of 75 years. Physiological, rather than economic, factors would appear to hamper further increases in this average level at present.
44. Twenty-four countries with GNP per capita of \$2 400 or greater in 1975 were classified as developed. Five other countries - Kuwait, Libya, Saudi Arabia, Singapore and Spain - met this requirement, but were classified as semi-developed as their economies cannot be said to have a structure characteristic of developed countries. Twenty-seven other countries with GNP per capita between \$1 000 and \$2 400 in 1975 were classified as semi-developed and divided into major oil producers and the rest. Nine countries were classified as major oil producers and eighteen as semi-developed (non-oil). The remaining countries with GNP per capita less than \$1 000 in 1975 were classified as less-developed. There were eighty-three countries in this category.

45. Sheehan, G. and Hopkins, M., op. cit., p. 123.
46. Ibid., p. 27.
47. This level probably exceeds the theoretical maximum because of differences in inter-country definition. In some countries children may begin primary school at a younger age than others.
48. Calculated from Table 1 of World Bank, 'World Development Report, 1978', op. cit., pp. 76 - 77.
49. Sheehan, G. Hopkins, M., op. cit., p. 130. Aggregate improvements are given in the units appropriate to each indicator. Data are given for improvements and so a decline in infant mortality is shown as positive.
50. The marginal decrease in primary school enrolment rates may be due to changes in definition.

CHAPTER 6 : A STRATEGY FOR MEETING BASIC NEEDS

6.1 INTRODUCTION

It is evident from the previous chapter that the basic needs of large sections of the world's population are not being satisfied and that previous development strategies, concentrating on economic growth as such and distribution-with-growth, have failed to adequately counter this problem. Consequently, a number of countries have adopted policies designed specifically to tackle the problem of meeting basic needs.¹ Previous social welfare measures have as a rule been applied on an ad hoc basis and not directed at the development issue. As a result, these countries have attempted to give direction and purpose to such measures, by directing them at the problem of development. It is not the intention here to analyse in detail the specific policy recommendations in these different countries. Nor can an assessment of their successes or failures be attempted, as in each case deliberate Basic Needs strategies have only been adopted after 1979 and so it is still too early for the results to be meaningfully assessed.² However, an attempt to outline in general the policy implications of the Basic Needs approach, based mainly on experience gained by the ILO and World Bank, will be made. But it should be borne in mind that not all economies are the same: some economies may be market-oriented and others centrally-controlled; some may possess only rudimentary market structures; and in some societies consumers are better informed than others (therefore education as a basic need). Where lack of information is a serious problem, the role of the government may be more prominent than otherwise. In view of these divergences, what follows in this chapter amounts to a rather general discussion of strategy, and specific policy measures would have to take cognisance of the institutional properties of the society concerned.

Any Basic Needs strategy must necessarily begin by establishing the pattern and extent of basic needs deficiencies within the target economy and the "underlying processes"³ which have either generated or perpetuated them. Thereafter the question of policies needed to alleviate this situation can be approached. These policies may be directed at transforming the underlying process and at achieving targets which may be set for each of the "core" basic needs. Hence, the need to transform the process which has generated or sustained deficiencies in

the attempted satisfaction of basic needs is emphasised, while at the same time attention is focussed on the details of the policies that seem appropriate.

The outline of a Basic Needs strategy, as for example put forward in the case of Zambia in 1981, was expressed as follows:

- (a) "substantial improvements in the living standards of the mass of the poorer households should be made a top priority of government policy and economic strategy in the next few years;
- (b) implementation of this priority should be made operational and specific by the adoption of a basic needs target income and minimum level of essential services. The impact of government programmes and projects in helping poorer households to reach this minimum should become a key test, which new projects, programmes or policy proposals would in general be expected to meet if they were to obtain budgetary support;
- (c) equally important, development strategy should be progressively realigned, to give priority to measures which encourage and provide opportunities for poorer households, rural and urban, to achieve major increases in their own production and incomes and thus in their ability to obtain the goods and services they need."⁴

Hence, the essential features of a typical Basic Needs strategy are, firstly, that measures must be introduced to increase the real incomes of target groups up to and above a specified minimum level, and, secondly, that the adequate availability of and access to the required private- and public-consumption goods and services must be ensured. Such goals should be achieved by methods allowing for maximum participation of the target group itself in the economy.

The incomes of poverty target groups may be raised up to and above specified minimum levels by a fuller utilisation of human resources through productive employment. Low incomes may result from both unemployment and underemployment and policies should be directed at the rapid expansion of productive employment opportunities as well as increasing the productivity of sectors where underemployment is prevalent. Thus policies should strive for the maximum utilisation of existing resources through appropriate technologies⁵ and products.

This involves techniques and products adapted to local conditions rather than grafted on from the rest of the world. This may require the redirection of education, training and research and the introduction of programmes designed to raise the productivity of resources available to the poor - especially their labour.

Incomes may be raised not only by increasing the productivity of resources available to the poverty target groups, but also by increasing the quantity of resources available to them. Of course, an increase in productivity is a prerequisite for any redistribution of resources, or total output will be lowered by giving resources to less-productive labour. Such a productive redistribution of assets to the poor can be achieved either by direct means, such as land redistribution, or indirectly, through, for example, the provision of low-interest loans and credit to low income groups. Further measures may include direct income transfers, minimum-wage legislation, price controls and subsidisation of certain basic goods and services. Such measures may, however, have adverse effects on some of the members of the group they are designed to assist. For instance, price controls may benefit consumers of the controlled goods within the target income group, but will adversely affect those members of the target group (and outside) who are producers of the controlled goods. It is difficult to confine the impact of such measures to target groups alone, and, hence, the cost of such policies may be inordinately high. In Sri Lanka, for example, the implementation of a rice subsidy proved enormously expensive, as, for political reasons, it could not be confined to poor consumers alone. The role of such measures is, therefore, limited, but they may be important in meeting the basic needs of special categories of the poor - such as the aged, handicapped or unemployable, backward or isolated regions, and in periods of extreme shortages - where policies designed to counter unemployment and underemployment cannot be effective. (Of course this would no longer be a Basic Needs strategy, but an ad hoc social welfare policy or a relief programme geared to a state of emergency).

The second requirement of a Basic Needs strategy is to ensure the adequate provision of essential goods and services. Unless such products are available, the changes in demand resulting from policies designed to increase the incomes of target groups will result in excess demand in the markets for basic goods and services, and resultant inflation and/or shortages.

Where markets are rudimentary, and market signals are therefore weak, an "announcement effect" with respect to basic needs is required and may serve to induce the supply of the required goods and services. The absence of such an increase in output would severely hamper any Basic Needs strategy, and so policies designed to increase incomes should be aimed at the production of Basic Needs goods and services. Such an approach has the advantage that by planning to raise incomes by producing products meeting the basic needs of the target low-income groups, a market for such goods and services is assured, and risk of failure is consequently reduced. At the same time Basic Needs items, such as food and housing, tend to have low import contents and involve the extension of existing techniques and methods of production, so that employment and income may be increased without running into balance of payments difficulties.

Basic Needs goods and services have been divided into private-consumption goods and services, such as nutrition and housing, and public-consumption goods and services, such as education, health and water supply. As the adequate supply of both private and public goods and services is dependent upon a certain level of demand (unless they are provided free of charge, i.e. by a social welfare policy rather than a Basic Needs strategy), incomes must be increased together with increases in the provision of both private- and public-consumption goods and services. Thus formal and informal enterprises engaged in the production of basic goods and services would have to be identified and encouraged through appropriate policies.

From the economic point of view, the distinction between Basic Needs goods and services which are divided between private and public consumption respectively essentially depends upon the allocation of resources between these two sectors of the economy. Even if such basic needs as food and shelter are deemed to belong to the private sector, the market system has evidently failed to supply these needs spontaneously (otherwise the problem would not exist in the first place). Hence, if existing provision is to be changed (that is increased) public policy measures would have to be taken, i.e. there would have to be some intervention in the private sector market mechanism. However, such intervention would not necessarily require a transfer of productive resources from the private to the public sector on an appreciable scale

as would be the case in the provision of the designated public consumption goods and services in respect of basic needs, namely, health, education, water supply and sanitation. In both cases policy makers should be careful to avoid self-defeating measures, for example, the transfer of resources from higher to lower productivity users, or policies which act as disincentives, thus actually diminishing the available supply of the goods and services concerned.

In the provision of private-consumption goods and services, the role of the policy makers should be to remove obstacles and improve incentives in relation to their production and consumption. Thus low-interest credit may be provided selectively and bottlenecks in the way of expansion or the provision of inputs to this sector removed. In nutrition, low-interest loans may be provided to rural producers, and in housing, loans for the construction of houses be granted or land set aside for low-cost housing. In some cases the public sector may resort to the production of certain goods and services itself to eliminate shortages.

The role of the public sector in providing public-consumption goods, and services - such as health, education, transport and water supply - is more direct. In an acute situation, an expansion and redirection of public expenditure so as to meet the needs of deprived target groups may be called for. Where such goods and services are already available, but not used, a restructuring of the content, organisation and delivery systems of these goods and services, may be necessary.

In the same way as the attitudes of the target groups were said (in the previous Chapter) to be crucial towards the success or failure of a Basic Needs strategy, so too is the attitude of the policy makers (i.e. the government). The success or failure of policies designed to expand or redirect public expenditure may, to a large extent, depend on the government's commitment to the achievement of such goals. Frequently the target groups (the poor) carry little political weight and, hence, policies to direct resources away from politically influential groups towards the poor, may be followed with some hesitancy by the governments concerned. Similarly, the actual extent of government influence may vary; the more centralized an economy, the greater the government's ability to influence resource allocation. Without the material support of government organisation, personnel and administration, even the most carefully designed Basic Needs strategy is bound to fail and funds will continue to be misallocated.

The third aspect above of a Basic Needs strategy (as set out on p. 105) is the promotion of mass participation, self-reliance and decentralisation of decision making, as the people whose basic needs are to be met should ideally participate in determining these needs instead of having them handed down from above.⁶ But in many areas, participation is hampered by the lack of representative organisations to express the views of the poorest sections of the population. Hence, institutions embracing the characteristics of mass participation, self-reliance and decentralisation, should be identified and encouraged where already existing, and created if absent. This may be done by encouraging small businesses in the production of private-consumption goods and services, and by establishing co-operative organisations for the production, marketing and distribution of Basic Needs goods and services. In the production of public-consumption goods and services, self-help and community-welfare projects should be encouraged to ensure maximum local involvement. Thus community clinics or schools could be constructed by the community itself rather than by relying on the central authorities to do so. (In practice, the lack of initiative and entrepreneurship has proved to be an important inhibiting factor).

In sum, any Basic Needs strategy should be founded upon the recognition that "problems of poverty and basic needs deficiencies must be attacked through a comprehensive set of measures and not through a limited number of ad hoc initiatives."⁷ All aspects of such a policy should be consciously directed at the central objective of poverty alleviation. Income levels of target groups should be raised by increased employment and levels of productivity, which should be the prerequisite to asset redistribution, and efforts may then be directed at asset or income redistribution. Attempts to increase employment in the modern or industrial sector of the economy may include efforts to fully utilise excess capacity in capital and social infrastructure in both the private and public sectors; investment allowances based on job creation and the decentralisation of industrial location; training incentives; and taxes on imported goods to encourage local production. Increased employment and income in the traditional or informal sector of the economy may be encouraged by removing restrictions, such as strict licensing, on such activities; the provision of basic infrastructure and services such as credit and marketing facilities; and improved training. Poverty alleviation may be further promoted by minimum-wages⁸, price controls and taxation, and efforts should be made to encourage the development and use of appropriate labour-intensive technology suitable for the needs of

small-scale rural and urban producers in both the formal and informal sectors. Such direct intervention in the market (such as price and wage control) is only likely to be successful where the markets concerned are imperfect and rudimentary, and the spontaneous market solution may therefore be suboptimal. Public expenditure should be redirected to provide facilities and services such as schools, clinics and basic infrastructure in all areas, in particular those where such facilities were previously inadequate or non-existent. The production of sufficient goods necessary to meet changing demand patterns for the satisfaction of basic needs may be encouraged by stimulation of the informal sector, increased agricultural output and the promotion of a flexible market structure. Mass participation could be encouraged by the development of small businesses in all sectors, and the promotion of co-operatives and self-help organisations.

The above discussion provokes the question of why such policies are not followed in practice. The answer lies in the fact that such policies may be difficult or even impossible to implement. This outline amounts to an ideal strategy whose practical implementation is contingent on existing resource constraints as well as policies.

In principle, a Basic Needs strategy can approach the problem of poverty in two ways: it can aim at the processes which result in the target groups being deprived of specific or individual basic needs; or it can be directed at all the main categories of needs taken together. These are not so much alternatives as complementary strategies, for, as Ghai, Godfrey and Lisk point out: "Process-derived policies alone might tend to be insufficiently detailed, need-derived policies too narrow."⁹

6.2 POLICIES DIRECTED AT THE "UNDERLYING PROCESS"

The underlying processes likely to have adverse effects on attempts to satisfy basic needs, in principle include a favourable institutional environment (public policy, customs, techniques), within which markets may operate, as well as imperfections inherent in the markets themselves. Specific conditions, like absolute poverty, which discourage risk taking and innovation would also belong to such underlying processes, the combined outcome of which is, inter alia, a comparatively slow economic growth of a country or region. Hence, policies would have to be directed at improving the export base; at raising the capacity of a region for endogenous self-sustained growth; at overcoming the locational disadvantages of some regions relative to others; and

countering the "backwash effects" discussed in Chapter 3. In other words, policies would be directed at increasing regional economic growth in order to counter basic needs deprivation. But, as has been pointed out, economic growth by itself is not a sufficient condition for basic needs satisfaction in less-developed societies and it is possible for high rates of economic growth to be accompanied by basic needs deficiencies and for low economic growth to be accompanied by a good basic needs performance. Therefore, the "underlying process" behind basic needs performance involves more than simply economic growth: the structure of the economy may give rise to production and expenditure patterns not conducive to the operation of a Basic Needs strategy and policies must be directed accordingly.

Any Basic Needs strategy will depend upon the particular circumstances of the country in which it is applied. This is particularly true of policies directed at the underlying processes resulting in basic needs deprivation, where poverty is approached not from the view of income distribution or the degree of deprivation of certain essential goods and services, but from the processes which create such a situation. Only once these processes have been analysed, can policies be devised to counteract them, and, hence, any general analysis of such an approach is difficult unless examined in the particular circumstances of an actual economy. Nevertheless, it is possible to examine the type of processes which are likely, in general, to result in basic needs deprivation, and to suggest possible policy measures to counteract them.

Essential to the satisfaction of basic needs is adequate productive employment. Without a minimum level of income, individuals are unable to satisfy their basic needs, unless of course these needs are satisfied free of charge in a "welfare" policy. While employment is not itself a basic need, it provides the income necessary for the purchase of basic goods and services. Hence employment is an essential prerequisite for the satisfaction of basic needs, and any Basic Needs strategy should be directed at the maximisation of employment. But not only should employment opportunities as such be present, employment should be productive. Thus low productivity jobs result in low wages; basic needs deprivation may then follow from comparatively unproductive jobs rather than from unemployment.

Economic development has generally resulted in a larger share of employment opportunities being generated in other than agricultural occupations, and these opportunities are normally located in urban

areas. A major problem facing rural areas is the failure of urban areas to create sufficient job opportunities to absorb the growing surplus of rural population. The cause of rural/urban migration is mainly economic, with people migrating in search of jobs; this flow is thus in principle regulated by the availability of employment opportunities in both the rural and urban areas.

Hence, migration is an inevitable result of economic development, and often involves the movement of unemployed or underemployed labour from rural to urban areas, where jobs are either available, or at least thought to be so, whether immediately or in the foreseeable future.¹⁰ From the point of unemployment, increased migratory flows may be considered desirable, but from the point of view of a policy-maker trying to satisfy basic needs within a particular area, the results may be very discouraging. "Every time a new job is created there is at least one person ready to take it, and there are probably several others waiting in rural areas for similar opportunities.... No matter how many jobs are created, more are needed, and attempts to increase income are confounded by the constant increase in the supply of labour."¹¹ From the point of view of a policy-maker seeking to satisfy basic needs in an urban area, the inflow of migrants will tend to put a strain on the provision of services, and the more employment created, the greater the inflow and the more services required. "From this point of view the problem is not one of lack of employment; it is rather one of management of the problems generated by increased employment."¹²

Policies directed at the problem of unemployment or underemployment should therefore not neglect employment creation in rural areas too, which would increase the satisfaction of basic needs in these areas and thus decrease migration. Thus policies designed to increase agricultural productivity also serve the end of Basic Needs services in rural areas. Then, the simultaneous increase in productive employment in urban areas would establish a comprehensive basis for income generation and the satisfaction of basic needs in a sustainable manner. But the impact of individual Basic Needs projects on employment would at best appear limited. Nevertheless, because of the importance of employment-creation to the satisfaction of basic needs, policies should examine all factors that serve to lower the potential level of productive employment.

Institutional constraints frequently hamper the efficient creation of productive employment, and particular attention should therefore be directed at alleviating such constraints. As mentioned above, small

entrepreneurs are frequently officially excluded from the provision of credit, and informal sector activities may be actively discouraged by licensing policies. Such factors will be dealt with in greater detail in the following paragraphs. In addition, efforts to increase productive employment are often hampered by the specific socio-economic position of the unemployed (such as age, work-preferences, lack of education, ill-health, etc.) A general increase in the demand for labour will not necessarily improve the position of such groups, and specific remedies would have to be devised for them.

Ghai, Godfrey and Lisk suggest that areas of basic needs deprivation for example in Kenya are the result of three factors: "... market forces, oligopolistic product differentiation and state intervention",¹³ which, "interact to reproduce and reinforce rural and urban stratification and... this in turn is reflected in the pattern of incidence of basic needs deficiencies."¹⁴

Market forces may work in such a way as to increase inequality and reproduce poverty. In the land market, for example, inappropriate land-tenure systems, increasing landlessness, and the continued subdivision of land into uneconomic units may be major causes of poverty. In such cases it may be necessary for the government to intervene to counter market forces or inertia to bring about more efficient systems of land use.

Another important market force may be the locational advantages derived by some regions from agglomeration economies and other locational factors,¹⁵ which are responsible for the generation of regional economic inequalities. Areas of economic concentration may be attractive not only as market and/or input sources, but also offer economies of large-scale production, encouraged by the powerful "backwash effects" of selective migration from less-attractive locations. To counter the locational attractiveness of some regions relative to others, areas where locational forces are weak can be favoured by policies designed to enhance their attractive powers - such as graduated investment allowances, tax concessions and lower transport and electricity tariffs, etc.

"Oligopolistic product differentiation" refers to the process whereby large firms redirect consumer tastes away from Basic Needs products, and

so conflict with a strategy designed to satisfy them in a number of ways. Firstly, the conflict may be direct, and consumer tastes are redirected away from products which are more appropriate to basic needs to less satisfactory (and sometimes more expensive) products. For example, Ghai, Godfrey and Lisk point to "the redefinition of Kenyan demand for maize flour away from ordinary posho, produced by labour-intensive methods, towards the packaged, branded, sweeter, whiter, finer and less nutritious sifted flour produced by roller-mills."¹⁶ Secondly, household expenditure may be diverted towards such redirected consumption patterns, which, from the point of view of satisfying basic needs, may be less efficient, i.e. target groups are especially vulnerable if they lack adequate information for basic needs. Hence, a greater proportion of a household's expenditure may be devoted to non-Basic Needs items or to items less cost-efficient in satisfying basic needs. Thirdly, redefinition may result in consumer preference for products of a type which is very difficult for small-scale producers to produce. Consequently, capital-intensive production may be encouraged and employment opportunities decline.

To overcome such problems of redefinition and redirection, advertising which influences consumer demand in a way that conflicts with basic needs satisfaction can be controlled by the authorities, and the consumption of redefined "needs" (such as alcohol, for example) can be discouraged through taxation and increased prices. The consumption of highly efficient Basic Needs products can be encouraged through increased production of such products by traditional, labour-intensive, small-scale techniques.

Large firms such as multinationals may import inputs and export profits. Such an outflow represents a leakage from the circular flow of income and expenditure within a territory and is, ceteris paribus, detrimental to local output and employment levels; it may also lead to balance of payment difficulties. However, it does not follow that the participation of outside firms in any territory is on balance detrimental to its economic performance, as the repatriation of profits may be a precondition to outside investment in the first place. To the extent that this underlying process results in a poor economic performance and employment conditions, it may be detrimental also to basic needs performance. To counter this process, firms from outside the region or

nation concerned could be encouraged to invest in export-oriented activities - particularly those industries where economies of scale are important.

"State intervention" may also contribute towards basic needs deficiencies, by reinforcing disequilibrating market forces. From an analysis of the impact of state intervention in the Kenyan economy Ghai, Godfrey and Lisk conclude: "The net result (then) of state intervention in the Kenyan economy, has probably been to reinforce the tendency towards inequality deriving from market forces, product differentiation, ownership and control."¹⁷ State provision of Basic Need goods or services may respond to existing patterns of purchasing power rather than counteracting the forces of inequality by being directed at those areas where need and deprivation is greatest. Thus the most developed regions, and sections of the population, tend to receive the largest share of public resources, and inequality is reinforced. For instance, health services tend to be superior in urban than rural areas, while quality of education frequently varies with the prosperity of the region and the income levels of parents. Infrastructural development may also be orientated in support of the modern sector of the economy and the developed areas of the region or nation rather than at the poorest and deprived. Hence, if market forces bring about distributional patterns deemed to have certain undesirable effects, then the task of public policy should be to counter rather than enforce the forces that bring these about.

Industrial protection may lead to the internal terms of trade turning against agriculture and other Basic Needs activities, with consequent negative effects for these sectors, but positive effects for protected sectors. Agricultural policy is frequently biased in favour of large-scale, highly productive farmers, who benefit from the application of extension services, research, and marketing systems in their direction. Credit often involves the use of land as collateral and so favours large farmers, while only a small proportion of smallholders have access to formal credit. In communal farms governed by traditional land tenure, land doesn't serve as collateral for credit at all. Similarly, large farms are often protected against other potential market entrants, either formally or by favourable tax-structures, access to credit and pricing policies.

In order to counter the inequalities they reinforce, policies towards industrial protection, pricing and marketing systems, should be reconsidered. Protection should be dismantled where it patently fails in the purpose to foster competitive or viable industries, which would alter the internal terms of trade in favour of at least some Basic Needs goods and services. Agricultural training and extension services should be expanded and refocussed at the "rural poor", and research should be oriented towards small producers. The success of such policies would depend upon an institutional environment fundamentally conducive to economic efficiency (the absence of traditional land-tenure systems inimicable to growth). In the absence of more suitable arrangements, marketing organisations favouring small-scale, labour-intensive producers could be encouraged by the establishment of co-operatives for the provision of inputs and sale of products, and the extension of savings and credit facilities to small-scale producers (agricultural and non-agricultural), given high priority.

Informal sector activities frequently have difficulty in complying with licensing and other regulations (such as product standards). These activities tend to be labour-intensive by nature¹⁸ but are unlikely to qualify for formal credit and are frequently unable to compete equally in the market. Moreover, official harassment of the urban informal sector where it exists, should be removed and informal sector activities encouraged through the provision of essential services and credit so that they can compete better with large (capital-intensive) firms in the market.

The results of such unfavourable underlying economic processes may well be reflected in the patterns of deficiencies of the "core" basic needs - nutrition, housing, health, education and water supply. Inadequate nutrition may result from low incomes, which are in turn due to inadequate household production, high input and low output prices, and low wages. Inadequate household production may be caused by various circumstances - small agricultural producers may have low output because of poor agricultural conditions or insufficient land, while in urban areas low wages may be the result of inadequate productive employment or unfavourable informal sector opportunities. Nutritional problems may also result from pressures on the poor to divert expenditure away from food to other non-basic needs, or to switch from more- to less-nutritious

foods. The high cost of other basic items, such as urban housing, may force households to allocate less expenditure to food consumption.

Difficulties in the ability to satisfy the basic need for housing may result from inadequate incomes to pay for housing of an officially acceptable standard. It may also result from intervention by the housing authorities, where minimum standards are set too high in terms of existing resource constraints and institutional obstacles are placed in the way of the supply of basic housing.

Inadequate health services resulting from the underlying processes may be seen in both quantitative and qualitative terms. Government expenditure may be directed away from health, and even expenditure on health services may be directed largely at urban areas, while inadequate provision is made for rural health facilities. This may be reflected either by the complete absence of such facilities, or where facilities exist, they may be inadequately staffed and administered. Consequently, health services may be unequally distributed and large numbers of the (rural) population may suffer from poor health. Furthermore, existing market trends may often result in health expenditure being directed at curative rather than preventative services.

In education, the underlying processes may again lead to inadequate satisfaction of this basic need. Low incomes may prevent poor households from keeping children at school for a sufficient length of time seeing that the opportunity cost of education may be inordinately high in such cases. Where government expenditure is inadequate, some households may live too far from school to have access to education. Equally important as these quantitative inadequacies, are qualitative inadequacies in education. Large parts of education expenditure may be directed at basic and higher education facilities for high-income groups, while the basic education of low-income groups remains inadequate.

Finally, inadequate water supply is frequently the result of low incomes and the inability of households to afford individual connections. But it is also the result of the failure of the public sector to provide adequate public-consumption services because of the direction of too large a share of income to non-basic items and the setting of inappropriate standards.

The underlying processes behind the failure to satisfy basic needs may be the combination of market forces, slow rates of growth of wage employment relative to the number of job-seekers, product differentiation and ownership, and the role of the public-authorities. Ghai, Godfrey and Lisk comment: "Although the process as a whole is one in which the separate strands are difficult to disentangle, these distinctions may be useful when it comes to thinking about policy possibilities."¹⁹ But these processes should be seen "as a whole" if overemphasis on the impact of policies directed at only one of these "strands" is to be avoided. (For example, Ghai, Godfrey and Lisk warn that policies directed at encouraging informal sector activities by removing institutional obstacles to their efficient operation "may not have a major impact."²⁰ To the extent that informal sector activities replace formal sector firms previously protected by these obstacles, the impact is decreased. Furthermore, such policies could not assist informal sector activities "competing with larger firms which either derive their market power primarily from redefining needs or have a real unit cost advantage over small firms in meeting relatively undefined needs."²¹)

Similarly, the importance placed on overcoming disequilibrating market forces should not disguise the difficulties inherent in policies designed to counteract cumulative tendencies towards regional, urban/rural and individual inequalities and, therefore, basic needs deficiencies. Specific policies for countering deficiencies in basic needs will be dealt with in greater detail in the following pages.

6.3 POLICIES DIRECTED AT THE MAIN CATEGORIES OF NEEDS

In addition to investigating and taking action in connection with the general economic processes which may give rise to insufficient basic needs satisfaction, an alternative strategy may be directed specifically at the main categories of basic needs. Such an approach has the advantage that the degree of deprivation in the case of each need can be measured, strategies be devised to deal with these problems, and the success or failure in meeting each need assessed. In this chapter, strategies will be discussed for meeting the "core" basic needs set out in Chapter 5, namely health, education, water supply (together with sanitation), nutrition and shelter. As mentioned previously, this does of course not necessarily represent a collectively exhaustive list of

even "core" basic needs. Transport in particular may be seen as an important need, especially as the means of access to e.g. health and educational facilities as well as, sometimes, to one's place of employment. The significance of transport may be especially great in rural areas. Limiting the present discussion to the basic needs mentioned above does not signify an implicit system of priorities. On purely practical grounds the set must be closed at some point, and the rough guiding principle here has been to include the variables which appear to be most closely related to the prerequisites for economic growth.

These needs have been further divided into "private-consumption" and "public-consumption" needs. By their nature, nutrition and shelter may appear to fall into the category of private-consumption needs. The consumption of food is obviously an individual action and unless the state is going to undertake the task of providing housing for all its citizens, so is housing. But health, education, water supply and sanitation are all communal services and cannot easily be undertaken on a purely individual basis. However, all these needs have to a greater or lesser extent the character of "merit" wants as set out in Chapter 5.

Strategies, as suggested by the experiences of the World Bank and the ILO, will be outlined in general for each "core" need, but particular stress will be placed on private-consumption needs. This should not be taken to suggest that these needs are deemed of greater importance than public-consumption needs. By definition, all basic needs are essential for a satisfactory existence. But private-consumption needs represent the area in which individual action should have the greatest impact. In an economy in which government action is constrained by a critical shortage of available funds and where the redirection of existing expenditure is hampered by political and other factors, immediate action in the field of public-consumption needs may be very difficult. On the other hand, private-consumption needs may provide greater freedom of action; food and housing typically represent the two largest items in a household's expenditure, and investment in housing represents a very significant item in a country's fixed capital formation. Thus a World Bank Report suggests that housing "typically constitutes 15% to 20% of household expenditure. For all but the wealthy, it is usually the major goal of family saving efforts. Investment in housing represents up to

20% or 30% of fixed capital formation in countries with vigorous housing programmes, and it is increasingly recognised as a profitable investment item, yielding a flow of income."²² 'In Ciskei, which is discussed in detail in Chapter 8, expenditure on food was found²³ to be by far the largest item of expenditure in black households - comprising 37,9 per cent, 49,7 per cent and 43,4 per cent, in large and small urban areas and in rural areas respectively in 1981. Expenditure on housing and household equipment was typically the second-most important item, being 20,2 per cent, 14,6 per cent and 16,9 per cent of expenditure respectively.²⁴ Given the importance of these items, particularly for low-income groups where the satisfaction of basic needs is likely to be poorest, emphasis on these sectors would seem to be justified.

The remainder of this chapter first briefly discusses the three basic needs of health, education, water supply and sanitation, often said to be of a "public-consumption" nature, and then proceeds to a rather more detailed discussion of the two so-called "private-consumption" needs of food and housing. This provides a suitable background to Chapter 8 which deals with the position of basic needs in Ciskei.

6.4 "PUBLIC-CONSUMPTION" GOODS AND SERVICES

The following so-called "public-consumption" goods and services are discussed below: health, education, and water supply and sanitation. These are fairly typical examples of goods or services produced under conditions of increasing returns to scale on account of the considerable overhead investment required in each case. For this reason it is not feasible for the private sector to produce them unless the supply is going to be confined to a small section of the population in the higher income groups who can afford to pay the high prices necessary to recover such costs. The alternative of public production does not mean that they are provided free of charge, and if a "crude" welfare programme is to be avoided, the cost of such projects must be met (at least in part) by the communities concerned. But it does mean that individuals acting alone can seldom meet these basic needs and collective action is required for their satisfaction. The examples discussed here would all seem to generate appreciable positive market externalities which therefore classifies them as "merit goods" on the definition used in Chapter 5.

6.4.1 Health

Strategies for meeting the basic need for health should include an improved spatial distribution of health facilities and personnel (particularly in rural areas) so as to provide reasonable access to the nearest doctor/hospital/clinic etc. for all sections of the population, in order to reduce the incidence of disease and death. (This point incidentally stresses the importance of transport and communications as parts of the Basic Needs spectrum). Such strategies may be directed at inputs relating to health-care, but their success or failure will be reflected in such development measures sensitive to the health of the population, such as life expectancy, infant mortality and morbidity.

Problems of ill-health may be the outcome of inadequate access to medical facilities, but may also be caused by poor nutrition or housing because of low income, or the failure to meet the basic needs for education, water supply and sanitation. This yet again stresses the complementarity which exists between the various individual basic needs. However, health problems may also result from inadequate health facilities per se, in which case policies should also be aimed directly at their improvement.

Inadequate health services may be reflected in shortages of physical amenities, with large sections of the population, especially in rural areas, living beyond the reach of health centres, or not having ready access to them. Existing urban facilities may again be required to deal with numbers of patients beyond their designed capacity. Health problems may also be reflected by shortages of drugs, poor administration, lack of equipment and even poor hygiene and sanitation at existing centres. In particular, further symptoms may be shortages of adequately trained staff or unequal distribution of trained staff (usually to the disadvantage of rural areas), the majority of qualified personnel being employed in large hospitals in major urban areas. Even where basic medical facilities do exist, there may be a problem of insufficient finance for the day-to-day running of such centres. Moreover, they may be directed at curative medicine rather than preventative health-care.

Shortages of adequately trained personnel may be overcome not only by the establishment of additional training centres, but also by the expansion of certain groups of medical personnel with training appropriate to Basic

Needs situations. For instance, the solution to a shortage of rural or other communal health workers may lie in the training of appropriate paramedical staff; rather than fully-qualified doctors with skills in excess of the needs to which they are sometimes assigned. Hence, a Basic Needs strategy in the field of health-care should not only be aimed at increasing the numbers of trained personnel as a group, but also at producing personnel with the necessary individual qualifications.

As in the case of medical personnel, the composition of available health facilities should also be geared to existing health needs. Hence, in rural areas with low population density, clinics may adequately satisfy local health needs, while the more specialised functions of hospitals may be confined to urban areas. Ambulance services and mobile clinics may often serve as adequate substitutes when more specialised services are required.

6.4.2 Education

Of the three "core" public-consumption basic needs outlined here, education has been stressed most frequently - even in growth and development strategies which do not possess an explicit Basic Needs focus. Education is considered to be important in this context for at least three reasons. Firstly, it is seen as an end in itself and necessary for a better "quality of life". Thus Ghai and Alftan stress: "Education should provide the necessary tools which enable an individual to participate fully in society. At the same time, education is a basic need per se, and can thus be viewed as an end in itself."²⁵ Secondly, education is complementary to the satisfaction of other basic needs such as nutrition and health. Hence, the World Bank found: "it is impressive that education emerges as a key factor among various basic needs in all the cross-country and cross-sectoral analyses that were undertaken."²⁶ Thirdly, education is seen to be directly related to employment, income levels and economic growth.

Targets for education can either measure results achieved, such as literacy rates (disaggregated, for example, by sex and according to rural and urban areas), or inputs, such as prevailing enrolment rates at different levels of education. Enrolment rates by themselves reveal nothing about the quality of education and so their relevance in a Basic

Needs strategy for the alleviation of poverty is dependent upon the extent to which the content of education is functional in acquiring employment and providing an adequate income for the satisfaction of basic needs. Population groups showing low levels of enrolment in educational institutions (quantitative deficiencies) and/or inappropriate education contents (qualitative deficiencies) may be indentified, and policies directed at these problem groups. Quantitative deficiencies may occur simply because educational institutions do not exist in some localities, or because some people are too poor to let their children go to school (even where school fees are zero, the cost of education is still positive in terms of income foregone - which poor households may not be able to afford), or because of cultural barriers which may result in parents being unwilling to send their children to school. Qualitative deficiencies, on the other hand, may result from inadequately trained teachers, poor motivation for adequate performance by teachers, inadequate facilities, and inappropriate syllabuses.

Thus people may in fact be educated, but their education may be inappropriate to their actual needs or the requirements of the economy. A frequent problem in less-developed countries may be the existence of large numbers of university graduates with few employment opportunities, while at the same time there exists a shortage of suitably qualified skilled workers and technicians. Such a problem may result from inappropriate educational patterns or salary structures, which result in "white-collar" employment being financially more attractive despite the relatively greater demand for "blue-collar" workers existing in the economy. Thus Foster concludes from an examination of the Ghanaian economy: "Those who criticize the 'irrational' nature of African demand for 'academic' as opposed to 'vocational' education fail to recognize that the strength of academic education has lain precisely in the fact that it is pre-eminently a vocational education providing access to those occupations with the most prestige and most important, the highest pay within the Ghanaian economy. The financial rewards and the employment opportunities for technically trained individuals were never commensurate with opportunities in the clerical field."^{26a}

Education policy is often government controlled and in planning school building and teacher training programmes etc., the authorities should be directed by criteria which give extra weighting or priority to those groups and regions which are quantitatively and qualitatively deprived as set out above. In principle, a basic minimum target for education is universal, effective primary education for all, but, depending upon the

level of development an economy has attained, this may be raised to secondary education as well.

This strategy involves increasing school enrolment; increased availability of education can be assured by building more schools and providing more teachers where needed, but equally important is the need to increase participation by removing disincentives, especially of an economic nature. This could involve either a system of bursaries, or the provision of free education for at least the entire primary school period, accompanied by a system of free books, improved equipment and facilities in general, and in-service training of teachers. One method of reducing the drop-out rate in primary schools could be the introduction of feeding schemes, which again stresses the complementarity of basic needs as a group.

To improve the education and literacy of adults, corresponding education centres may be established and appropriate syllabuses developed. Together with primary education for young children, universal adult literacy is a minimum target in the provision of educational basic needs.

In addition, education policies designed to satisfy basic needs may include a strategy to improve and reorientate existing training. To this end the necessary training for employment should be flexible enough to match changing patterns of production and employment opportunities for the satisfaction of basic needs in their overall context. The removal of imperfections in the labour market should serve as a useful guide to the kind of education and training required for full employment. Experience in less-developed countries has shown that prospective entrants into the labour market tend to opt for that kind of education (e.g. academic or technical) which yields the highest wage rate. In other words, a successful education strategy should not be seen in isolation, but geared to prevailing conditions in the labour market. The labour market in turn can only serve as a useful guide to education strategy if relative wages also reflect the relative demand for skills.²⁷

6.4.3 Water Supply and Sanitation

An adequate supply of clean water is deemed one of the most crucial of human needs. Without water man cannot survive and without clean water his existence can be at best unhealthy. An insufficient supply of clean drinking water and inadequate sanitation are indirectly or directly responsible for the high rate of diseases that affect many developing

countries. The economic cost of disease have been expressed by the World Bank as follows: "Various studies and estimates indicate that in these (developing) countries disease typically takes up about a tenth of the average person's potentially productive time and, in addition, affects risk-taking and initiative adversely, disrupts the education and nurture of children, stunts physical development and causes vast suffering and hardship."²⁸ While possessing their own distinctive characteristics, water supply together with sanitation as a basic need is of course closely related to the health requirement previously discussed in this section.

According to the World Bank, the main reason for the large differences in especially infant mortality rates between developed and less-developed countries lies in diseases resulting from unsatisfactory water supply and waste disposal. For a Basic Needs strategy to be effective in this respect, attention must be given to the inter-related nature of the supply of clean drinking water, sanitary disposal of waste matter and good hygiene in general; the last point in turn stresses the significance of basic education.

Targets for water supply and sanitation should be defined in terms of adequate access to a source of clean water for consumption and cleansing purposes, and a safe method and place of disposal of waste matter. Adequate access may be defined in terms of a maximum distance between households and such sources and places of disposal, as well as the number of households sharing the same facilities. Because of greater population density, the problem of water supply and sanitation is often likely to be more urgent in urban than rural areas.

These two related basic needs cannot normally be met by individual action in areas of high population density, and so public provision is even more essential here than in the case of the other basic needs discussed in this chapter. The case for public intervention could, moreover, be argued in terms of the external costs and benefits of these services, which are bound to have a wide impact indeed by virtue of their preventative nature in the general field of health care. With the other basic needs discussed here policies aimed at providing water and sanitation should make use of cheap but effective methods rather than simply reproducing contemporary high cost methods which low-income groups would not be able to afford. The use of inappropriate techniques of water supply and waste disposal would also result in high capital outlay which society as a whole may not be able to afford. It has, for example,

been estimated that the provision of "sewerage" or "septic tanks" would cost 29 and 26 per cent respectively, of the average income of a hypothetical low-income household, but "pit latrines" would cost only 3 per cent.²⁹ Thus, so long as methods in keeping with the income levels of target households are used, it should be possible to provide safe water and sanitation for all households without the need for subsidies.³⁰ The underlying principle pertaining to a Basic Needs strategy in general is therefore also applicable here: if such services are not to be provided free of charge as part of a "crude" welfare programme they must be provided at a cost which the target groups can afford.

It should however be realised that the basic needs discussed above, as well (at least to some extent) as those that follow below, would have to be supplied along so-called public-utility principles : although the users of the services concerned could pay the direct cost of their supply there remains a problem with regard to their capital costs. Given the positive externalities generated by "public" and "merit" goods (the Basic Needs goods and services being examples of the latter), optimal resource allocation would justify the imputation of the capital cost of public utilities to the government, i.e. the general tax-payer. Presumably this would be effected by fiscal measures rather than by direct government production. The provision of basic needs along these lines would inevitably give rise to a redistribution of wealth from higher to lower income groups. However, still in the realm of (static) equilibrium, Hochman and Rodgers, for example, have argued that "Pareto optimality... is not only consistent with but requires redistribution".³¹

At the purely practical level it also stands to reason that the failure to make public provision for basic needs, especially of the kind discussed above, would give rise to acute social distress and deprivation among lower income groups, and, hence, on humanitarian rather than economic grounds give rise to so-called "crude" social welfare measures or policies. In other words, it may in practice simply not be possible to avoid such costs; the question is rather will public expenditure serve to prevent poverty or be the result thereof.

From a dynamic point of view the provision of basic needs, whether in the nature of either "public"- (above) or "private"-consumption (below), may be seen as agents of economic growth and development; and this matter is further discussed in Chapter 7.

6.5 PRIVATE-CONSUMPTION GOODS AND SERVICES

An essential role of policy makers would be to remove possible obstacles in the way of the production and consumption of the relevant private goods and services directed at basic needs. Not only should the production of food and housing as such be encouraged, but food and housing of the appropriate standard for meeting the basic needs of the poverty target groups should be ensured. Production can be promoted for example by the provision of credit and the removal of bottlenecks to the expansion of these sectors. Consumption of the appropriate goods and services may again be encouraged by means of increased incomes and the redirection of consumption patterns through relative price changes. Only in extreme cases would the public sector become directly involved in the production of certain goods and services or in altering the consumption patterns of poverty groups. Such contingencies are, of course, far more likely to arise in the case of the basic needs of health, education, water supply and sanitation.

6.5.1 Nutrition

Ghai and Alfthan suggest: "The first item of basic needs which in most poor countries could also be designed as the dominant item is food."³² Food is the most fundamental of all human needs. It is essential for survival and for the ability to perform competently in society. Inadequate nutrition leads to high mortality rates, morbidity and a decreased capacity to work or educate and raise children. Insufficient nutrients during pregnancy may lead to low birth-weights and high infant mortality. During lactation it may result in poor health for both mother and infant and raise infant mortality. Poorly nourished children will experience diminished physical growth, and, in extreme cases, reduced brain size.³³ Poor physique resulting from malnutrition has been linked to poor productivity and low output rates, and, hence, leads to a reduction in society's potential level of output. Accordingly, adequate nutrition for all sections of the population - of all ages, income groups and both sexes - must have a high priority in any Basic Needs strategy, both as an end in itself and as an instrument of economic development. The enhanced well-being and survival implied by improved nutrition is itself sufficient justification for a Basic Needs strategy to focus on improved nutrition for all. But, in addition, the favourable impact on work capacity and cognitive ability which it signifies, makes improved nutrition an important part of any policy of economic growth through its increase in potential output.

It is sometimes argued that improved basic needs and a subsequent decline in mortality, will be self-defeating. Declining mortality rates mean increased population growth and, therefore, a declining or static average output. Such a Malthusian argument is not necessarily valid, for evidence exists to suggest that improved basic needs satisfaction, and increased living standards, leads to a decrease in the rate of population growth. Statistical evidence suggests that a declining mortality rate is accompanied by lower population growth rates; for example, the average annual population growth between 1970 and 1980 in Industrial Market Economies was 0,8 per cent, and the accompanying infant mortality rates in 1980 were 11 and 25 per 1 000 live births, respectively. By contrast, the average rate of population growth between 1970 and 1980 in Low Income Economies was 2,1 per cent and infant mortality was 94 per 1 000 live births.^{33a} Thus improved nutrition may not be self defeating through its impact on infant mortality. In fact, improved nutrition may lead to a fall in population growth rates (through a lower birth rate associated with improved living standards) and greater increases in average productivity.^{33b}

The population groups at risk nutritionally as well as appropriate Basic Needs targets for nutrition may be identified in terms of average calories and/or proteins consumed per day and/or the incidence of malnutrition amongst vulnerable groups of people. Targets based on national or regional averages tend to neglect specific groups suffering from lower than average nutrition and cannot account for the distribution of food within households or the nutritional impact of eating patterns. Consequently, those groups who fare most poorly nutritionally, such as children, women, the urban poor, etc., should be identified and progress gauged in terms of the effect of Basic Needs policies on their nutritional position.

Nutritional deficiencies may arise from inadequate levels of income, the suboptimal use of income, or the suboptimal use of food. Obviously these three factors are themselves the result of very different causes which need to be identified and policies designed accordingly. Inadequate levels of income may result from inadequate household production, the inefficient use of resources, unequal resource endowment, or low factor incomes. The suboptimal use of income on the part of rural producers/consumers may follow from a nutritionally unbalanced pattern of food production, excessive sales (for cash) of nutritionally important foods, or a misallocation of resources between food for own consumption and cash crops. In urban areas similar suboptimality may result from

either an inadequate proportion of income being spent on food, or a disproportionately large part of income being spent on nutritionally poor food. The suboptimal use of food may result from poor methods of preparation, unequal distribution patterns within households, and customs that prevent the consumption of certain nutritionally valuable kinds of food.

The policies to be adopted will clearly depend upon the cause(s) of the nutritional problem. Thus, if the problem is caused by low income arising from inadequate household production in rural areas, then the policies indicated may well include the introduction of high-yield cash crops, the expansion of extension services, irrigation schemes, land reform, the establishment of agricultural co-operatives etc. If inadequate income, for example on the part of peasant farmers, is a consequence of high input costs and low output prices, policies should attempt to improve markets, to provide stable prices for producers while still protecting the standard of living of low-income food purchasers, and, perhaps, the subsidisation of inputs and outputs for the relevant income groups. If inadequate income is caused by low wages, then policies may include measures to raise the level of work skills, attempt to create alternative productive employment opportunities and the expansion of informal sector activities by the removal of legal and institutional obstacles to their operation. Intervention by minimum-wage legislation and trade union bargaining power could have the desired effect where market forces are patently imperfect.

If inadequate nutrition results from suboptimal use of income because of a nutritionally unbalanced pattern of food production, then policies should include extension services designed to supply information and advice on the optimal crop-mix to be produced. If the suboptimal use of income arises from an inadequate proportion of income being spent on food, or from a misallocation of resources between subsistence and cash crops, policies might attempt to weaken the factors that cause income to be diverted from food purchases to other competing uses. Such policies may include restrictions on advertising (which may "re-define" needs away from basic items); the provision of low-cost housing and education to which incomes might otherwise be diverted, with the effect of raising real income; and the encouragement of purchases of cheap yet nutritionally rich products rather than expensive foodstuffs with little nutritional value, by means of a nutritional-education programme, or changing relative prices.

When nutritional problems are caused by the suboptimal use of food, then educational programmes could aim at overcoming poor methods of preparation and cultural bars to the consumption of certain highly nutritional foodstuffs. Where the problems emerge from unequal distribution patterns within households, then educational programmes could pay particular attention to these problems and, for instance, focus in particular on the position of women and children, or be accompanied by supplementary feeding schemes.

The strategy most commonly employed to counteract malnutrition has been to encourage increased food production. But increasing the supply of food is not, by itself, sufficient, as the low incomes of the poor, who obviously comprise the largest portion of the malnourished, frequently prevent them from transforming their potential demand for food into effective purchases. Consequently, policies designed to reduce under-nourishment should attempt not only to increase the supply of nutrients, but also to raise the real purchasing power of the under-nourished. This can be achieved either by raising the incomes of the poor, or by lowering the price of essential foodstuffs. But studies in several developing countries³⁴ have suggested that even under the most favourable circumstances of high income growth (i.e. ignoring the issue of income distribution) and stable food prices, the number of under-nourished people cannot be expected to decrease significantly. With the less optimistic (but perhaps more realistic) assumptions of low income growth and rising prices, their number can indeed be expected to increase. Hence, increases in income and food supplies alone are unlikely to adequately meet the basic need for nutrition, and policies in this direction are likely to prove less than successful. Consequently, a strategy designed specifically to combat the problem of insufficient nutrition would be required to supplement a policy directed at growth. The issue of food prices in underdeveloped countries may well be a very problematic one. Policies of industrial protection raise the prices of manufactured goods relative to those of foodstuffs and thus direct resources away from agriculture into often uncompetitive secondary industry. Likewise, sales of subsidised food by developed countries may well relieve temporary emergencies but in the longer run have the effect of reducing agricultural output in the less-developed societies.

In discussing measures against malnutrition, Berg³⁵ suggests that the most suitable strategy is the "deliberate use of public policy to influence the character of production, processing, and distribution of food within a country to increase the amount consumed by the poor."³⁶

This may be achieved "by changing the strategy of agricultural production to put more emphasis on the nutritional needs of the poor"³⁷ and "by adjusting consumer prices in ways to assure that the poor have access to what they need."³⁸ Such a policy should bear the following considerations in mind: while low income groups spend most of their income on food, many of them are under-nourished; the types of food consumed by the poor are in many ways different to those by the rich; while most of the calories consumed by the poor are obtained from low-protein starches, they nevertheless usually maintain an adequate protein/calorie balance in their diet; imbalances frequently exist in the distribution of food within families, with women and children in particular suffering; while many of the under-nourished are peasants and small farmers, many are also urban dwellers and landless people who benefit only indirectly from programmes designed to increase food production; and nutritional deficiencies may differ substantially according to geographical location because of differences in tastes and consumption patterns, differences in price and employment levels, and because of seasonal differences (particularly in cases where major crops are produced only at certain times of the year).

Accordingly, from the point of view of a Basic Needs strategy there is little merit in a policy that concentrates on increasing the production of relatively expensive foodstuffs consumed primarily by higher-income groups. By contrast, programmes aimed chiefly at relatively cheap foodstuffs primarily consumed by the poor should therefore also benefit those whom they were intended to reach. Hence, most important in a policy designed to improve nutrition amongst the poor is an agricultural strategy devised to increase the production of those low-cost foodstuffs which are actually consumed by the target group.

Programmes designed to increase agricultural output would have the positive effect of raising the incomes of peasants and small farmers suffering from malnutrition. However, if cash crops replace subsistence farming, the real food consumption levels of the affected households may decrease if an insufficient percentage of the cash income received is allocated to food purchases, or if such purchases can only be made at high retail prices. This may be particularly detrimental to women and children if highly unequal distribution patterns exist within households. Furthermore, programmes designed to increase output by means of relatively higher prices for farming products may raise agricultural incomes and output at the expense of the non-agricultural sectors, which would have to pay more for their food purchases. In the absence of

simultaneous wage increases or food-price subsidies, the nutrition of the non-farming sectors will deteriorate. This then raises inter-sectoral distribution problems with different sectors of the economy unless the economy as a whole is experiencing constant growth.

In the case of a move from subsistence to commercial agriculture, widespread programmes of nutritional education, or of partial subsistence farming alongside cash crops, may be required in order to avoid possibly harmful nutritional consequences. While in the long run a Basic Needs strategy requires nutrition-oriented programmes of food production alongside measures to increase the incomes of the poor, a short- and medium-term solution would be the provision of relatively cheaper forms of nutrition to under-nourished people. This may be achieved by price discrimination in favour of the poor and by altering consumption patterns in favour of cheaper, more highly-nutritious, goods. Altered consumption patterns have been achieved by food ration or subsidy programmes, but such policies tend to have high maintenance costs as well as involving political difficulties in subsequently reducing them, apart from potentially impinging on output levels. Not surprisingly, ration and subsidy programmes have sometimes been seen as part of the development problem rather than of the solution, but in principle they remain one of the ways of meeting the nutritional needs of specific poverty groups.

In Sri Lanka, Pakistan and parts of India, such programmes have been shown to effectively reach the poor and substantially reduce malnutrition and mortality rates. In Sri Lanka, a programme whereby a subsidised rice ration was provided for everybody has been shown to have successfully reduced malnutrition. In 1970, the rice ration provided 20 per cent of the total calories consumed and represented 14 per cent of the income of the lowest income groups. The result was that only 5 per cent of the adult population consumed less than 1 900 calories per day and in 1975 life expectancy at birth was 66 years. This was significantly higher than in comparatively richer countries such as Brazil and Korea and was the highest figure for all countries at a comparative income level for which data was available.³⁹ The level of infant mortality was also correspondingly low.

However, nutrition was not the only basic need adequately provided in Sri Lanka : by international standards health services and water supplies were also very good for a country at its level of development, and adult literacy was 78 per cent. While such factors must clearly have influenced the high life expectancy and low infant mortality rates

experienced, the crucial importance of nutrition was shown in 1974, when the rice ration was drastically reduced, because of soaring costs, and food prices rose sharply in general. Although literacy, health services and water supply remained unchanged, the mortality rate rose sharply and could, therefore, be directly attributed to a decline in nutrition.

Food subsidies may also be used as a method of redistributing income within a country where fiscal methods of income redistribution are politically not feasible. Such programmes for reducing malnutrition are admittedly costly - for instance, Sri Lanka spent 16 per cent of its national budget in 1975 on food subsidies.

As malnutrition is a problem virtually confined to the poor, programmes should therefore be designed to reach only the poorest sections of the population. But, while the majority of under-nourished people are poor, poverty need not necessarily lead to under-nourishment. For, as Berg stresses: "The whole problem of the malnourished can be viewed as part of a complex tangle of poverty; clearly, the fundamental causes of poverty loom large in any analysis of the problem. But malnutrition is not just a poverty problem. While virtually all people suffering from calorie deficiencies are poor, not all poor people suffer from calorie or other nutritional deficiencies. Some countries with high per capita incomes have considerable malnutrition, and certain low-income countries have little. In short, countries committed to eliminating most overt malnutrition appear capable of doing so."⁴⁰ The composition of the under-nourished target groups confronting any nutrition-oriented strategy will depend upon the circumstances within a country, upon the particular nutritional problems and their causes, and the incidence of malnutrition between regions, rural and urban areas, and within families.

Target groups can be identified in several ways: by region, by season, by sex, age, income and the composition of their diet. While income represents perhaps the most important cause of inadequate nutrition, the administration of a nutritional programme based on income would be difficult, expensive and open to abuse. Consequently, a suggested alternative is the subsidisation of foodstuffs which are high in calorie value relative to their cost, (such as unprocessed grains, which are consumed chiefly by lower-income groups, who would then be the chief beneficiaries of this scheme).

In less-developed areas malnutrition amongst young children commands special attention, not only because of its widespread occurrence, but also

its detrimental effects later in life. Other areas of concern are represented by the aged and workers, who would be more productive if better nourished. In many such cases the problem is one of inefficient nutritional distribution within families and not only a deficiency for the specific target groups. (For instance, a principal cause of malnutrition in young children is inadequate nutrition amongst their mothers). The solution to malnutrition should therefore take cognisance of all persons comprising a poor household, and not just a target group per se (e.g. children).

The principal difficulty of a food subsidy or ration programme as discussed above is the problem of cost. Such a programme is difficult to administer and raises formidable institutional problems and is open to bureaucratic inefficiency and corruption. But if such administrative costs are lower than those of alternative nutrition-oriented strategies, then such a programme is better than none at all. A further problem is that the groups intended to benefit from a nutrition programme may decrease their cash (as against real) expenditure on food in response to such a programme. But, seeing that low-income groups apply the greater part of their total expenditure to Basic Needs goods and services, such a reaction is likely to change the consumption and expenditure patterns leading to the increased satisfaction of other basic needs. Another problem of such a programme is that attempts by the authorities to minimise its costs of administration may lead to lower prices paid to producers of staple products - with a resultant fall in production. Any such programme would therefore have to take into account the need to encourage production as well as minimising its cost of implementation.

It follows, that both increased incomes for the poor and increased food production are essential in any nutrition-oriented strategy. A Basic Needs strategy approaches the problem of nutritional deficiencies by attacking problems affecting both supply and demand - that is, inadequate output of suitable foodstuffs, inefficient utilisation of resources and insufficient income for meeting nutritional requirements. On the one hand, a Basic Needs strategy for nutrition implies a reorientation of agricultural strategy away from export cash-crops towards the production of food for local consumption. On the other hand, cash incomes must also be increased and the optimal usage of income on food consumption (i.e. utility maximisation) obtained. Increased incomes for the poor are vital, or else they will not be able to afford to buy more food even if it is available. Higher incomes may also lead to increased government tax revenue with which to finance nutritional and other Basic Needs

programmes. Increased food production is also necessary to meet the expected increase in demand resulting from higher incomes without raising food prices which would in turn inhibit consumption levels. But such increases in food production should be nutrition-oriented in order to satisfy the requirements of an effective Basic Needs strategy. Such a policy could also be supported by subsidies on basic foods designed to reach specific poverty target groups, to ensure that demand patterns are altered in favour of highly nutritional foodstuffs.

The use of food subsidies to encourage the production and consumption of basic foodstuffs would seem to be in conflict with the alleged advantage of private-consumption needs - namely, that they require less government expenditure than public-consumption needs. But subsidies may only be seen as an ancillary policy in this respect. Deficiencies in nutrition can result from inadequate incomes, from the suboptimal use of incomes and from the suboptimal use of food. These deficiencies can be overcome by means of programmes designed to increase employment and productivity, improved distribution systems, educational programmes in food production and consumption, the encouragement of increased production of low-cost basic foodstuffs etc. Only if certain groups fail to benefit from such policies, would subsidies be necessary. Adequate nutrition is desired in its own right as it is vital for a productive human existence. The satisfaction of this need is not only an end in itself, but also a means of raising potential output levels and is therefore an instrument of economic growth. Available evidence seems to indicate in general that the achievement of Basic Needs targets in food consumption should be permitted by the resources available to most societies.

6.5.2 Shelter

The need for adequate shelter is the second of the two private-consumption needs discussed in this chapter. Along with nutrition, shelter or housing may be considered the most fundamental of basic needs, without which human survival cannot be ensured. While the provision of housing is sometimes the responsibility of the public authorities, it is seldom provided free of charge. When private ownership of housing prevails the decision to purchase or build a house is probably the most important long-term investment decision an individual is likely to make. Targets and policies for overcoming

housing deficiencies must of necessity reflect differences in rural and urban housing problems. In rural areas, the main housing problem tends to be that of the low quality of housing, while in urban areas such problems tend to be concerned with inadequate quantity, (although urban squatting, which is the result of a shortage of housing supply, may also tend to be more easily seen in terms of the quality of housing.) In rural areas, the quality of housing and basic facilities may be measured in terms of materials used in construction, types of roofing and flooring, number of rooms, and their adequacy in providing shelter from the elements. Targets in urban areas may be more easily measured in terms of numbers of households waiting for homes, or numbers of households or persons per dwelling unit, thereby reflecting shortages in the housing market.

While large sections of the rural population may live under inadequate housing conditions, the core of the housing problem is often likely to be represented by the urban poor. This is because the provision of shelter in rural areas is much more likely to be satisfied by the rural poor themselves than in the urban areas. This is the result of the difference between the "need" for housing and the "demand" for housing. The need for housing may, for example, be measured by the numbers of homeless people, the degree of overcrowding, the extent of inadequate housing conditions, the rate of necessary replacement due to depreciation, and the rate of population increase. Demand on the other hand depends upon the number of people actually able to pay for the housing they need and is, therefore, dependent upon income and prices. Thus, if the cost of housing of an "acceptable" standard is such that its rental value is so high as to require an inordinately large share of the income of many of those in need of housing, the demand for such housing will be less than the need. For reasons that will be analysed in greater detail in the following pages, the need for housing in rural areas is more likely to promote equality of demand and supply than in urban areas, and so the provision of housing is likely to be a more serious problem in urban areas. This state of affairs tends to be reinforced by rural/urban migration.

The effective demand for housing is dependent upon household income and the price of housing and therefore may be less than the need for housing. Closing the gap between demand and need therefore involves

either higher incomes, lower prices, or both. Where the difference between the need for housing and demand is great, increased incomes by themselves are unlikely to be sufficient, as this might presuppose such rapid growth and large redistribution of wealth that might be difficult to achieve if adequate housing is to be afforded by all. If so, policies designed to lower the price of housing would be needed alongside policies for raising incomes.

The housing market is by nature heterogeneous. The demand for housing is a derived demand - housing is not so much desired for itself as for the services it generates. These services include shelter, comfort, privacy, social status and an opportunity for speculative investment. Hence, they include both necessities (shelter) and luxuries (social status and speculative investment opportunity). The value attached to such services differ for different households, depending upon whether one rents or owns a house. *Ceteris paribus*, more value is attached to ownership than renting because more services are then received. A certain minimum level of shelter is required for survival, but once this need has been satisfied, the demand for housing is no longer inflexible and should respond to economic incentives. In other words, once the most basic need for housing has been met, the demand for the remaining various services derived from housing is likely to be responsive to changing economic conditions, i.e. the demand for housing should be income-elastic.

The supply of housing comprises both existing housing and newly built houses for sale or for hire. In the private sector of the economy, the supply of housing depends upon the price of houses (especially expected prices in the case of property developers), the cost of housing (an important influence on the decision to build), the availability of credit, and seasonal factors. In the public sector, the supply of housing is essentially a political issue determined by the estimated social need or value attached to housing by the authorities. Housing, even more so than food, has the characteristic of a "merit" need, that is the priority attached to it and the extent to which this need fails to be met by the private sector, will determine the involvement of the public sector in the supply of housing, subject to the constraint of available finance. R.A. Musgrave defines a merit need as follows: "(Merit) wants are met by services subject to the exclusion principle and are satisfied by the market within the limits of effective demand. They become public

wants if considered so meritorious that their satisfaction is provided through the public budget, over and above what is provided for through the market and paid for by private buyers.....Public services aimed at the satisfaction of merit wants include such items as publicly furnished school luncheons, subsidized low cost housing, and free education... The satisfaction of merit wants, by its very nature, involves interference with consumer preferences."⁴¹ Such interference with preferences would have to be offset by the positive external effects generated by merit goods.

By its nature as a merit good, the housing market operates along other than strictly economic lines and it is therefore difficult to objectively determine the extent of the resources which should be devoted to housing. One simple rule is "the ability to pay" principle and, hence, except for the most rudimentary shelter, the prerequisite for adequate housing is sufficient income and employment levels. Thus, housing strategies perforce operate within the constraints of existing economic conditions.

Under what circumstances, then, is intervention in the housing market justified? Writing on low-income housing in South Africa, Hofmeyer⁴² suggests: "Intervention by the housing authorities is justified if the standards at which people house themselves are considered too low by the wider community." It may be assumed that all households should provide themselves with at least the most rudimentary shelter. But if this shelter is below a standard considered necessary by "the wider community", intervention would be called for. If the minimum standard perceived as necessary is equal to that also perceived by the local community, and the amount that they are able and willing to spend on housing is adequate to achieve this minimum standard, then all that stands in the way of its achievement are market imperfections and a lack of community organisation. In this case, all that is necessary is for the authorities to overcome such imperfections and set up the necessary organisational structure - by the provision, for instance, of security of tenure, long-term credit at suitable interest rates, community organisations etc. But if the minimum standard perceived as necessary by "the wider community" exceeds that which local communities themselves are able to pay for, then direct intervention in the housing market by the housing authorities may well result. (If so, housing would then at least

to some extent move into the category of publicly rather than privately provided basic needs, with a corresponding impact on the pattern of resource use.)

More generally, public intervention in the housing market may be justified in two ways. Firstly, imperfections in the housing market mean that the market allocation is suboptimal. Given the importance of housing both in terms of the level of capital investment within the economy and as a "merit" need, such suboptimal allocation is likely to precipitate policy action. Secondly, the market-determined provision may fall below the perceived necessary minimum standards and then an alternative mode of provision is required. In the first case, intervention attempts to overcome market imperfections, in the second it may well aim at raising and/or redistributing incomes. But such arguments for intervention involve two important value judgements: firstly, the perception that existing market allocation is suboptimal, and, secondly, the specification of what is considered the minimum acceptable standard.

It is important to note that such value judgements might not be shared by the local community and the "wider community", where the latter in effect often represents the viewpoint of the public authorities. For example, squatters may prefer to live in houses of a lower standard than that approved and/or provided by the authorities, either because such housing is cheaper or because the services provided suit their particular needs. Even if public housing can be provided at the same price as squatter shacks the latter may be preferred: while physically inferior to public housing, squatter shacks may for example provide greater security of tenure, social returns (e.g. enable families to live together) or be situated at a preferred location. Hence, what the public authorities may see as a suboptimal market allocation, or housing below a minimum acceptable standard, may differ sharply from the perception of the local community itself. For a housing policy to be successful the target group must be both willing and able to accept the standards laid down. This requires that the cost of housing and the willingness of the residents to pay for it is equal.

Because housing is a "merit" need, any definition of what comprises "basic" housing or shelter is confronted with value judgements, apart from tangible economic principles. Such a definition should be country or region specific and take into account climatic, physical, economic, social and cultural factors, in addition to the need to provide adequate protection from the elements and a healthy environment. Furthermore, a locational component should be included so that housing is provided in the optimal place. Housing provides a variety of services and so can only be defined within a specific context and in its entirety, rather than as supplying a particular service, such as shelter. But when individual services such as the quality of shelter are weighed against other services such as location, further problems emerge as households may attach different values to them.

Having arrived at a consistent definition of shelter within a specific socio-economic context and circumstances, the problem then arises towards which groups should investment policies be directed? Usually the provision of housing to the urban poor is considered to warrant more urgent attention than that of the rural poor, despite the fact that the quality of housing of the urban poor is often very much the same as that in rural areas. Several reasons may however be advanced for giving greater priority to the problem of urban housing.

Firstly, as population grows, increasing numbers of people tend to migrate from rural to urban areas, which is especially the case in less-developed countries today. This inflow, coupled with natural population increase in urban areas, means that the absolute need for housing is growing faster in urban than rural areas. The World Bank⁴³ estimates that by the year 2000, 74,3 million households designated as poor, will be living in urban areas, as against 56,6 million households in rural areas - an increase from the corresponding 1975 figures of 40,8 million for urban and a decrease of 26,8 million for rural areas. Consequently, in terms of human numbers alone, the magnitude of the housing problem in urban areas is likely to exceed that in rural areas.

Secondly, while the physical quality of shelter may be similar for both the urban and rural poor, the environmental conditions arising from dense concentrations of people may mean that living conditions are more invidious in urban than rural areas - and, with a growing concentration

of urban population, may be aggravated further. For example, while the provision of adequate sanitation and waste-disposal facilities may not be a problem in rural areas, in high-density urban areas they are an essential prerequisite for a healthy environment.

Thirdly, while the provision of housing and associated facilities of at least a rudimentary nature may be left to individual initiative in rural areas, in urban areas the provision of such facilities requires large-scale public participation beyond individual capacity. Thus in rural areas the solution to housing problems lies much more in individual hands than is possible in urban areas. In urban areas an effective demand for adequate housing will not necessarily generate an adequate supply response if cognisance is taken of the appropriate environmental circumstances, including communal services of an auxiliary nature.

Finally, the daily contact between rich and poor is more marked in urban than rural areas and so the provision of adequate housing for the poor is a more politically sensitive issue in compact urban areas than in more or less scattered rural communities.

Accepting the need for the provision of a socially determined "adequate" level of shelter, the problem arises as to whether it is possible to provide such shelter within the income constraints of the poorest members of the community. Regression analysis based on household surveys of the lowest third of income groups in twelve developing countries⁴⁴ suggests that the lowest income groups typically devote between 15 and 20 per cent of their income to housing.⁴⁵ The question is therefore whether a "socially acceptable" level of "adequate" or "basic" housing can be provided on the basis of such a level of expenditure, and the answer depends primarily on the definition of the word "adequate". Available evidence suggests that unless unrealistically high targets are set, housing within the incomes of all but the very poorest is indeed feasible.⁴⁶

But while it may be technically feasible to provide "adequate" shelter within the income constraints of low-income groups, this solution is frequently not "socially acceptable" - or, more important, it may not be acceptable to the housing authorities who set comparatively high standards based upon their own socio-economic perceptions, rather than

those of the low-income groups concerned. The result may be that untenably high standards are set, and the cost of shelter is artificially placed beyond the income levels of the target groups. At the same time the attitudes of the intended beneficiaries of alternative (i.e. cheaper) housing strategies should also be considered : have they already adopted the standards of the housing authorities as a minimum requirement, or are they willing to accept housing of a lower yet adequate standard in terms of their own basic needs as well as existing resource constraints?⁴⁷

While "adequate" shelter can evidently be provided within the income constraints of low-income groups, for the very poor even the most basic housing may be beyond their means. Dealing with the housing problems of the lowest income group depends on the manner in which they are accommodated within existing communities. Frequently the poorest people are accommodated in rented rooms which, when accommodation is scarce, are let at a higher price than warranted by their cost. In such cases, a programme designed to increase housing construction and home ownership cannot benefit them directly, as they are unable to afford such housing themselves, because of their low or intermittent incomes. But such programmes may benefit the poorest households indirectly, if they increase the supply of rented accommodation. New houses should be designed so as to include additional rooms for letting apart from meeting the basic needs of the house owner or occupier. In this way, not only would the supply of Basic Needs housing be increased to those who can afford it, but so will the supply of rooms for rental to the lowest income groups. The income the house owner or occupier obtains from the rented room can obviously be used towards the cost of renting or purchasing the house.

If, as available evidence suggests, income is not a constraining factor in the provision of adequate shelter, except for the very poorest, the question of why so many of the world's population lives in obviously inadequate dwellings arises. The answer seems to lie mostly in the existence of bottlenecks on the supply side. Existing housing demand may be at least potentially effective, but frequently the supply of housing fails to rise to the level of demand. The problems inherent in the supply of housing can generally be divided into three categories - land, public services and finance. A shortage of land for housing is almost exclusively an urban problem. In rural areas a shortage of agricultural

land may exist, but there is seldom insufficient land for housing. Even in urban areas the problem is rarely one of insufficient land as such, but rather of insufficient land being available to low-income groups; in other words it is a problem of absolute poverty rather than an absolute scarcity of land.

Land typically comprises only a small fraction of the total cost of shelter.⁴⁸ Obstacles to land occupancy and distribution may take many forms. These include legal or statutory barriers, such as confused, complicated, or antiquated title-deeds and regulations regarding size and occupancy, which effectively exclude low-income buyers from the land market. But without security of tenure the urban poor will be unable or reluctant to invest in improving the quality of their housing. Hence, the removal of statutory and legal impediments to land distribution may well be a priority objective for increasing the supply of shelter available to the poor.

Another obstacle to the provision of low-income shelter is a lack of available public services. The cost of such services generally represents a large proportion of the total cost of shelter and in projects supported by the World Bank⁴⁹ has varied from 20 to 30 per cent, and even been as high as 50 per cent. In most instances, low-income groups are able to provide their own housing of adequate standards, but are unable to provide the services to go with it.⁵⁰

Because of the importance of public services such as sanitation and water supply - both for themselves and for health reasons, and because of their high capital costs (on account of which private initiative cannot be relied upon for their provision) - the provision of these services is generally the monopoly of local or central authorities. But, the provision of such services has frequently fallen short of the demand, both because of inadequate resources and because of the failure to come to terms with the problem of urbanisation. Instead of being recognised as a symptom of the permanence of growing urbanisation, the presence of low-income housing such as squatter shacks has often been met by a policy of razing them to the ground. Even when such settlements have been accepted as permanent, adequate services have often not been provided because of inadequate finance, unrealistically high standards of quality, and inadequate service charges.

A third factor inhibiting the supply of low-income housing is a lack of finance. This may be due to a shortage of funds per se, or of funds specifically needed for low-income housing. While finance for housing as a whole may be available, it is frequently only for short-term loans and to higher-income groups, and the bulk of low-income housing is financed from personal savings without the use of institutional intermediation.⁵¹ Thus the pace of construction is typically determined by the slow rate of accumulation of funds and materials, and there is a strong tendency to put any unexpected receipts and accruals into housing. It would therefore seem, that while low-income groups have a strong desire to improve their housing, the supply of housing to these groups is constrained by the lack of available finance. Even when financial institutions possess sufficient funds for low-income housing, factors which militate against the provision of loans include the lack of security of tenure, incomplete ownership of property, and institutional restrictions on the terms on which loans can be made. Financial institutions are naturally reluctant to give loans to individuals whose legal ownership of property is unclear and who are therefore unable to provide adequate security for the loan. At the same time, institutional restrictions on the type, size and terms under which loans can be made, contribute to restricting the access of low-income households to formal credit markets.

Given the rapid growth in the demand for shelter (particularly in urban areas) and the large shortfall in supply that has accompanied it, it is evident that an important part of any Basic Needs strategy should be directed at the construction of new shelter, as the existing supply, of whatever standard, is insufficient. The establishment of new settlements means that they can be designed for optimal cost-efficiency in the supply of services, whereas existing settlements may be inefficiently designed. But the development of new settlements is hampered by important institutional constraints on land procurement and the setting of standards by the responsible authorities. The amount of land available for new settlements may be small and the procedures for obtaining additional land complicated and lengthy. In such a case there are few alternatives to upgrading existing shelter. Furthermore, in the creation of new settlements the relevant authorities frequently demand higher standards of housing than in existing settlements. This policy may result in unrealistically high standards being set, with the result that

new dwellings may be beyond the reach of the low-income groups which it is designed to assist. Consequently, they may resort to squatting and illegal settlements.

Further factors hindering the development of new settlements include the fact that they tend to be more management-intensive than schemes for upgrading existing housing, (and, hence, make greater use of scarce administrative resources), and the burden of the design, implementation and cost of new projects must be borne by the public at large, whereas in betterment schemes the burden can be borne at least in part by the community concerned. In addition, the development of new settlements is hampered by the inability of the public sector to develop schemes on a small scale because of the frequent indivisibility of administrative procedures. In the upgrading of existing settlements, the authorities are more likely to accept somewhat lower (and more realistic) standards of housing, on the reasoning that any improvement is better than none at all. Furthermore, the problem of additional land procurement is removed. Consequently the upgrading of existing housing may be the easiest way of reaching low-income groups.

Clearly, the public sector has an important role in both the development of new housing, and the upgrading of existing settlements. But such development may produce only limited results, unless the institutional bottlenecks accompanying public sector intervention are overcome. The private sector also has an important role to play - particularly in the provision of housing for the lowest-income groups, which frequently fail to benefit from public sector projects. Examples of private sector provision would be subletting of rooms, as discussed above, and also houses erected by employers for their employees. The role of the public and private sectors should therefore be complementary, and care should be taken to avoid allowing the intervention of the public sector to discourage private investment. The powers of the public sector to remove institutional bottlenecks and provide public services should not result in the provision of low-income housing being left to the public sector alone. In few areas can the public sector hope to satisfy the aggregate need for housing, and so appropriate incentives should encourage private sector investment - particularly in the types of housing the lowest-income groups can afford.

Several strategies for overcoming the shortage of low-income housing can be suggested. Firstly, projects may be specifically designed for the public provision of communal services such as water, sanitation and transport, for all income groups, while leaving the actual provision of shelter itself to individuals. Such a "self-help" approach is based upon the belief that individual action can usually be relied upon for the provision of housing itself, but not for the provision of related services. Hence, low-income groups should be assisted by the provision of public services, and, where necessary, in obtaining the finance and materials necessary for the construction of adequate shelter, and the actual building of dwelling units should be left to individual action. But such an approach deals with public services on a sectoral basis and fails to recognise that many services complement each other and cannot fully succeed unless provided simultaneously. (For instance, it is little use ensuring adequate water supply unless adequate waste-disposal and drainage are provided as well.) Accordingly, a large amount of planning and co-ordination is required for such an approach, but the necessary administrative machinery is frequently lacking at local levels where such tasks are allocated to different departments and levels of government.

To overcome these problems, the World Bank⁵² suggests: "an integrated approach to urban development to complement and support the sector-by-sector approach." This approach requires that projects be directed towards specific communities, "and the aim is to ensure the delivery of a package of complementary services in accordance with the priority of these communities."⁵³ This requires local co-ordination of service programmes and the removal of bottlenecks to the supply of shelter, such as unsuitable land tenure systems.

Essential to such a programme is that costs should be recoverable. This is important not only so that programmes may be replicable without being hampered by insufficient funds, but so that housing should be appropriate for given circumstances. Subsidised housing may lead to housing being built of a standard in excess of the basic needs of their intended occupants, with the result that such programmes are costly and unlikely to meet the supply constraints because of the very high levels of investment required on a continuous basis. It may also lead to such housing being priced above the level which its intended beneficiaries can afford.⁵⁴

To ensure an appropriate standard of housing and the recovery of costs, community participation is helpful. Such participation can take the form of the appropriate design of housing to meet basic needs, the selection of sites, and the design and implementation of projects, so that the resources of local communities can be directed at meeting their own basic needs. At the same time provision must be made for orderly urban growth so that the future costs of urbanisation can be minimised.

To estimate the resources required for meeting the basic need for housing, goals must be set with respect to target groups, the appropriate standard of housing, and the time period in which these goals should be met. Such goals will differ from country to country and region to region, depending, inter alia, upon the available level of resources. But the ultimate target remains the provision of a basic unit of shelter to all households. Investment in housing is only one of the investment requirements to which a community's resources must be devoted, and, hence, any programme which requires an inordinately large share of investible funds for housing is unlikely to be successful.

A basic dwelling unit can be defined as "that which can be afforded by a family living exactly at the threshold of poverty,"⁵⁵ where the poverty threshold is defined as "the level of income at which a family would be able to purchase a minimal package of food."⁵⁶ Since experience of the World Bank "indicates that basic needs for shelter can be met at levels of income below the poverty threshold"⁵⁷, there should not exist undue pessimism about the capacity to satisfy the basic housing needs of target groups. The optimal level of investment that should be devoted to housing should thus be at least equal to the minimum level of expenditure necessary to satisfy this effective demand.

Where the aggregate level of investment in housing is sufficient to potentially satisfy the basic need for housing, yet an inadequate share of this investment is devoted to low-income housing, a revised allocation of resources invested in housing is required. But such a revision is not likely to be achieved without difficulty, and requires the removal of institutional bottlenecks which prevent available resources from financing the required number of low-cost housing units. Where the aggregate level of investment in housing is insufficient even to meet basic needs, the total share of GDP applied to housing would obviously

have to be raised. But this too can only be achieved with great difficulty. Unless a greater share of investable funds can be channeled into housing, an increase in the level of national income is required to meet such housing needs adequately.⁵⁸ This yet again emphasises the importance of a high rate of economic growth in any Basic Needs strategy.

In sum, the high cost of conventional subsidised housing programmes has made investment in housing appear a "bottomless pit". If emphasis were to shift from the construction of subsidised housing per se to the upgrading of existing shelter, site-and-service schemes, not ignoring the recovery of costs, a dwelling unit which would satisfy basic needs could be provided for all members of the population. The urgency of such a shift is stressed by the rapid increase in the demand for housing resulting from rapid population growth and rural-urban migration, and a consequent growth in the need for housing far beyond the fiscal capacity of most governments to provide subsidised housing. Not only have the authorities been unable to provide sufficient subsidised housing, but the allocation of resources in this direction has meant that insufficient resources have been available for even low-cost schemes such as site-and-service projects. With the authorities also facing compelling demands for resources from Basic Needs sectors other than housing, attention has of necessity recently turned to cost-recovery and duplication of projects.⁵⁹

While any strategy to meet the basic need for housing must necessarily be place-specific, some general observations can clearly be made. Firstly, the provision of low-income housing is primarily an urban problem, and the bulk of new dwelling units will thus have to be built in urban areas. This does not mean that shelter in rural areas is always adequate, but merely that the problem is less urgent because private initiative can be relied upon to provide at least rudimentary shelter, and the dangers to a healthy environment are less acute. Furthermore, the relative number of urban poor households is estimated to be increasing globally, but the relative number of rural poor households is shrinking.

In rural areas the housing problem is largely a matter of upgrading existing shelter, but in urban areas a large number of new housing units will have to be constructed. The World Bank⁶⁰ estimated the total cost of overcoming the urban housing shortage in a period of twenty years to

be between 120 and 130 billion US (1975) dollars, or 6 to 7 billion dollars per annum on average. "Considered in relation to national resources these amounts do not seem unreasonable, and although a few years would be required in some countries to develop the capacity to implement them, it should be possible to carry out programs of such orders of magnitude."⁶¹ The problem of financing the supply of housing to satisfy basic needs is essentially not a matter of inadequate resources as such, but rather of allocating available resources in an optimal way, especially by setting appropriate standards of housing.

But even in realistic housing programmes designed for full cost-recovery, the period of repayment must of necessity often be lengthy and so a problem in financing such projects may persist. The World Bank⁶² argues that such programmes should not be beyond the resources of most governments and, except in a few developing countries where government revenue is comparatively low in relation to national income, would not amount to more than 5 or 10 per cent of public revenue.

In most countries, the greatest proportion of saving and investment in housing is undertaken by the private sector, but the provision of associate services has generally been the preserve of the public sector. Low-income housing in particular has frequently suffered from inadequate provision of such services by the public sector, whose role in the supply and finance of such services as sanitation, electricity, water supply and transport should not be underestimated. The World Bank has estimated that "typically the amount [required for such services] will be about a third of the total cost of the shelter provided."⁶³ In addition, the public sector must supply social infrastructure essential for an urban community, like clinics, schools, hospitals etc. "On the basis of experience gained in World Bank-supported projects, this is likely to be an additional investment equal to 10 or 20 per cent of the resources estimated.... Combining what the government is likely to be called upon to finance in the way of public services - probably about 30 per cent of total expenditures for shelter - and social services suggests that the call upon the financial resources of the public sector is likely to be less than 50 per cent of the total investment of any poverty-oriented shelter program."⁶⁴

In view of a potentially effective demand for basic housing on the part of all but the very lowest income groups, and the availability of evidently sufficient resources, it seems unnecessary that the supply of housing fails to match demand. Consequently, a reorientation of housing strategies is required, with emphasis being on the creation of sufficient housing units to satisfy the basic needs of all. For this to be achieved housing standards of an appropriate nature must be set, and resources reoriented in this direction. While shelter may in principle be seen as a private-consumption good, the role of the public sector in any policy designed to provide basic housing to all households is crucial. This role involves not only the provision of the services essential to the supply of housing, but the removal of the constraints on the supply of housing for which the public sector is itself responsible.

It would seem that provided a suitable strategy for the satisfaction of the basic need for housing is adopted, such a solution should lie within the resource capacity of most communities. But, on a more cautious note, it should be recognised that such a strategy will not always be readily acceptable to all countries and even when they are accepted the ability to carry it out will not always exist.

In principle, both food and housing are "private-goods", in the sense that they are purchased and consumed by individual households, and may be supplied by profit-seeking producers within the scope of the market system. However, purely private provision of food and housing has evidently failed to satisfy these two basic needs at an adequate level, at least in a large part of the Third World. As there exists wide agreement on this point, it would seem proper and realistic to rather classify food and housing as "merit goods", on the definition set out on page(Musgrave)[as was the case with "public goods" (above)]. In other words, although food and housing may be viewed as private-consumption goods to an extent, state participation in their supply would not appear abnormal or alien, even in predominantly market-oriented society where these basic needs have not been adequately met.

Such participation is likely to be less direct in the case of food than housing, where the government is more likely to have recourse to the nation's available stock of production factors in the attempt to raise

the supply of housing to an "acceptable" minimum level. In contrast food supply and consumption may be encouraged by the removal of market imperfections, selective subsidy schemes and, in special cases, by price controls, apart from such more general policies of dissemination of information and measures to stimulate economic growth.

Similar policies may also be pursued in the case of housing, but in view of the magnitude and long-term nature of the funds required, together with problems peculiar to the availability of land, auxiliary services and complicating locational factors, a Basic Needs strategy aimed at the provision of low-cost housing is not only likely to result in greater market intervention, but may also entail direct state participation in the production process, that is, give rise to a transfer of resources from the private to the public sector. Naturally such a redistribution of resources would be facilitated by a process of sustained economic growth. The broad relationship between basic needs and economic growth forms the subject matter of the following chapter.

6.6 NOTES

1. See Ghai, D., Godfrey, M., and Lisk, F., Planning for Basic Needs in Kenya, (ILO : Geneva, 1979); ILO, Employment and Basic Needs in Portugal, (ILO : Geneva, 1979); ILO, Basic Needs In An Economy Under Pressure, Findings and Recommendations of an ILO/JASPA Basic Needs Mission to Zambia, (ILO : Addis Ababa, 1981); Sandbrook, R., op.cit.; and Van Rijckeghem, W., 'Employment and Basic Needs : Lessons of a Mission to Portugal', International Labour Review, vol. 117, no. 6, Nov - Dec 1978, pp. 697 - 707.
2. The case of Sri Lanka - see Richards, P. and Gooneratne, W., Basic Needs, Poverty and Government Policies in Sri Lanka, (ILO : Geneva, 1980) - is often used to assess the successes and failures of a Basic Needs strategy. But Sri Lanka's strong welfarist approach long precedes the formulation of the Basic Needs Approach and is essentially a widely-based welfarist policy that touches on aspects of basic needs, without being a Basic Needs policy as such. Consequently, while important lessons can be learnt from this experience, Sri Lanka does not provide a good example for studying the general impact of Basic Needs policies.
3. Ghai, D., Godfrey, M., and Lisk, F., op.cit., p.44, define the "underlying process" as "the process which generates [these] results".
4. ILO, 'Basic Needs in an economy under pressure,' op. cit., p. 47, (emphasis in the original).
5. See Singer, H., Technologies for Basic Needs, (ILO : Geneva, 1977).
6. See Ghai, D., Godfrey, M., and Lisk, F., op. cit., p. 7.
7. Ibid., p. 74.
8. But there may be a contradiction here, and minimum-wages may result in a capital-intensive technology being adopted - and so worsen poverty.
9. Ibid., p. 81.

10. See Todaro, M. P., 'A Model of Labour Migration and Urban Unemployment in Less Developed Countries,' American Economic Review, vol. 59, 1969, pp. 138 - 148.
11. World Bank, Shelter, Poverty and Basic Needs Series, (World Bank: Washington, D. C., 1980), p. 22.
12. Ibid., p. 22. Even under the most ideal conditions, unemployment of at least a structural nature is certain to exist. It is possible that employment opportunities are available, but those seeking work may be inappropriately or inadequately qualified, or even located in the wrong place. Conversely, work seekers trained in a specific field may exist, but there may be no suitable employment opportunities. So long as people remain unemployed (or underemployed) they will be deprived of the income necessary for the satisfaction of their basic needs. Hence, employment creation and the removal of structural unemployment remain essential elements of a Basic Needs strategy.
13. Ghai, D., Godfrey, M., and Lisk, F., op. cit., p. 44.
14. Ibid., p. 44.
15. See Chapter 3.1 - 3.4 above.
16. Ghai, D., Godfrey, M., and Lisk, F., op.cit., p. 50.
17. Ibid., p. 59.
18. See, for example, Davies, R. S., 'Notes on the Theory of the Informal Sector with reference to Zimbabwe', South African Labour Bulletin, vol. 3, no. 5, 1977, pp. 56 - 71; Sethuraman, S. V., 'The Urban Informal Sector; Concept, Measurement and Policy', International Labour Review, vol. 114, no. 1, 1976, pp. 69 - 81; and Weeks, J., 'Policies for Expanding Employment in the Informal Sector of Developing Economies', International Labour Review, vol. 111, no. 1, 1975, pp. 1 - 13.
19. Ghai, D., Godfrey, M., and Lisk, F., op. cit., p. 63.
20. Ibid., p. 63.

21. Ibid., p. 63.
22. World Bank, Housing, Sector Policy Paper, (World Bank: Washington, D. C., 1975), p. 1.
23. Martins, J. H., Income and Expenditure Patterns of Households in Ciskei, 1981, (Bureau of Market Research, UNISA: Pretoria, 1981), pp. 41 - 43.
24. This despite the fact that housing rentals and maintenance in Ciskei are often heavily subsidised.
25. Ghai, D.P. and Alfthan, T., 'On the Principles of Quantifying and Satisfying Basic Needs', in Ghai, D.P., Khan, A.R., Lee, E.H., and Alfthan, T., op.cit., p. 32.
26. World Bank, Meeting Basic Needs: An Overview, Poverty and Basic Needs Series, (World Bank: Washington, D. C., September 1980), p. 9.
- 26a. Foster, P.J., 'The Vocational School Fallacy in Development Planning', in Blaug, M., (ed.), Economics of Education 1, (Penguin Books : Harmondsworth, 1968), p. 401.
27. See, for example, Foster, P. J., op.cit. pp. 400 - 401.
28. World Bank, Water Supply and Waste Disposal, Poverty and Basic Needs Series, (World Bank: Washington, D. C., 1980), p. 2.
29. Ibid., p. 20. Similarly, the total capital cost of water connection to individual houses was estimated as \$120 per capita in urban areas as against only \$40 for the provision of communal water taps ("standpipes"). Ibid., p. 16.
30. Ibid., p. 20.
31. Hochman, H. M. and Rodgers, J. D., 'Pareto Optimal Redistribution', American Economic Review, vol. 59, 1969, p. 544.
32. Ghai, D. P. and Alfthan, T., 'On the Principles of Quantifying and Satisfying Basic Needs', in Ghai, D. P., Khan A. R., Lee, E. H., and Alfthan, T., op. cit., p. 32.

33. Berg [Berg, A., 'A Strategy to Reduce Malnutrition', Finance and Development, vol. 17, no. 1, March 1980, p. 24] notes: "Even when malnutrition is not severe, decreased growth is associated with low scores on tests of cognitive and sensory ability".
- 33a. World Bank, World Development Report, 1982, (O.U.P. : New York, 1982), Tables 17 and 21.
- 33b. See also footnote 5 on p. 169.
34. Ibid., p. 24.
35. Ibid., p. 24.
36. Ibid., p. 24.
37. Ibid., p. 24.
38. Ibid., p. 24.
39. Ibid., p. 25.
40. Ibid., p. 26.
41. Musgrave, R.A., op.cit., p. 13.
42. Hofmeyer, J.F., 'The Subsidization of Low-Income Housing', South African Journal of Economics, vol. 50, no 1, 1982, p. 49.
43. World Bank, 'Shelter', op.cit., p. 3, Table 1.
44. Ibid., p. 4.
45. These findings would seem to conform with the expenditure of black households in Ciskei, where expenditure on housing and household equipment was shown (above) to be 20,2 per cent, 14,6 per cent and 16,9 per cent of total expenditure in Large and Small Urban Areas and Rural Areas respectively. (Martins, J.H., op.cit., Tables 22, 23 and 24).
46. Burki, S.J., and Voorhoeve, J.J.C., 'Global Estimates for Meeting Basic Needs', World Bank Background Paper, (Washington, D.C., August

1977), cited in Ibid., footnote 4, p. 5, suggest: "US \$1 000 a household can be considered the minimum amount of capital required for shelter expenditures. Assuming a real rate of interest of 6 per cent and the devotion of 20 per cent of income to shelter, a capital expenditure of this size would be within the means of a household whose income was US \$25 a month or US \$300 a year. If there are six persons to a household, an annual income of US \$50 a person is implied."

47. If higher standards of housing have previously been provided on a subsidised basis to some sections, then it is possible that all poverty groups will come to accept the provision of such a standard as a "right" to which they are entitled. Similarly if housing is seen to be inferior (even if in practice it is not), it may not be acceptable to either low-income groups or the housing authorities.
48. For a detailed analysis of the component costs of housing in the United States, see, for example, Bruce-Briggs, B., 'The Cost of Housing', The Public Interest, no. 32, Summer 1973, pp. 34-42. The World Bank (World Bank, 'Shelter', op.cit., p. 5, footnote 5), gives the following examples from several of its projects, of the cost of land as a percentage of the total cost of shelter - Nicaragua, 13 per cent; Senegal, 5,5 per cent; Tanzania, 0,5-3,6 per cent; and Zambia, 0,8 per cent.
49. Ibid., p. 6, footnote 7.
50. Thus the World Bank notes: "In household surveys in which low-income residents are asked to list their priorities, it is common to find housing itself well down the list, below water supply, education, transportation, and other services." (Ibid., p. 6).
51. For instance, a study in Colombia found that less than ten per cent of low-income housing had not been fully paid for. [Strassman, W.P., 'Basic Shelter in an Urban Framework', mimeographed, (World Bank : Washington, D.C., Nov. 1978), cited in Ibid., p. 7.]
52. Ibid., p. 11.
53. Ibid., p. 11.

54. Grimes [Grimes, O.F., 'Housing for Low-Income Urban Families', (John Hopkins University Press : Baltimore, 1976), p. 9, cited in Ibid., p. 11], suggests that as many as sixty per cent of the population of developing countries could not afford the cheapest form of public housing, even when it was subsidised.
55. Ibid., p. 26.
56. Ibid., p. 26.
57. Ibid., p. 26.
58. Burns and Grebler, [Burns, L.S., and Grebler, L., 'Resource Allocation to Housing Investment : A Comparative International Study', Economic Development and Cultural Change, vol. 25, 1976, pp. 95-121], suggest that as income (GDP per capita) rises, so the share of investment in shelter rises until it is about 6 or 7 per cent, and then it falls to about 3 per cent. At low levels of income, the high social rate of return of other Basic Needs items, such as food, result in a relatively low share of income being devoted to housing. As incomes increase, so the share of income allocated to housing also increases, but after a point where the basic need for housing is satisfied, the relative importance attached to investment in housing will decrease.
59. A further factor which has resulted in emphasis shifting away from subsidisation to cost recovery, is the belief that subsidised urban housing will further encourage rural-urban migration and so simply produce continuous excess demand for urban housing. But such migration takes place even when no services at all are available to migrants and so it is clearly motivated by factors other than a search for housing services provided in urban areas (e.g. employment).
60. World Bank, 'Shelter', op.cit., p. 33.
61. Ibid., p. 33.
62. Ibid., pp. 34-35.
63. Ibid., p. 35.
64. Ibid., p. 35.

CHAPTER 7 : GROWTH AND BASIC NEEDS

7.1 GROWTH VERSUS/AND BASIC NEEDS

Regional problems, which were discussed in Chapters 2, 3 and 4, may represent an important set of obstacles to economic development. The question now arises whether the pursuit of a Basic Needs strategy and a regional growth policy complement or compete with one another in the pursuit of the economic development of poor societies.

The Basic Needs approach to development emerged essentially from the rejection of development strategies that rely solely upon economic growth as the means for overcoming poverty. Historically high rates of growth in developing countries were observed to have had little impact upon the reduction of relative and absolute poverty.¹ Consequently employment- and rural-development-oriented, redistribution-with-growth strategies, and, more recently, the Basic Needs Approach directed attention away from the unqualified maximisation of output, as stressed by growth-oriented theories, towards the minimisation of poverty in both absolute and relative terms. But germane to this approach was the contention that growth should at all times accompany the satisfaction of basic needs so that the quality of life could be raised and absolute, as well as relative, poverty reduced.

Consequently, the Basic Needs Approach should not be seen simply as a short-term redistribution of existing goods and services, but rather a long-term strategy intended to increase the amount of goods and services available to society. In other words, it should not amount to a policy of redistributing poverty. But to what extent are these approaches to development compatible, or is there an inevitable trade-off between growth and basic needs satisfaction? Can the basic needs of all groups within society be satisfied so as to encourage development, or will it be achieved only at the expense of a lower level of economic growth and future development?

The Basic Needs Approach attempts to bring about a restructuring of national priorities and a reallocation of resources so that all sections of the population benefit from and contribute to development, and poverty may be overcome without hindering economic growth. This change of

emphasis does not imply a total departure from traditional growth-oriented programmes, but rather their redirection towards the elimination of poverty. Accordingly Ligthelm stresses: "The basic needs approach leads in most cases to a restructuring of urban priorities where programmes such as education, health, small business development, the development of national roads and information services, enjoy a high priority..... The approach does not also imply a total restructuring of existing programmes, but only a simultaneous change in priorities in the direction of the elimination of poverty. These programmes are aimed in the first place at increasing productivity and creating opportunities by which the increased productivity can be economically utilized."² But must concentration on the achievement of basic needs satisfaction not inevitably clash with economic growth? Ligthelm warns: "The provision of peoples' basic needs as an end in itself can strongly harm economic growth because social services are then not integrated with production activities."³

A possible resolution to this trade-off issue would seem to be suggested by empirical investigations of the relationship between the satisfaction of basic needs and economic growth in the recent past. Unfortunately, the evidence available is not conclusive. Some countries - such as Burma, Cuba, Sri Lanka and Tanzania - have concentrated on the provision of basic needs and simultaneously experienced lower growth rates. Others - such as Taiwan, Korea and Singapore - have achieved high levels of economic growth together with reduced poverty, increased provision of social services, and a more equal income distribution. Consequently, on empirical grounds alone the effects of a Basic Needs strategy on growth and development cannot be easily evaluated.

On the one hand, it can be reasoned that the increased satisfaction of basic needs will tend to lead to improved health and higher levels of education and so productivity and output should increase in the long run. T.W. Schultz, for example, considers direct expenditures on education and health to be "clear examples [of] investment in human capital."⁴ Moreover, improved health would mean longer life expectancy, and, ultimately, a lower fertility and net reproduction rate⁵, with the result that a larger proportion of the population would become economically active in the long term. Resources necessary for meeting basic needs could, for example, be found by restructuring

consumption patterns in general, and public expenditure in particular, which would increase the consumption of basic goods and services without raising total consumption or decreasing saving.

Alternatively, it has been claimed that a Basic Needs approach will serve to redistribute income in favour of the poor, thus raise consumption levels and, hence, reduce saving and the level of investment and, thereby, the rate of economic growth. As a result, the poor would receive a greater share of existing production only at the cost of future production. Relative poverty would be overcome only at the expense of a lower long-term absolute poverty level; the long-term interests of all the poor would thus be sacrificed for short-term consumption gains. In the long run the poor would be better off in terms of the level of basic needs satisfaction from the generally higher income level that would result from the higher investment and transfer of capital resources made possible by a growth-oriented development strategy.⁶

Central to the controversy is the problem of the extent to which growth may be sacrificed during the period when basic needs satisfaction is being improved, and whether the possible sacrifice is outweighed by the more rapid growth and development in the future which may result from the satisfaction of basic needs in a poor society.

In the extreme case it could be argued that the intention of a Basic Needs strategy is to divert attention away from an emphasis on growth, which failed to reduce poverty in the past; whether the satisfaction of basic needs takes place at the expense of growth or not, is said to be irrelevant. But if the Basic Needs strategy is to avoid simply redistributing poverty rather than wealth, the importance of economic growth cannot be ignored. A more common approach is to suggest that basic needs may be met in ways which have little effect upon the level of aggregate investment (and therefore the rate of growth), namely, by reducing non-essential consumption and by directing consumption and government expenditure towards the meeting of basic needs. Even if basic needs require some sacrifice of growth in the short run, in the long run the expected benefits in terms of improved human capital should outweigh any temporary reduction in growth that might result.

Hence, the present problem revolves around determining the effect of a Basic Needs strategy on human capital and assessing whether the returns to this form of investment are greater than those from conventional investments in human or physical capital. This has been attempted in several ways: firstly, "growth accounting" attempts to identify the contributions of various inputs to historical increases in output and to assess the importance of productivity changes or changes in human capital; secondly, the rate of return to various forms of education can be measured; and, thirdly, the statistical correlations between growth rates and the provision of basic needs within sample countries can be examined.

The contribution of human capital to the rate of growth of output has received considerable attention in the past.⁷ For example, Denison⁸, using the method of growth accounting, estimated that only just more than half the increase in output in the United States from 1929-1969 could be attributed to increases in land, capital and labour inputs and improved resource allocation by removing certain market imperfections. Just more than 45% could be ascribed to investment in "human capital" - 14.1% to education and 31.1% to "advances in knowledge"⁹ Similar conclusions have been reached by Krueger¹⁰, who attributed half the difference in per capita G.N.P. between the United States and a sample of developing countries to differences in human capital; and Hayami and Ruttan¹¹, who ascribed one-third of the difference in agricultural productivity between developed and underdeveloped countries to differences in education levels. Kuznets examined the importance of qualitative improvements in productive factors in explaining economic growth and concluded that the contribution of increased knowledge was considerable. He states: "One might define modern economic growth as the spread of a system of production, in the widest sense of the term, based upon the increased application of science, that is, an organised system of tested knowledge."¹²

Another method of measuring the significance of human capital is to calculate the rate of return to education. This may be achieved by estimating the lifetime earnings of people of different education levels and comparing them to the private and social cost of education, including earnings foregone while instruction is taking place.¹³ Psacharopoulos¹⁴ found an average return of 25% for primary education

for 17 developing countries, ranging from 6,6% for Singapore in 1966 to 82% for Venezuela in 1957. The World Bank¹⁵ calculated rates of return to education for a sample of 30 developing countries to be 24,2% for Primary education, 15,4% for Secondary education, and 12,3% for Higher education. In a sample of 14 industrialised countries the rate of return for Secondary education was 10,0% and for Higher education 9,1%. By contrast, Correa¹⁶ concluded that while health and nutrition were important, education played little part in increasing output, and Nadiri¹⁷ found the contribution of education in explaining differences in inter-country growth rates to be slight - although it was important in explaining variations in factor productivity within countries over time.

A further method of identifying the relationship between growth and basic needs is to examine statistical correlations for inter-country studies. But it should be noted that even if a strong correlation between growth and basic needs is found to exist, it is possible that improved performance in basic needs is a result of increased output rather than a cause. Furthermore, while improved basic needs satisfaction amounts to increasing human capital, not all increases in human capital (such as tertiary education) can be considered to be a basic need.

Morawetz¹⁸ was unable to find a clear relationship between basic needs satisfaction and growth in output, and concluded that GNP per capita was not a good measure of basic needs fulfilment. In contrast, Hicks and Streeten¹⁹ found that by using a semi-log relation to allow for a sharp decline in increased life expectancy beyond a certain income level, a better relation between GNP per capita and life expectancy could be obtained. Isenman²⁰ in a study of the relationship between life expectancy and GNP per capita in Sri Lanka concluded that: "while investing in basic needs may have reduced per capita income, the gains registered in social indicators are much greater than would have been expected even at the higher income level."²¹

Thus much of the evidence on the importance of education, human capital and Basic Needs for increasing output over time appears inconclusive. Even if it were not, empirical data would still not provide a complete answer to the question of the relationship between growth and basic needs, as the concept of basic needs is not synonymous with simply increased human capital. Hicks²² looked specifically at the issue of

growth and basic needs and attempted by means of a cross-country statistical analysis of variables explaining growth between 1960 and 1973 in less-developed countries to answer two questions: (i) does the degree of basic needs satisfaction at the beginning of a period influence the level of growth during the period that follows? and (ii) do countries which make considerable progress towards the satisfaction of basic needs during a given period experience lower rates of growth and investment at the same time?

He found that the Basic Needs variables were indeed significantly related to growth, even after allowance for the influence of other explanatory variables had been made. Countries which had life expectancies (at birth) ten years higher than those expected on the basis of their respective income level were found to have significantly higher economic growth rates per capita as well. On the basis of his findings Hicks concluded, firstly, that countries which make substantial progress in meeting basic needs do not experience substantially lower economic growth rates; and, secondly, that the attainment of a high level of basic needs satisfaction in one period would seem to lead to higher economic growth rates in subsequent periods. Hicks observes: "(These) results seem to support the proposition that the level of basic-needs attainment is related to the rate of growth of output. The basic-needs measures appear important in their own right, and are not proxies for the level of income. Thus, the development of a critical minimum level of human capital may be an important prerequisite for accelerating the growth of output."²³ He concludes: "It seems likely that countries generally have the capacity to meet basic needs without crippling other programmes aimed at growth enhancing investments. Not only does a basic-needs programme appear unrelated to a reduction in growth potentials, it appears to offer long-term benefits which will raise the rate of growth as well."²⁴

In a further study, Hicks²⁵ again attempted to measure the statistical correlation between growth and the provision of basic needs by comparing the growth rates of different countries at the beginning of the period 1960 to 1977 to the level of basic needs satisfaction achieved at the beginning of this time period. From a set of 83 countries, he examined in detail the 12 fastest growing countries and concluded that they experienced, on average, life expectancies at birth of 5,6 years higher

and adult literacy rates of 12 per cent higher than could be expected on the basis of income levels alone. This analysis therefore suggested that there was a positive relationship between the basic needs satisfaction at the beginning of the time period and the economic growth rate during this seventeen year period, but this did not necessarily prove that the satisfaction of basic needs is a sufficient condition for future growth. Accordingly, Hicks examined the 12 selected countries which had the highest deviation in life expectancy from the expected norm, and found that the majority had experienced high rates of growth, while others were not so successful. Nevertheless, the average rate of economic growth for these 12 countries was 4%, which was significantly higher than the 2,4% for the group as a whole.

From this evidence and that of his previous study²⁶ Hicks concludes: "... those countries which do well in providing for basic needs tend to have better than average performance in terms of economic growth. This would also seem to suggest that a basic needs emphasis in development, far from reducing the rate of growth, can be instrumental in increasing it."²⁷

A further important finding of Hicks' analyses, is that improvements in health, as measured by increased life expectancy, are as strongly related to economic growth and improvements in human capital (productivity) as education, the influence of which has been studied rather more frequently in the context of human capital. This suggests that significant complementarities exist between such basic needs components as health and education and that health and nutrition may be as important as education in the raising of productivity and the promotion of economic growth. But these findings also suggest that improvements in health, and hence life expectancy, are strongly related to levels of education and therefore the effect of education on productivity may be indirect through the resultant improved health of the labour force, rather than direct through improved skills and technical knowledge.²⁸ On the basis of these findings, Hicks proposes: "It would appear that economists who formerly focused on human capital may have concentrated too narrowly on one aspect of human capital, namely education. It seems possible that other aspects of a basic needs approach to development, which aim to improve the health and living conditions of the poor, should also be considered as building up a country's human capital.[These kinds of] gains in productivity from

investment in health and education are now being recognized as important as the returns from investments in the more standard forms of physical capital. In other words, investing in people may be a good way to both eliminate the worst aspects of poverty and to increase the growth rate of output."²⁹ Functionally speaking investment in basic needs may be seen as a threshold measure or prerequisite for productive investment in human capital; unless a minimum level of living has been reached conventional human capital investment may indeed yield disappointing returns.

The complementarity between different basic needs and their collective impact on the supply of labour, innovation and economic growth has, of course, been appreciated long before the present explicit concern with Basic Needs strategies. Thus, Professor Belshaw wrote in 1954: "... we regard the reduction of lethargy and inertia, and an increase in the propensity to innovate and accept innovation, as such vital elements in the development process that health and nutrition measures warrant high priority in development plans."³⁰

Further evidence of positive correlation between economic growth and basic needs satisfaction is provided by World Bank studies in countries such as Sri Lanka, Brazil, Indonesia, Egypt, Mali, Gambia and Somalia, where progress towards the implementation of Basic Needs strategies has been made. While suggesting that no generalised conclusion should be made at this stage from such localised studies, the World Bank nevertheless draws the following inference: "An overall conclusion appears to be that if objectives in income distribution and meeting basic needs are pursued rationally economic growth need not necessarily be sacrificed."³¹

While the available empirical evidence may not be entirely consistent or positively conclusive, it does, nevertheless, at least suggest that the objectives of economic growth and basic needs do not have to conflict. In fact, the bulk of the evidence suggests it is possible for them to be complementary and for a Basic Needs policy to enhance growth through improved productivity arising from not only better education but other Basic Needs measures as well. While it is possible that the improved provision of basic needs may lead to higher consumption and reduced saving levels, this is not a categorical imperative, and, as suggested above, basic needs may also be satisfied from a reallocation of

inefficient consumption expenditure in the aggregate. The latter is in any case a point which belongs essentially to static economic conditions : in the long run it seems likely that the improved provision of basic needs should indeed lead to increased productivity and higher levels of output, and fears that Basic Needs expenditure could only be undertaken to the detriment of long-term economic growth, appear to have no firm foundation in logic or fact.

This conclusion is naturally of considerable importance for the effectiveness of Basic Needs policies designed to reduce both inter- and intra-national economic divergences such as those characterised by a process of cumulative causation, where it has been concluded that poor regions are inefficient utilizers of resources. In the attempted reconciliation of the Export Base Theory and the Principle of Cumulative Causation presented by Kaldor, and Dixon and Thirlwall (Chapter 4), the key to the cumulative nature of the model was the Verdoorn coefficient. Inter-regional growth rate differences could result from local differences in income elasticities of demand or in labour productivity relative to wages ("efficiency wages"). Regional growth rates could be raised by reducing "efficiency wages", but as labour productivity depends upon the rate of growth of output, "efficiency wages" would fall more rapidly in fast-growing regions, as money wages rise uniformly in both. Consequently, falling "efficiency wages" increase the competitiveness of the region or country concerned.

In the above discussion, growth rates have been shown to be positively related to the level of basic needs satisfaction, either because of the direct effect of improved education on productivity, or for example its effect on health and the resultant indirect improvement in productivity. Consequently, regions (in the broader sense of the word) which experience a comparatively rapid improvement in the provision of basic needs should also undergo a relatively rapid growth of labour productivity; hence, "efficiency wages" may be expected to fall. This in turn results in an increased rate of growth for the region, and the process is cumulative : increased output leads to a further increase in productivity, which brings about another fall in "efficiency wages", and so on.

This argument may now be related to the model set out in Chapter 4. There, in Equation (4.2):

$$q_i = a_i + by_i$$

where: q_i = rate of change of labour productivity in region i
 a_i = autonomous productivity growth in region i
 b = Verdoorn coefficient
 y_i = rate of growth of output in region i

But q_i is dependent upon the level of basic needs satisfaction and the effect is positive. Thus for region i:

$$q_i = a_i + h_i + by_i \quad \dots(7.1)$$

where: h_i = level of basic needs satisfaction in region i and is positive.

Hence equation (4.5) becomes:

$$Y_i = \frac{f[d(W_i + t_i - a_i - h_i) + ep_j + gz_j]}{1 + f db} \quad \dots(7.2)$$

An increase in the level of satisfaction of basic needs in region i therefore results in an increase in the rate of growth of income in region i.³²

The effect of an improvement in the level of basic needs satisfaction is cumulative. Greater basic needs satisfaction results in an increase in the rate of growth of labour productivity in region i (7.1); this results in a fall in the rate of domestic price inflation for region i (4.4); and consequently an increase in the rate of growth of exports (4.3). This in turn leads to a higher rate of growth output in region i (4.1), an increase in labour productivity (7.1), and the whole circular process - which began with an improvement in basic needs - is repeated.

Economic policies designed to improve the level of development of slow-growing regions can therefore in principle achieve their aim through the application of a Basic Needs strategy. The improved satisfaction of

basic needs will not only reduce the level of poverty, but may well lead to increased growth of output and a higher level of economic development. The cumulative process which works so as to produce regional income divergence can be reversed in order to raise the rate of growth in underdeveloped regions. Under appropriate circumstances a Basic Needs strategy can at least complement other policies directed at the promotion of economic development.

7.2 NOTES

1. See, for example, I.L.O., 'Employment, Growth and Basic Needs : A One-World Problem', op.cit.; and Ghai, D.P., Khan, A.R., Lee, E.L.H., and Alfthan, T., op.cit., p. 2.
2. Ligthelm, A. A., 'n Perspektief op die Basiese-Behoefte ("Basic Needs") - Benadering tot Ontwikkeling', Development Studies Southern Africa, vol. 3, no. 3, 1981, p. 316, (author's translation).
3. Ibid., p. 316, (author's translation).
4. Schultz, T. W., 'Investment in Human Capital', in Blaug, M., (ed.), 'Economics of Education 1', op.cit., p. 13.
5. It has sometimes been suggested that basic needs policies will inevitably fail as they contain within themselves the seeds of their own destruction. An improvement in education, health and nutrition will lead to a fall in infant mortality, an increase in life expectancy, and, hence, it is argued, an increase in population growth. As a result the aggregate needs of the population will increase and partially, or wholly, off-set any improvements in the provision of basic needs that had been achieved. But such an essentially Malthusian argument neglects the impact of Basic Needs policies on fertility. As infant mortality decreases, so fertility rates may decline. But there is likely to be a lag between the decline in mortality and its general perception, so that initially the rate of population growth may rise, but in the long run it will fall. Morawetz [Morawetz, D., 'Basic Needs Policies and Population Growth', World Development, vol. 6, no. 11/12, 1978, p. 1251] indicates that there is a significant negative relationship between fertility rates and literacy, infant mortality and income distribution, but the nature of the lag before the effect is felt is uncertain. He (Ibid., p. 1251) suggests: "There are several strong reasons to expect that basic needs oriented policies may eventually cause fertility rates to decline, even if the same policies do not cause per capita income to be raised significantly. First, since parents are likely to be concerned more about the number of surviving offspring than about the number of babies born, a decline in infant

mortality may lead, after some recognition lag, to a decline in fertility. Second, an increase in the quantity and quality of education that is available may cause fertility rates to decline, both because parent's aspirations for themselves and their children may be raised and because parents may now have more positive attitudes towards (and better access to means of) birth control. Third, basic needs policies are likely to cause an increase in the degree of equality of the distribution of the national income among members of society, which in turn may cause fertility to decline. A nation in which the poorest 70% of the people (who account for a disproportionately large share of overall population growth) receive 30% of the national income, say, is likely to have a lower fertility rate than a second nation with the same average per capita income in which the poorest 70% receive only a 15% share."

6. Hicks observes: "The problem is essentially the same as that drawn by Ahluwalia and Chenery in Redistribution with Growth: a strategy that provides for 25 years of consumption transfers eventually results in lower income (and welfare) for everyone compared to a non-interventionist base case. On the other hand a transfer that increases the capital assets of the poor produces a permanent improvement in their condition, and could result in higher GNP if one adopts a poverty-weighted measure of output." Hicks, N. L., 'Growth vs Basic Needs; Is there a Trade-Off?', World Development, vol. 7, 1979, p. 985.
7. See, for example: Schmookler, J., 'Changing efficiency of the American Economy, 1869-1938', Review of Economics and Statistics, vol. 34, August 1952, pp. 214-231; Denison, G. F., Why Growth Rates Differ: Postwar Experience in Nine Western Countries, (Brookings Institution: Washington, D. C., 1967); and Denison, G.F., Accounting for United States Economic Growth, 1929-1969, (Brookings Institution: Washington, D. C., 1974).
8. Denison, G. F., 'Accounting for United States Economic Growth, 1929-1969', op. cit., p. 130.

9. Hicks (Hicks, N. L., 'Is there a tradeoff between growth and basic needs?', Finance and Development, vol. 17, no. 2, June 1980, p. 18) warns of the problems associated with the technique of "growth accounting" whereby the growth of output is attributed to changes in input factors and a residual which is unexplained changes in productivity: "There is some question, however, whether the residual can be attributed to improvements in the stock of human capital. It could represent errors in the calculation of other variables, the omission of other important factors, or simply a faulty assumption about the nature of the underlying production function. While growth accounting attributes an important role to human capital in explaining growth, it does not necessarily prove that human capital is important. Thus it is not a completely reliable way to measure the contribution of human capital to the growth process."
10. Krueger, A. O., 'Factor endowments and per capita income', Economic Journal, vol. 78, September 1968, pp. 641-659.
11. Hayami, Y., and Ruttan, V. W., 'Agricultural productivity differences among countries', American Economic Review, vol. 60, December 1970, pp. 895-911.
12. Kuznets, S., Economic Growth and Structure, (Heinemann: London, 1965), pp. 83-84.
13. Hicks (Hicks, N. L., 'Is there a tradeoff between growth and basic needs?', op. cit., p. 18) warns: "There are considerable conceptual difficulties in measuring such rates of return on investments in human capital. The returns may be overstated because they capture the 'screening' effect of higher education, which means that more highly educated people receive better paying jobs regardless of any true differentials in productivity. The high unemployment rate often found among highly educated people in some developing countries suggests that investments in education may not always raise productivity, particularly in those countries already possessing a large supply of educated persons."

14. Psacharopoulos, G., 'Returns to Education', (Jossey - Bass: San Francisco, 1973), cited in Hicks, N. L., 'Is there a tradeoff between growth and basic needs?', op. cit., p. 18.
15. World Bank, 'World Development Report, 1980', op. cit., p. 49.
16. Correa, H., 'Sources of Growth in Latin America', Southern Economic Journal, vol. 37, July 1970, pp. 7-31.
17. Nadiri, M. Ishaq., 'International studies of factor imports and total factor productivity: a brief survey,' Review of Income and Wealth, Series 18, June 1972, pp. 129-154, cited in Hicks, N. L., 'Growth vs Basic Needs; Is there a Trade-Off?', op. cit., p. 986.
18. Morawetz, D., Twenty-Five Years of Economic Development, (World Bank: Washington, D. C., 1977).
19. Hicks, N. L. and Streeten, P., 'Indicators of development: the search for a basic needs yardstick', op.cit., pp. 567-580.
20. Isenman, P., The relationship of basic needs to growth, income distribution and employment: the case of Sri Lanka, (World Bank: Washington, D. C., May 1978, unpublished), cited in Hicks, N. L., 'Growth vs Basic Needs: Is there a Trade-Off?', op. cit., p. 987.
21. Ibid., p. 987.
22. Ibid., pp. 985-994.
23. Ibid., pp. 990-991, (emphasis added).
24. Ibid., p. 992, (emphasis added).
25. Hicks, N. L., 'Is there a tradeoff between growth and basic needs?', op. cit., pp. 17-20.
26. Hicks, N. L., 'Growth vs Basic Needs: Is there a Trade-Off?', op. cit., pp. 985-994.

27. Hicks, N. L., 'Is there a tradeoff between growth and basic needs?', op. cit., p. 20, (emphasis added).
28. Hicks [Hicks, N.L., 'Growth vs Basic Needs : Is there a Trade-Off?', op.cit., pp. 991-992] observes : "The general finding of [the above] analysis that life expectancy is at least as strongly associated with GNP growth as education indicators, is somewhat surprising. As pointed out, however, the education measures are highly correlated with life expectancy. For instance, the level of literacy explains more of the variation in life expectancy between countries than do variables such as GNP, calorie and protein consumption, the number of doctors or nurses per capita and the accessibility of clean water. The levels of primary-school enrolment shows a similar high correlation, although not quite as significant as literacy..... The fact that literacy is highly associated with variances in the level of life expectancy has been noted by others. It seems reasonable to assume that greater literacy could aid in the understanding of the causes of ill health, and the causality links between inadequate sanitation, infection and disease. Thus, while improving literacy may raise productivity directly, there may also be very important long-term gains from improvements in literacy which occur through improvements in health status."
29. Hicks, N. L., 'Is there a tradeoff between growth and basic needs?', op. cit., p. 20.
30. Belshaw, H., Population Growth and Levels of Consumption, (George Allen and Unwin: London, 1954), p. 138.
31. World Bank, 'Meeting Basic Needs: An Overview', op.cit., p. 3.
32. d = price elasticity of demand for exports and is negative.

CHAPTER 8 : BASIC NEEDS IN CISKEI

8.1 INTRODUCTION

This chapter gives a cursory analysis of the level of Basic Needs satisfaction prevailing in Ciskei, a distinctive territory in South Africa, and considers the relevance of an economic development policy deliberately directed at basic needs against this background. This is done largely as a case study for a potential Basic Needs strategy and, hence, the details of such a strategy are not discussed as such. The choice of Ciskei as an empirical focus is admittedly arbitrary, though not inappropriate, as Ciskei may be considered to be a fairly typical case study of an economically underdeveloped region in the Southern African, African and even global context. In the present introductory section a brief overview of the Ciskei economy will be presented and an attempt made to place Ciskei in a regional and international setting in terms of the level of its economic development. In the following section (8.2) the economy of Ciskei will be discussed in the light of the Export Base, Location and Cumulative Causation theories discussed in chapters 2 and 3, and in section 8.3 the Ciskei economy will be analysed in terms of the "core" basic needs outlined in chapter 5. Finally, the relevance of a Basic Needs policy for Ciskei will be considered in section 8.4. The discussion relies heavily on available statistical data, which are themselves presented in a statistical appendix to this chapter.

Charton¹ describes Ciskei as the region "situated on the eastern seaboard of South Africa between the Stormberg escarpment and the sea, the Great Kei river in the east and the Great Fish and Kat rivers in the west. It includes the black homeland created by the government of the Republic of South Africa in pursuit of its policy of 'separate development', as well as a white-owned corridor adjoining the Kei river". In area it is approximately 800 000 hectares, of which 13 per cent can be considered arable.² In 1980 Ciskei comprised only 530 000 hectares (5 300km²). The remaining 300 000 hectares still to be consolidated from the Republic. In Dec 1981 Ciskei became officially independent of the RSA; yet the districts of Herschel and Glen Grey (included in the 800 000 hectares above) have not yet been ceded to it by the RSA. The de facto population of Ciskei in 1980 was estimated to be 666 000 (virtually all Xhosa-speaking) persons³, giving a population density of 125,7 persons per square kilometer.⁴ Of this population some 84 per cent were urbanised (living in proclaimed towns),⁵ the

principal urban areas being Mdantsane (population 159 000)⁶ and Zwelitsha (population 29 000),⁷ both of which are adjacent to the "white" urban areas of East London and King William's Town respectively. In the general context of economically less-developed societies, this represents an exceptionally high rate of urbanisation.

In 1980 the Gross Domestic Product (GDP) at factor cost was R131,9⁸ million and the Gross National Product (GNP) at factor cost R340,7⁹ million. Hence, foreign factors receipts comprise a very important part of national income, which is the result of the large number of cross-border commuters and migrants who live in Ciskei but work outside its borders in the Republic of South Africa. According to estimates there were in 1980 some 38 100 commuters¹⁰ and 56 000 migrants¹¹, which together comprise about 14 per cent of the total population, or 69 per cent of the economically active population of Ciskei.¹² In the same year, nearly 45 per cent of the population was under the age of 15 years¹³ and hence Charton concludes: "... population growth will (thus) continue to put pressure on the economic resources of the region. It is calculated that approximately 8 000 newcomers may be expected to enter the labour market each year between now and the turn of the century."¹⁴

In Table 8.1, the GDP of Ciskei according to the kind of economic activity at current prices is given for the years 1970, 1975 and 1980. In 1980 the largest proportion of Ciskei's GDP was generated by Manufacturing, namely 22,2%, compared with a figure of 8,3% for Agriculture and Forestry. Construction comprised 16,4 per cent of GDP and 0,1 per cent was made up by Electricity, Gas and Water. The remaining 53 per cent was contributed by the various services sectors of the economy: Trade and Catering (3,6%), Transport (4,4%), Financial Services (7,2%), Public Administration (12,0%), Education (18,1%), Health (7,0%), and "Other Services" (0,7%). It may be noted in passing that the share of manufacturing is exceptionally high for an economically less-developed society, certainly in a South African context.

The economically active¹⁵ (black) population of Ciskei according to industrial group is given for 1980 in Table 8.2. The corresponding rates were as follows: Agriculture (8,5%), Mining (1,1%), Manufacturing (20,6%), Electricity (0,4%) and Construction (3,4%); 37,8 per cent of

the economically active population was employed in the services sectors of the economy: Commerce (10,3%), Transport (3,6%), Financing (0,7%) and Community, Social and Personal Services (23,3%). Unemployment in Ciskei is high, with 38 340 (28,15%) of the total economically active population given as "unspecified and unemployed".¹⁶ Furthermore, 79,65 per cent of the total population was not economically active.

As Gross Domestic Product was only 38,7 per cent of Gross National Product in 1980, the importance of links with the economy outside Ciskei's borders cannot be ignored. Ciskei is heavily "dependent" on the South African economy at large, and especially on the "white" economy adjacent to its borders. Charton observes: "Geographers recognise four regions in the space economy of South Africa. The dominant region is centred on the southern Transvaal; it encompasses two-thirds of the national area, and contains all but three of its metropolitan nodes, it generates 75 per cent of the country's gross domestic product. The remaining three regions are centred on Cape Town, Port Elizabeth and East London. The latter is the most poorly developed, due to its peripheral location in relation to Cape Town and the principal region, which includes Johannesburg and Durban, its hinterland lacks the mineral resources and mining development characteristic of the principal region; it also lacks the agricultural development characteristic of the regions centred on Cape Town and Port Elizabeth. In South Africa regional inequalities are pronounced; the East London region is one of the poorest of all In the same way that the East London metropolitan region is peripheral to the principal region at the national level, Ciskei and Transkei are peripheral to East London at the regional level."¹⁷ In terms of official regional development policy in South Africa, the entire territory of Ciskei forms part of the larger "Region D" which also comprises parts of the RSA and Transkei. This matter is discussed further in section 8.2. (See map following p.194.).

In 1980 the GDP per capita of (black persons) in Ciskei was R195 at current prices¹⁸ and GNP per capita R464¹⁹. For a household of six persons this would mean an average household income of R236 per month or R2 784 per annum. Between the years 1975 and 1980, GDP and GNP per capita at current prices rose at an average annual rate of 17,9 and 16,0 per cent respectively²⁰, but real GDP and GNP per capita at 1970 prices rose by 5,1 and 3,7 per cent, respectively, over the same

period²¹. However, per capita income levels differ markedly between large and small urban areas, as well as between urban and rural areas, a point that will be elaborated upon in section 8.3.²²

Per capita incomes vary not only on a regional and urban/rural basis, but are also distributed unevenly between the households within each category. Thus some households have above average income levels, while others have below average income levels. The Bureau of Market Research calculated that an average rural household of six persons in Ciskei received a monthly income of R146,97 in 1980, while the urban equivalent received R301,65²³. The distribution of income within urban and rural areas is shown for 1980 in Table 8.3. An estimated 59 per cent of rural households and 20 per cent of urban households received less than R1 600 per annum (R133,33 per month), which was below the Household Subsistence Level calculated for each category.²⁴

Household sizes also vary considerably. In Table 8.4 the average household size for Ciskei in 1980 was 7 persons, and most households have between 5 and 8 members. On average, 20 per cent of households have 9 or more members. In Mdantsane, average household size is smallest, and the percentage of households of 9 members or more was very much smaller (5%) than in the other locations in Table 8.4.

In Chapters 5 and 6 it was argued that per capita income levels do not necessarily represent ideal indicators of the level of economic development of a country or region, because they fail to take into account distributional inequalities and ignore the extent to which basic needs are satisfied. However, the paucity of data often makes more comprehensive statistical comparisons difficult to achieve. Hence, an attempt will be made here to place Ciskei in its regional, national and international setting on the basis of per capita income statistics only. While recognising that the value of such comparisons may be limited, they should not give rise to any seriously misleading distortions in the present instance.

In Table 8.5 the real GDP and GNP per capita income figures (at 1970 prices) of the nine designated black states in South Africa are shown. In Table 8.6 they are expressed as percentages of the RSA figures for the same years, as calculated in Table 8.9. In Table 8.7 the nine black

states are ranked in terms of GDP and GNP per capita; according to this ranking Ciskei is seen to occupy an intermediate ranking for the time period considered. In terms of real GDP per capita Ciskei's ranking relative to the other black states varies from 2nd in 1976 to 5th position in 1977, but 3rd (the 1978 and 1980 values) or 4th (the 1975 and 1979 values) would seem more realistic. Relative to the RSA, Ciskei's GDP per capita is very low, ranging from 7,8 per cent in 1975 to 11,7 per cent in 1978. The 1980 figure was 10,4 per cent. In terms of real GNP per capita relative to the RSA, the designated black states appear in a considerably more favourable light, but again Ciskei's performance is "average". Ciskei's ranking relative to the other black states varies from 4th (in 1976) to 6th position (1975 and 1980), but 5th (1977, 1978 and 1979) would seem more realistic. Relative to the RSA, Ciskei's GNP per capita is still very low, varying from 20,8 per cent in 1975 to 29,1 per cent in 1978. The 1980 figure was 25,9 per cent. This was considerably better than the relative position of GDP per capita, which again emphasises the importance of foreign factor receipts for per capita income in Ciskei.

As mentioned, the GNP per capita of Ciskei in 1980 was R464²⁵ at market prices while that of the RSA was R2 048. Hence GNP per capita in Ciskei was 22,7 per cent of that in the RSA in 1980. In Table 8.8 the GNP per capita of 125 countries divided into five designated levels of economic development, according to World Bank classification, is shown for the year 1980; and this figure is also expressed as a percentage of GNP per capita for RSA, which was \$2 300 in 1980²⁶. Clearly Ciskei does not conveniently fall into any one of the specified levels of economic development. Ciskei's GNP per capita is higher than the weighted average of the Low-income economies (11,3%), but considerably lower than that of the Middle-income economies, as a percentage of the RSA's GNP per capita (60,9%). In Table 8.10 Low-income economies are defined as those with a per capita GNP less than \$ 410 (17,8% of RSA) and Middle-income economies with GNP per capita greater than this level. Ciskei (22,7%) would thus fall into the lower end of the "middle income" group of economies. Of the 125 countries listed by the World Bank, Ciskei would have ranked 10th from last among the 63 countries regarded as "Middle income economies", in terms of the GNP per capita observed for 1980.²⁷

In Table 8.11, the GNP per capita in 1980 of the 39 African states for which data are available in the 1982 World Development Report is shown, and the GNP per capita as a percentage of the RSA value is again calculated.²⁸ The ranking of these countries relative to Ciskei in terms of GNP per capita can clearly be seen. Firstly, it should be noted that of the 33 countries designated "Low-income economies" above, 20 were in Africa. Only Libya (\$8 640 per capita) had a higher GNP per head than South Africa, but then the highly skew income distribution prevalent in oil-exporting countries in particular should be borne in mind in this case. Of the 40 countries listed in Table 8.11, Ciskei ranked 27th on the basis of per capita income alone, and, hence, in an African context Ciskei would appear to perform slightly better than average in terms of income per head. While many African countries are worse-off than Ciskei in terms of GNP per capita, a significant number are better-off. GNP per capita in Ciskei was marginally lower than in the Southern African states of Zambia and Zimbabwe, fractionally higher than Angola and Lesotho, but considerably higher than Mozambique. As pointed out above, GNP per capita in Ciskei was only 22,7 per cent of that for South Africa as a whole.

On the basis of GNP per capita alone it can, therefore, be inferred that Ciskei represents a fairly typical underdeveloped territory in a regional, African and global context. Chapters 5 and 6 discussed various measures pertaining to the degree of Basic Needs satisfaction. But again very considerable statistical problems tend to be present in using such data for inter-country comparisons. However, two of these measures, namely adult literacy and life expectancy at birth do lend themselves to international comparisons in the present case, albeit to a limited extent. For example, definitional problems occur as to what comprises "literacy", while failure to register births or deaths may distort life-expectancy values. Also, when such data are available for different countries or regions, they do not always refer to the same time period, thus aggravating the problems of comparability.

No official or reliable figures for life expectancy at birth and adult literacy exist for the designated black states in South Africa and so it is impossible to rank Ciskei relative to the other black states as was done for GNP per capita. In the "Page Report" 58 per cent of Ciskeians were said to be literate in 1970,²⁹ and this compared favourably with

the figure for the "whole of the Xhosa nation", which was 43,9 per cent.³⁰ Given a considerable increase in expenditure on education, and the lower pupil/teacher ratios observed since 1970 (discussed in section 8.3 below) it seems likely that the level of literacy has increased since 1970. Evidence of this is provided in Table 8.12, where the literacy of the Xhosa aged 15 years and more is said to be 72,7 per cent in 1980. Given the fact that literacy for Ciskei in 1970 was higher than that for the "Xhosa nation as a whole", the 1980 literacy rate for Ciskei is unlikely to be lower than the 72,7 per cent for the Xhosa.

Official literacy rates are not available for the other designated black areas in South Africa either, and, hence, an inter-regional comparison with Ciskei, as was done for GNP per capita, is not possible. It is, however, possible to make a comparison on the basis of ethnicity, and in this regard the Xhosa would seem to fare comparatively well. Only South Sotho, with a literacy rate of 73,5 per cent, rank higher than Xhosa out of the 11 ethnic divisions in Table 8.12, while the level of literacy of all black people in the RSA was, by comparison, 66,9 per cent. Hence, Ciskei's performance seems markedly better than the average black performance in the RSA as a whole.³¹ It should be realised, however, that the level of literacy in Ciskei is unlikely to be the same in all constituent areas of the territory. Thus, in 1970, the level of literacy appeared to vary from 50 per cent at Peddie, to 66,2 per cent at Keiskammahoek. In Mdantsane 55,3 per cent of adults were reported to be literate while in Zwelitsha the corresponding figure was 59 per cent.³² Hence, the Page Report comments: "It is difficult to account for this phenomenon as it would normally be expected that the highest educational level would be obtained in the urban areas."³³

In Table 8.13, the literacy rates for the designated levels of economic development, as distinguished by the World Bank (above), are shown for the year 1977. Even at a 1970 level, of 58 per cent, Ciskei compares well in terms of adult literacy and would rank among the Middle-income economies, whose weighted average was 65 per cent in 1977. With a 1980 literacy rate of 73,5 per cent or more, Ciskei's performance would rank it amongst the very top middle-income economies and, hence, considerably higher than would be "expected" on the basis of GNP per capita alone. In Table 8.14 the literacy rates (where available) of the 39 African States for which data are given in the 1982 World Development Report are shown.

At the 1970 literacy rate, only Somalia, Tanzania, Zimbabwe and Tunisia fare better than Ciskei, while the 1980 rate of 73,5 per cent is surpassed only by Zimbabwe. Again Ciskei appears to perform much better than "expected" on the basis of GNP per capita alone. However, when compared with Table 5.2.1 (above) Ciskei's position is slightly less favourable. Ciskei's literacy rate is considerably better than the 1976 figures for Capital-Surplus Oil Exporters (50%) and Low-Income Economies (51%), but approximately equal to that of Middle-Income Countries (72%). This was substantially lower than the 99 per cent adult literacy for Industrial Market Economies in 1976.

Comparisons on the basis of life expectancy at birth are even more tentative than those on adult literacy, on account of data problems. As official vital statistics registration is manifestly incomplete in the case of South Africa's black population, it is perforce difficult to calculate accurate measures of fertility and mortality, and, hence, life expectancy. The Science Committee of the President's Council³⁴ reported that the average life expectancy at birth of black people in South Africa in 1980 was 57,5 years while for whites it is 65 years and for coloured people 59 years. The black figure was based on a death rate of 90 infants per 1 000 births during the first year after birth. In Mdantsane the comparable infant mortality rate was said to be 1 in 10 (100 per 1 000 births) in 1978.³⁵ Mdantsane was considered to be "probably the 'best' health area" in Ciskei, and, hence, infant mortality for Ciskei as a whole would probably exceed 1 in 10. Consequently it may be inferred that life expectancy at birth in Ciskei would be less than 57,5 years (the average South African black figure), but by how much remains unclear. It is clear that the life expectancy at birth in Ciskei is also lower than that of whites and coloureds in South Africa as a whole.

The position of life expectancy in Ciskei relative to other individually designated black areas in South Africa is uncertain. In Table 8.14, life expectancy at birth for South Africa as a whole is given as 61 years in 1980, which is significantly higher than the expected level for Ciskei. In a broader context, Ciskei would seem to rate among the top 13 African countries which have a life expectancy at birth of 50 years or higher, as also shown in Table 8.14. This is much the same as would be expected on the basis of GNP per capita alone. In a global context, Ciskei would

seem to rank alongside the Low-income economies, which exhibited a weighted average of 57 years in 1980, and not the Middle-income economies with a weighted average of 60 years. Relative to the data in Table 5.2.1, Ciskei's life expectancy at birth of 57,5 years is again unsatisfactory, and ranks alongside that of Capital-Surplus Oil Exporters (56 years) and Low-Income Countries (57 years) in 1979. This is significantly lower than Middle-Income Countries (61 years), Nonmarket Industrial Economies (72 years) and Industrial Market Economies (74 years). This outcome is therefore different to that previously noted in the case of adult literacy.

In summary it may thus be concluded that Ciskei displays the broad characteristics of an economically underdeveloped region, ranking somewhere between a Low-income and Middle-income economy along the World Bank' global scale. While having a higher than "expected" Adult literacy rate, the Ciskei's GNP per capita and Life expectancy at birth would classify it as neither a well-off nor an exceptionally poor region. In section 8.3 of this chapter a more detailed analysis of basic needs in Ciskei will be attempted. As Ciskei would appear in many ways to display the characteristics of a fairly "typical" underdeveloped economy, it may well follow that the Basic Needs features present there would be capable of yielding broad policy conclusions of fairly general application. Meanwhile, in the following section the characteristics of Ciskei's economy will be examined in terms of the Regional Growth theories discussed in Chapters 2 and 3.

8.2 THE EXPORT BASE OF CISKEI

Chapter 2 discussed an economic model where the rate of growth of regional exports was taken to be the primary determinant of the rate of growth of regional income. In the simple Export Base model, exports were shown to be the sole autonomous determinant of regional income, and all other elements were functions of income. But, in the analysis of the extensions of the Export Base model put forward by Tiebout, and Hartman and Seckler, this assumption was proved to be unrealistic. The autonomous base was then expanded to include internal determinants of income, such as internal investment and consumption, government expenditure, and structural changes. It was concluded that any general theory of regional income growth should consider both the autonomous and induced components of investment.

Such a conclusion is of considerable importance for regional economic policy. For example, in the case of Ciskei, it will influence the importance of alternative development strategies on the region's economic growth performance. It will determine the direct impact of investment outside Ciskei (in both the adjacent Border region and the rest of South Africa) on Ciskei's income (exogenous income growth), and on induced growth within Ciskei (endogenous income growth). It will also determine the importance of autonomous internal factors for regional income growth, as well as the impact of investment in Ciskei at alternative locations ("internal growth points" and "border urban areas"), and the induced effects of this investment. The conclusions reached will influence the potential merits of a policy designed to increase Ciskei income as part of a general strategy of regional growth for the wider Ciskei/Border/Transkei region (Region "D"), or of increasing internally generated (endogenous) income.

The Gross National Product (Income) at factor cost of Ciskei is shown for the years 1975-1980 in Table 8.15. In 1980, the GNP of Ciskei was R340,7 million, of which R118,9 million (34,9%) was earned by (black and non-black) persons inside Ciskei, while R221,8 million (65,1%) was earned outside Ciskei. This compared with a 1975 GNP of R149,8 million, of which 32,3 per cent of income was earned inside Ciskei, and 67,7 per cent outside. Between 1975 and 1980 there was thus a nominal increase in GNP of R190,9 million (or 227,4%). In Table 8.16 the real GNP of Ciskei at 1970 prices is shown for the same period. Real GNP rose from R35,0 million in 1975 to R47,6 million in 1980, an increase of 36% (or 6,3% per annum). Throughout this period, the largest share of income in Ciskei was earned outside Ciskei (exogenous income), which fell from 67,7 per cent of total income in 1975 to 65,1 per cent in 1980.

Following the example of Black³⁶, let $Y = Y_x + Y_n$, where Y = Gross National Income, Y_x = exogenous or autonomous income, and Y_n = endogenous or induced income. From the expanded Export Base model, $Y_n = a + bY$, where a and b are constants. Hence, $Y = (a + Y_x) / (1-b)$ and $dY / dY_x = 1 / (1-b) = k$, where k is the expanded Export Base multiplier. Thus regional (or, for that matter, national) income is equal to the level of autonomous income (the Export Base) multiplied by the expanded Export Base multiplier, k . A given increase in Y_x causes Y to increase by a multiple of k .

In Ciskei, the primary export can be said to be labour (both migrants' and commuters'). Income earned outside Ciskei is exogenous and two sources of exogenous income can be identified: commuter income³⁷ (Y_c) and migrant income³⁸ (Y_m). Both commuter and migrant income are exogenous as they represent income earned from the export of labour to the "white" areas outside Ciskei. The remaining part of Gross National Income is earned inside Ciskei by black and non-black residents, and this can be said to be endogenous income (Y_n).

The components (Y_c and Y_m) of exogenous income (Y_x) and endogenous income (Y_n) are shown for the years 1975 to 1980 in Table 8.17. The Export Base multiplier is equal to $dY/d(Y_c + Y_m)$, which, over the period 1975 to 1980 is equal to 1,585. In other words, an exogenous increase in income of R1 000 would "cause" an increase of R1 585 in the Gross National Income of Ciskei. This agrees closely with the annually calculated multipliers for the individual years in Table 8.17, as well as with Black's³⁹ calculation of 1,374 between 1970 and 1974.⁴⁰

In Table 8.18, the exogenous, endogenous and total Gross National Incomes are given for the nine designated black states in South Africa for the years 1975 and 1980, and Export Base multipliers are calculated for each region, and for the regions as a whole. The Export Base multiplier of Ciskei for 1975 to 1980 appears slightly larger than the multiplier of 1,44 for the black states as a group. The multiplier coefficient varies from 1,83 in Transkei to 1,21 in Kwazulu, but there would seem to be little direct relationship between the size of the region and the size of the multiplier. Thus two relatively large regions, Transkei and Bophuthatswana, have relatively large multipliers, but another large region, Kwazulu, has a relatively small multiplier. Similarly, Gazankulu, a small region, has a multiplier nearly as large as the much larger regions Ciskei and Venda. But none of these differences is very significant, which would appear to contradict the point made in Chapter 2 that the larger a region, the relatively smaller its export base.⁴¹ However, the four de jure independent black states, Transkei, Ciskei, Venda and Bophuthatswana, all had larger multiplier coefficients than the five remaining black states.⁴²

It was noted above, that for every increase of R1 000 in exogenous income (exports), total income in Ciskei would increase by R1 585. But not all of the additional R585 over and above R 1 000 is induced income. In terms of the simple Export Base multiplier, endogenous income is necessarily induced by the increase in exogenous income, as exports are assumed to be the only autonomous determinant of regional income growth (see Chapter 2.1). But according to the expanded Export Base multiplier (Chapter 2.3), part of the increase in endogenous income could actually be autonomous. Increased income in Ciskei could in principle be the result of government expenditure, autonomous private investment and consumption, or past increases in internal income. These factors are all autonomous and unrelated to changes in the export base. Black argues: "all exogenous income is, by definition, autonomous income; there is no way in which an increase in exogenous income can cause increases in the production or turnover of local industries, without it being reflected as an increase in the endogenous income of the homelands. Endogenous income, on the other hand, is not necessarily equal to induced income. It is quite possible that, within a given time period, part of the increase in endogenous income could be autonomous."⁴³ To the extent that the endogenous increases in income are autonomous, the Export Base model as defined above will overestimate the induced effects of an increase in exogenous income on the national income of Ciskei.

In Table 8.1 the Gross Domestic Product of Ciskei according to the kind of economic activity, and the percentage share of GDP of each activity, are shown for the years 1970, 1975 and 1980. It was observed in the Ciskei Commission (or Quail) Report of 1980: "Of the goods and services produced in the Ciskei, food and manufacture constitute less than a quarter, whereas half of the territorial output is comprised of public administration, education and financial services. This contrasts with the normal structure of a low-income economy in which the two directly productive sectors (i.e. agriculture and manufacturing) typically constitute 50 or 60 per cent of the GDP"⁴⁴ The prime source of induced endogenous growth would intuitively be expected to be in the agricultural and manufacturing sectors, but the joint contribution of these two sectors rose only marginally from 26,7 per cent in 1970 to 30,5 per cent in 1980, while the individual share of agriculture and forestry actually declined from 16,3 per cent to 8,3 per cent over the same period. Thus the contribution of manufacturing rose significantly from 10,4 to 22,2

per cent during this period. A principal source of autonomous endogenous expenditure would be expected to lie in government expenditure (and in private investment), and it is therefore significant that the relative contribution of Public Administration, Education and Health, rose from 36,3 per cent of GDP in 1970, to 37,1 per cent in 1980, while Construction rose sharply from 7,0 per cent to 16,4 per cent over the same period.

Thus, it can be concluded that an important source of endogenous income growth in Ciskei between 1970 and 1980 would seem to have been autonomous rather than induced. Accordingly, the size of the Export Base multiplier over this period is likely to have been smaller than otherwise suggested. Part of the increase in income must be attributed to autonomous endogenous factors, rather than being induced income resulting from increases in exogenous income. The same argument is likely to apply to the other designated black states in South Africa, and, hence, it may be concluded that the induced growth potential of an increase in exports in a territory like Ciskei is bound to be relatively small. Increases in domestic income are due mainly to increases in exogenous income from commuters and migrants, and hence, as was suggested above, the growth of the Ciskei economy is heavily "dependent" upon the growth of the larger South African economy. This "dependence" would seem to be more or less constant, as in 1970 exogenous income comprised 67,7 per cent of Ciskei's income and in 1980 was 65,1 per cent. Similarly, for the black states as a group, the corresponding percentage was 70,6 per cent in 1970 and 70,0 per cent in 1980. Thus the Quail Commission concluded: "at its current state of development the Ciskei is more of a dormitory area for South African wage-earners and surplus population than it is a viable economic entity on its own."⁴⁵

As a result of the evidently weak Export Base multiplier in Ciskei, two alternative development strategies may be suggested. Firstly, attempts could be made to raise the size of the regional multiplier, so that induced endogenous income is increased.⁴⁶ In this way the effect of an expansion in exports on total income would be enlarged by the thus increased induced endogenous income. Alternatively, the relatively small multiplier may be accepted as given, and efforts directed solely at raising the level of exports, i.e. effectively larger migrant and commuter income.

Since the publication of the Tomlinson Commission Report of 1955⁴⁷ and the subsequent White Paper⁴⁸, the policy of the South African government has been to encourage the decentralisation of industries, first to the black states themselves, then to the adjacent "border areas", and, more recently, to various "growth points" either within or on the borders of the black states. The "border areas" are in "white" South Africa, and black workers commute on a daily basis from homeland towns to the "white" urban areas. In Ciskei, this policy was responsible for the creation of large urban areas, principally at Mdantsane and Zwelitsha⁴⁹, and the significant increase in commuter income of 120,7 per cent between 1975 and 1980⁵⁰, although the number of commuters evidently increased from 34 600 to only 38 100 between 1977 and 1980⁵¹. Between 1977 and 1981, the reported number of migrant workers from Ciskei rose from 54 000 to 60 000⁵² (11 per cent), but migrant income increased by 117,4 per cent between 1975 and 1980⁵³. Thus in 1980, 5,4 per cent of the de facto population of Ciskei appeared to be employed as commuters⁵⁴ and 8,4 per cent as migrants⁵⁵. But this 13,8 per cent of the de facto population was responsible for 65,1 per cent of total income⁵⁶. Yet, because of the small Export Base multiplier, the induced effect of this exogenous income on endogenous income within Ciskei, was negligible.

In the Ciskei townships adjacent to the "border areas", a large percentage of commuter income is spent in the "white" economy outside the territory of Ciskei, and, hence, induced investment resulting from increased commuter expenditure is likely to take place in the "white" economy rather than in Ciskei. Because of this large leakage of income from Ciskei, "border" industries, while being the greatest source of exogenous growth in Ciskei, also limit the induced endogenous growth potential of the region.

The Export Base multiplier is low because commuters in the "border areas" tend to consume goods bought in the "white" commercial areas rather than in Ciskei. This propensity to import consumer goods is likely to be lower at internal "growth points" than "border areas", simply because of the greater distance to the white shopping centres. Hence, a greater proportion of wages earned at internal "growth points" is likely to be spent in Ciskei than in the case of commuter income, and the induced effect of the multiplier is thus likely to be larger. As a result,

ceteris paribus, a suggested strategy designed to increase the size of the Export Base multiplier, is that industrial development should be concentrated at "growth points" within Ciskei rather than in "border areas". But the difference in the size of the multiplier at internal "growth points" relative to that in "border areas", is likely to be reduced by the fact that many of the consumer goods bought inside Ciskei are likely to have been imported from outside the region in the first place. Hence, the leakage of income at internal "growth points" is also likely to be comparatively large. But this leakage will not eliminate the positive effect on the multiplier of internal "growth points" completely. Even if all consumer goods were imported, the multiplier would be increased by at least the profit margin on sales of consumer goods accruing to Ciskeian businessmen. However, if a Basic Needs policy were adopted then, on the arguments presented in Chapter 5, the propensity to import should be reduced⁵⁷, and, ceteris paribus, the multiplier increased accordingly.

A second factor affecting the size of the Export Base multiplier is the import content of any given increase in autonomous expenditure. Autonomous investment at first increases income by an amount equal to the wages and profits thus received. But in a regional context, these increases may "leak out" of the region in the form of capital imports as well as profit (or wage) remittances, and hence the increase in autonomous regional income may be less than the increase in autonomous investment. In an underdeveloped region, like Ciskei, the higher the capital/labour ratio of autonomous investment, the greater will be leakages resulting from capital imports, and the lower will be the multiplier. Conversely, the more labour-intensive (low capital/labour ratio) is investment, the greater will be the multiplier, ceteris paribus, because of the high propensity to consume associated with labour-intensive industries.⁵⁸

In the "border areas" only the wage component of autonomous investment accrues to Ciskei, profits and capital expenditure being confined to the "white" economy. It is possible that the impact of autonomous investment at internal "growth points" is similar, depending as it does upon "the effect that different ratios of the value of capital to that of labour may have on the import content of autonomous expenditure".⁵⁹ The lower the capital/labour ratio, the lower the capital import content of

autonomous expenditure will be and the greater will be the propensity to consume, and, hence, the larger the resultant increase in income.

A rough estimate of capital/labour ratios for Ciskei may be made by comparing the total capital investment per estimated (black) employment opportunity, created by industries in "border areas", with the total capital investment per (black) employment opportunity created inside Ciskei. Using this method, the capital investment in the "border areas" of Ciskei up to 1981 was found to be R11 372⁶⁰ per black employment opportunity, while that in industries established inside Ciskei was R10 606⁶¹ per employment opportunity. This would tend to suggest a lower capital/labour ratio for industries inside Ciskei than in "border areas". Hence, the size of the multiplier in internal "growth points" is likely to be greater than in "border areas", because of the lower import content and greater propensity to consume of autonomous expenditure. A strategy designed to raise the size of the Export Base multiplier could, therefore, be aimed at shifting the preponderance of autonomous investment from "border areas" to internal "growth points".

However, strategies designed to increase the size of the multiplier by directing investment towards internal "growth points" may ignore the possibility that these positive factors affecting the size of the multiplier could be more than offset by the possibility that autonomous investment in "border areas" may be more likely to induce further investment, and, hence, further commuter employment and income (the so-called "super-multiplier"⁶²). As a result, the increase in total income in Ciskei may be greater, after all, if autonomous investment takes place in "border areas" than at internal "growth points".⁶³ In this case a development strategy for Ciskei should, of course, rather be directed at concentrating investment in the "border areas" than the internal "growth points".

The consequences of these factors for the adoption of a regional development strategy for Ciskei are considerable. Firstly, it has been shown that the growth of income in Ciskei has been closely linked to development in the South African economy, and, in particular, to development in the "border areas" of Ciskei - as evidenced by the continued dominance of commuter and migrant income as a proportion of GNP. But the "spread effects" of the growth of commuter and migrant

income on the internal economy of Ciskei have been limited. A large part of commuter income is spent outside the borders of Ciskei and thus the multiplier effect of increases in commuter income is experienced elsewhere, and the induced effects inside Ciskei are small. Hence, while commuter and migrant income are an important source of exogenous income growth, their effect on endogenous growth is rather limited. This would seem to suggest that exogenous investment should rather be attracted to internal "growth points" within Ciskei, where the exogenous increase in income would be the same as in the "border areas", but the endogenous effect should be greater because of higher propensities to consume, a lower import content of consumption, and lower capital/labour ratios. But the possible existence of a "super-multiplier" in "border areas" means that the total effect on income of investment there may be greater than for equal investment at internal "growth points". However, because of the high leakages from Ciskei in "border areas", a strategy concentrating on the surmised "super-multiplier" effect of investment there would increase the "dependence" of the Ciskei economy on the "white" South African economy. Economic growth would, therefore, seem to be promoted at the expense of economic independence. Conversely, a strategy directed at investment at internal "growth points" would seem to promote economic independence at the expense of economic growth.

Because of the limited impact of the "border" industry strategy on the "internal" economy of Ciskei, the Ciskei government adopted an internal "growth point" strategy in the mid-1970's, which is summarised below.

PROPOSED GROWTH-CENTRE STRATEGY FOR CISKEI

<u>Designation of central places</u>	<u>Name of centre</u>	<u>Proposed functions and comments</u>
Administrative capital	Alice	Parliament, government offices and university
Industrial capital	Middledrift	Industrial and business centre, magistracy; will eventually coalesce with Alice, 14km away.
Regional centres	Sada, Seymour, Peddie, Mt Coke	Magistracy, hospital, secondary schools, police, post office, clinic
Ward towns	Bull Hoek, Heald Town, Kamastone, Newtondale, etc.	Retail trade, primary and secondary schools, police, post office, clinic.
Existing border towns	Mdantsane, Zwelitsha	No further growth to be encouraged
Local agricultural villages	About 32 centres	Farming services, retail trade, primary schools, post office, clinic.
Principal tourist centre	Hamburg	Holiday resort, yacht basin, casino and conference centre.

The object of this strategy was to concentrate exogenous and endogenous economic growth within the borders of Ciskei, so that "leakages" might be minimized and "spread" effects maximized. But, the capital cost of the Alice and Middledrift projects alone was estimated at R100 million each⁶⁵. Given a gross fixed investment by the Ciskei government of R8,6 million in 1976, and a total gross fixed investment by both the

Ciskei and South African governments of R24,0 million in the same year⁶⁶, such investment would seem to be totally beyond Ciskei's resources. In 1979 industrial output in Ciskei was limited to 31 factories established at a total cost of R23 million.⁶⁷ Most of these factories were located at Dimbaza under the "agency system" - where incentives provided to industrialists included loan capital at an interest rate of 3,8 per cent, annual factory rentals of 6,8 per cent of construction cost, 40 per cent rebate on railway tariffs, relocation grants, a 7 per cent price preference on government tenders, and income tax relief convertible into cash grants if "insufficient" profits were earned⁶⁸. In March 1981 total capital investment in all industrial undertakings established with the aid of concessions in Ciskei was R32,6 million⁶⁹, and 3 076 black employment opportunities⁷⁰ had been created, giving an investment per job opportunity of R10 606, as was mentioned above. Of these employment opportunities, some 21,3 per cent were in food, beverages and tobacco manufacture, 37,2 per cent in textiles and leather, 18,4 per cent in wood and wood products, 0,6 per cent in paper products, printing and publishing, 3,6 per cent in chemicals and chemical products, 0,9 per cent in non-metallic mineral products, 6,1 per cent in basic metal industries, and 11,9 per cent in fabricated metal products.⁷¹

Manufacturing comprised 10,4 per cent of GDP in 1970 and 22,2 per cent in 1980.⁷² However, in terms of GNP, which is a more significant measure of economic welfare, the impact remains limited. The absolute size of the manufacturing sector cannot be deemed "large". Despite the possible advantages of an internal "growth-centre" policy in respect of the multiplier, such a policy is likely to have only limited effect in the light of the previous success of Ciskei in attracting manufacturing industry. The proposed massive investment at a "growth centre" like Middeldrift (or anywhere else) would hardly seem economically justified. Such investment would simply duplicate existing infrastructure e.g. at Berlin (just beyond the Ciskei border) and Dimbaza, and the return on such capital is likely to be low relative to similar expenditure on development projects like irrigation, agriculture and Basic Needs provision.

The limited success of attempts to attract manufacturing industry to Ciskei can be attributed largely to locational disadvantages prevailing

there. In Chapter 3 an analysis of the factors affecting location was made and various theories of location were discussed. The principal factors affecting location were identified as transport costs, the situation of inputs and markets, internal and external economies of scale, and agglomeration economies. It was concluded that firms would tend to locate near markets, input sources, and areas of agglomeration, where economies of scale are concentrated, and risks are minimised. The location of manufacturing will tend to be confined largely to existing areas of economic concentration, and economic growth is, therefore, cumulative by nature. Rapidly growing regions will continue to grow, while areas in which there is little economic activity will stagnate. This conclusion was then elaborated upon in the Principle of Cumulative Causation.

The "growth-centre" strategy and the "agency system" of incentives are designed to overcome the disadvantages of locating in Ciskei. The incentives to industrialists (summarised above) were designed to overcome high transport and capital costs, to compensate for distance from markets and factor inputs, and the absence of economies of scale and agglomeration economies in Ciskei. Despite these incentives, only limited success in attracting manufacturing industries was achieved. This can be attributed, in part, to the "psychic income" factors affecting location discussed in Chapter 3. It was concluded that "firms may not locate at the optimal profit-maximising location if they believe it to involve greater risks than alternative locations"⁷³, and Richardson warned: "broadly speaking the majority of industrialists will prefer to concentrate at established industrial centres even if production costs are higher than at alternative sites with few market access disadvantages"⁷⁴; and, "personal considerations may be important in the location decision."⁷⁵ Locational decisions in Ciskei may have been influenced by the risks and "psychic" costs associated with locating away from areas of existing economic concentration, as well as the political uncertainty associated with the region's future. In addition, there is the problem of a shortage of skilled labour, and the need for (white) management to commute from centres like East London, King William's Town and Queenstown to Dimbaza.

One possible response to the limited success of this policy is to suggest that the incentives offered to industrialists in the past have been

insufficient to compensate for the locational disadvantages (both "psychic" and financial) of establishing manufacturing industries in Ciskei. Hence, all that would be required is for greater financial incentives to be offered to potential industrialists. This would seem to be the philosophy behind the recently adopted Regional Development Strategy for Southern Africa⁷⁶. The official map which is reproduced in this document follows after this page.

In brief, this plan concentrates upon promoting industrial development in regions other than the four main metropolitan areas of South Africa.⁷⁷ South Africa (designated as "Southern Africa" in the official document) is divided into eight development regions, Region D comprising the Southern Transkei, Ciskei, the Border corridor, and the Eastern Cape including Port Elizabeth. Of the eight regions, Region D is considered to be the region most in need of economic development, state incentives and policy action. Incentives for industrial development at nine "deconcentration" and "industrial development" points in Region D have been announced. These points include three interior "growth points" for Ciskei (Mdantsane, Dimbaza and Sada) and two "border areas" (East London and King William's Town), discussed above. In addition, the concept of regional development is broadened to include agricultural development, the growth of small industries and informal sector activities.⁷⁸ But the manner in which these additional dimensions to regional development are to be implemented is not yet specified, and, hence, Bekker, Black and Roux conclude: "The Plan leaves the impression that industrial development remains the main thrust of the regional development policy."⁷⁹

This so-called "Good Hope Plan" therefore amounts to increasing the financial incentives for industrial decentralisation above previously proffered levels, so as to overcome existing locational disadvantages. The internal "growth points" of Dimbaza, Sada and Mdantsane offer 60 per cent rail rebates, employment incentives for seven years amounting to 95 per cent of the total wage bill with a maximum of R110 per worker per month, training grants, an 80 per cent rental and interest subsidy for ten years, a housing subsidy of 60 per cent of the prevailing interest rate, a re-location allowance, and a 10 per cent price preference on government tenders.⁸⁰ Concessions at the "border areas" of Ciskei are less generous (a 60 per cent rail rebate, a subsidy of 80 per cent of the

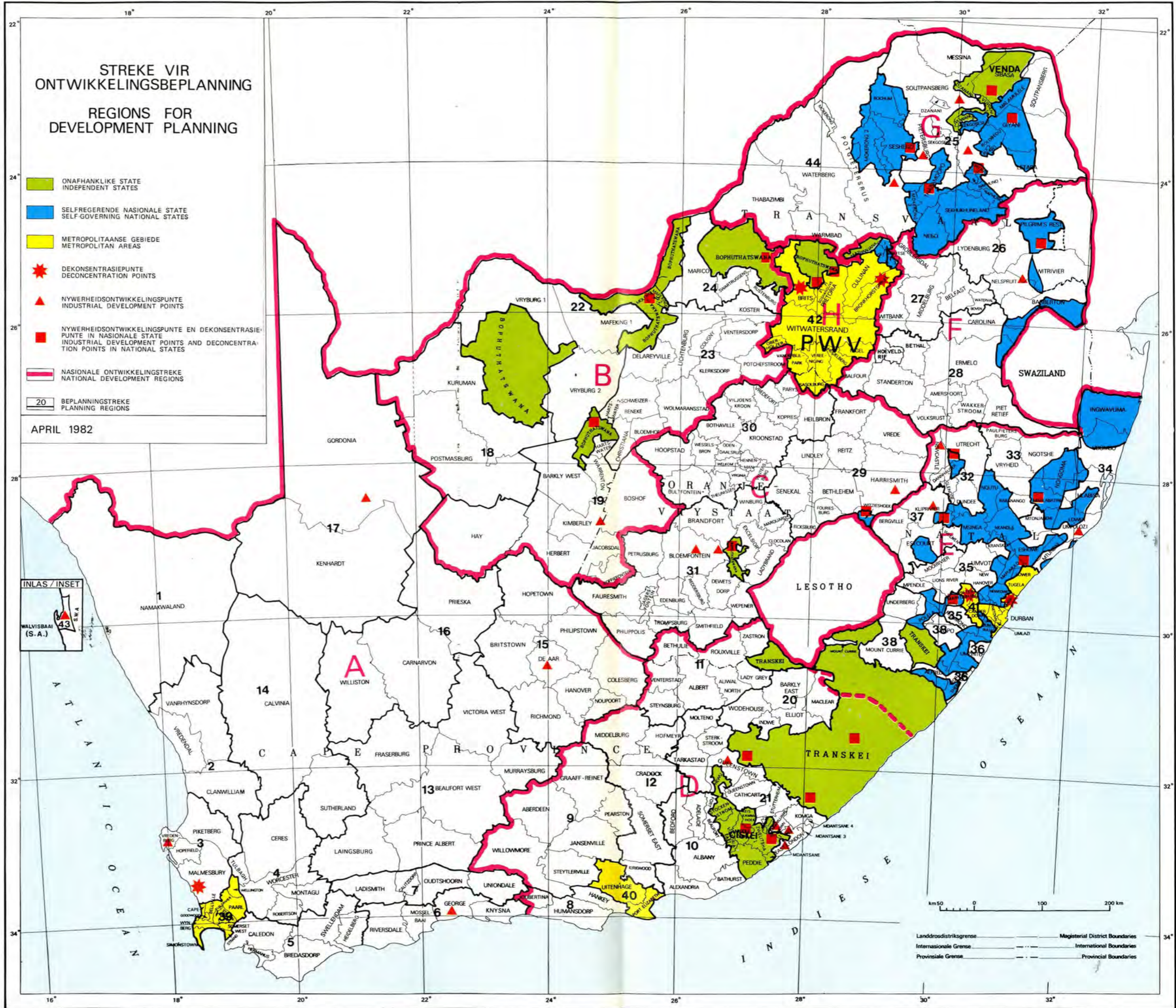
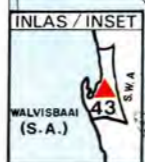
1968

STREKE VIR ONTWIKKELINGSBEPLANNING

REGIONS FOR DEVELOPMENT PLANNING

- ONAFHANKLIKE STATE
INDEPENDENT STATES
- SELFREGERENDE NASIONALE STATE
SELF-GOVERNING NATIONAL STATES
- METROPOLITAANSE GEBIEDE
METROPOLITAN AREAS
- DEKONSENTRASIEPUNTE
DECONCENTRATION POINTS
- NYWERHEIDSONTWIKKELINGSPUNTE
INDUSTRIAL DEVELOPMENT POINTS
- NYWERHEIDSONTWIKKELINGSPUNTE EN DEKONSENTRASIE-
PUNTE IN NASIONALE STATE
INDUSTRIAL DEVELOPMENT POINTS AND DECONCENTRA-
TION POINTS IN NATIONAL STATES
- NASIONALE ONTWIKKELINGSTREKE
NATIONAL DEVELOPMENT REGIONS
- BEPLANNINGSTREKE
PLANNING REGIONS

APRIL 1982



Landdroonstreeksgrense
Internasionale Grense
Provinsiale Grense

Magisteriale Distriktsgrense
Internasionale Grense
Provinsiale Grense

total wage bill with a maximum of R100 per worker per month, a training grant, a 60 per cent rental and interest subsidy for ten years, a housing subsidy of 60 per cent of the interest rate, a re-location allowance and a 5 per cent price preference on tenders⁸¹). The interior "growth points" are given equal incentives to the Transkeian "growth points" of Butterworth, Umtata and eZibeleni which are only marginally better than similar advantages at "growth points" in the other black states. However, the financial incentives offered in the (white) "border areas" of King William's Town and East London do compare favourably with those offered in the (white) "border areas" in the rest of South Africa.

However, it has been concluded that the "Good Hope Plan" is likely to have limited effect in overcoming the "psychic" and financial disadvantages of locating at Ciskei interior "growth points" as against (white) "border areas". Thus, Bekker, Black and Roux conclude: "whilst the new decentralization policy may benefit the white border areas of East London and King William's Town, it is unlikely to bring about a significant redistribution of resources in favour of the rural areas of Ciskei: if anything, the policy may well increase Ciskei's dependence on the white economy of the Eastern Cape, thus exacerbating existing differences in income and employment between the urban and rural areas of Ciskei."⁸² Hence, exogenous income growth may be expanded, but the effect on endogenous income growth may remain negligible.

But, as was argued at the end of Chapter 7, an alternative strategy to reliance on industrial development would seem to be possible, namely, the expansion of the multiplier through endogenous income growth by the adoption of a Basic Needs strategy. Such a strategy would concentrate on the production of goods and services for which there is a large internal demand in Ciskei, and, therefore, the consumption-leakages from the local production of Basic goods and services should be small. Basic needs should be satisfied by labour-intensive, low-import techniques, and, consequently, the consumption-multiplier effect should be enhanced, and the import-leakages reduced. Informal sector and small-scale production of Basic goods and services would be promoted, and this should not only lower the price of such Basic goods and services to consumers, but also lower the travelling costs of consumers to "white" commercial areas, and thus raise the long-term endogenous growth potential of Ciskei.

In summary, an alternative economic development strategy should combine industrial development with the satisfaction of basic needs. Industrial development should be encouraged, where possible, in the border "growth points" of Mdantsane, Sada and Dimbaza, so that maximum advantage may be obtained from both the expansion of the Export Base multiplier and the "super-multiplier". Industrial development should not be seen as the only requirement for economic development. At the same time, endogenous growth should be encouraged by the satisfaction of basic needs (i.e. education, health, water supply and sanitation, nutrition and shelter) within Ciskei. In this way progress towards a "threshold" of internal economic development that is conducive to self-sustaining economic growth may be achieved.

8.3 BASIC NEEDS IN CISKEI

In Section One of this Chapter an attempt was made to place the general economic position of Ciskei and the extent, at least partly, of Basic Needs satisfaction there in a regional and international perspective. On the basis of a comparison of GNP per capita, adult literacy, and life expectancy at birth, it was concluded that Ciskei occupied a fairly unexceptional position as an underdeveloped economy in terms of Basic Needs performance. But, a memorandum by Dr H.L.G. Thomas concluded that: "Many people have inadequate means for basic survival and are consequently teetering on the edge of a social precipice."⁸³ In this section an attempt will be made to examine those "core" basic needs (education, health, water supply and sanitation, nutrition and shelter) outlined in Chapters 5 and 6, and an attempt will be made to assess the extent to which each of these needs is satisfied in Ciskei. In Chapter 5.2 various measures were suggested by which the level of Basic Needs satisfaction could be gauged. Where possible these measures will be used, but unfortunately in the case of Ciskei they are not always available and, hence, have had to be supplemented by seemingly relevant data when necessary.

8.3.1 Education

In Chapter 5.2, adult literacy and primary school enrolment were suggested as potentially meaningful measures of the satisfaction of the "core" basic need, education. In Section One of this Chapter, literacy

was shown to be comparatively high in Ciskei in terms of what might be expected on the basis of its level of economic development as measured by GNP per capita. In 1970, 58 per cent of adult Ciskeians were said to be literate, and by 1980 this was likely to exceed the 72,7 per cent estimated for "The Xhosa". This was deemed to be a very favourable performance in an international and African context and to compare well with that of all black people in South Africa as a whole.

In 1980, 222 771⁸⁴ pupils, or 32,3 per cent of the total population,⁸⁵ were at school in Ciskei. If all persons in the age group 5 to 19 years are considered to be of school-going age, then 40,9 per cent⁸⁶ of the total population fell into this category. This compares with about 21 per cent in economically developed countries.⁸⁷ Approximately 28 - 29 per cent of the black population of South Africa is of school-going age and in 1979 24,4 per cent of blacks were at school.⁸⁸ Hence, actual school enrolment was proportionately much higher in Ciskei than the rest of South Africa - but so was the number in the potential school-going age group.

In Table 8.19, primary school enrolment is shown for Ciskei for the years 1977 to 1981. In Table 8.20 the number of black persons between the ages 5 and 14 years (the seemingly relevant ages for primary school education) is given for 1980, and the primary school enrolment (as a per cent) of the population in this age group, is calculated. Between 1977 and 1981 the number of primary school pupils per teacher in Ciskei dropped significantly from 50,4 to 43,4 and for each year the pupil/teacher ratio was more favourable than for the "Independent Black States", the "Self-governing Black States", the RSA, or the total of the RSA and the Black States. Primary school enrolment, as a per cent of the number of black persons between the ages 5 and 14 years was also considerably higher in Ciskei in 1980 than for any of the other territories in Table 8.20. In 1980, primary school enrolment in Ciskei was equal to 91,7 per cent of the black population between the ages 5 and 14 years. Such a rate was considerably higher than that for the Independent Black States (82,5 per cent), the Self-governing Black States (81,0 per cent), the RSA (61,4 per cent), and the total RSA and Black States (73,7 per cent).⁸⁹

Hence, in terms of this admittedly crude aggregate indicator, the basic

need for primary education in Ciskei would seem to be reasonably well satisfied in an absolute sense, as well as relative to the other black regions in South Africa. But in a global context Ciskei does not necessarily compare as favourably. In Table 8.21, primary school enrolment is expressed as a percentage of the appropriate age group⁹⁰ for the five designated levels of global development discussed in Chapter 8.1, for the year 1979. Even the "Low-income economies", with a weighted average of 94 per cent, perform marginally better than Ciskei, and only "Other Low-income" and "High-income oil exporters" perform less well. However, when compared with the (1975) figures in Table 5.2 Ciskei's performance is more favourable. Ciskei compares very favourably with the "Less-developed" (68 per cent) and "Semi-developed (major oil-producers)" (76 per cent) countries, but less well with the "Semi-developed (non-oil)" (102 per cent) and "Developed" (105 per cent) nations.

Given the relatively high level of literacy in Ciskei suggested previously, such a performance is somewhat surprising and suggests that while primary school education is sufficient to impart the basic skills of literacy, there is a relatively high drop-out rate even at this level of education. Thus Quail warned: "The first target, in view of the importance of effective literacy (which requires more than the theoretical first four years of schooling to achieve and to retain), should be universal education for the whole primary school period."⁹¹

In Chapter 5, it was stressed that a meaningful indicator of Basic Need satisfaction should reflect outputs rather than inputs. Literacy measurements reflect the output of education, while the pupil/teacher ratio and enrolment as a percentage of a certain age group reflect inputs. Measurements of inputs ignore the quality of these inputs and hence a further method of looking at the success or otherwise of education may be to examine the level of drop-outs and failures at different levels of education and, thus, the extent to which each level of education equips pupils for advancement to the next.^{91a}

Using the number of pupils enrolled in Standard 10 in a given year, expressed as a percentage of the number of pupils in Standard 6 four years previously, Quail⁹² found that for the years 1971 to 1974 an average of 13 per cent of black children in Standard 6 reached Standard 10 four years later. This compared with 11 per cent for black children in the RSA, 17 per cent for Bophuthatswana, and 20 per cent for Lebowa.

Using a similar method, the number of Matriculation and Senior Certificates awarded in 1978, 1979 and 1980 are expressed as a percentage of the number of Form III (Standard 8) certificates conferred two years previously (1976, 1977 and 1978) in Table 8.22. For Ciskei the figure was 27,9 per cent in 1978, 23,8 per cent in 1979 and 14,5 per cent in 1980. Hence, of the pupils who passed Form III in 1976, only 27,9 per cent obtained Matriculation or Senior Certificates two years later. This figure decreased considerably for 1977 and 1978, although this may have been due to special (i.e. political) circumstances.

It is interesting to note that except for 1978, when Ciskei's performance was marginally better than that of the Independent Black States as a whole (26,7 per cent) and the RSA (21,5 per cent), Ciskei's performance is considerably worse than the other four territories defined in Table 8.21 for the three time periods considered. In 1980, the number of Matriculation and Senior Certificates awarded in Ciskei was only 14,5 per cent of the number of Form III Certificates two years previously and this was considerably less than the 29,1 per cent for the Independent Black States, 48,3 per cent for the Self-governing Black States, 53,9 per cent for the RSA, and 42,6 per cent for the RSA and Black States together.

In Table 8.23 the number of Form III certificates conferred is expressed as a percentage of the Higher Primary certificates awarded three years earlier. Ciskei's performance again compares poorly with the other territories or states in Table 8.22 for both 1979 and 1980. In 1979 the number of Form III certificates conferred in Ciskei was 54,9 per cent of the number of Higher Primary certificates in 1976, and only the RSA (37,9 per cent) fared worse. In 1980 Ciskei (29,8 per cent) again performed least well of the five territories in Tables 8.22 and 8.23. This compared with 55,0 per cent for the Independent Black States, 55,4 per cent for the Self-governing Black States, 31,8 per cent for the RSA, and 47,3 per cent for the total RSA and Black States together.

Hence, despite Ciskei's relatively favourable performance in a South African context in terms of literacy, pupil/teacher ratios, and primary school enrolment as a percentage of black persons aged between 5 and 14 years, there is evidently a very high failure and/or drop-out rate at both primary and secondary school level. Thus, while the quantity of inputs may come close to satisfying the basic need for education, this is

less obviously so in terms of results achieved. Such a conclusion is supported by Table 8.24, where the 1979 enrolment per given school standard in Ciskei is expressed as a percentage of enrolment in the preceding (lower) standard in 1978. For each standard (except Standard 3, where there is an increase, and Standard 5, where the decrease is negligible) there is a significant decrease in 1979 enrolments from the enrolment one standard lower in the previous year. If these results are projected over a child's entire potential school career, then a black pupil who entered Sub A in Ciskei in 1978 would have had only a 51,7 per cent chance of reaching Standard 5 six years later, and a 14,3 per cent chance of reaching Standard 10 eleven years later. Given a Matriculation and Senior Certificate pass-rate of 67,6 per cent in 1979⁹³, the chances of obtaining a Matriculation or Senior Certificate in the minimum twelve years of schooling are only 9,7 per cent. In Table 8.23, the highest failure or drop-out rates were recorded in Standard 9 and 10, but there was also an extremely high failure/drop-out rate in Sub A. At secondary school level alone, the Quail Commission estimated the drop-out rate to be 87 per cent.⁹⁴

As was stressed previously, the satisfaction of basic needs depends not only upon the quantity of facilities available, but also on their quality and access to them, as well as the actual rate at which they are consumed. The extremely high failure and drop-out rates would seem to indicate an inadequate quality and, certainly, use made of education despite the increase in expenditure per pupil from R64 per annum in 1977/78 to R94 in 1979/80.⁹⁵ If the number of schools in Ciskei is taken as an indicator of access to education (even though such a figure does not necessarily reflect geographical distribution), then access to Lower primary and Higher primary education, for which there were 417 and 340 schools respectively in 1978⁹⁶, is vastly superior to access to Junior secondary and Senior secondary education, for which there were only 91 and 14 schools respectively in 1978.⁹⁷

An indicator of the quality of education may be the level of qualification of teachers. Not only is it important that pupil/teacher ratios be low, but teachers should also be adequately qualified for the level at which they teach. In Ciskei, the total number of black pupils per teacher fell from 46,0 to 40,1 between 1977 and 1981.⁹⁸ Primary school enrolment per teacher fell from 50,4 to 43,4 over this period⁹⁹,

while for secondary school and teacher training students the ratio fell down 33,5 to 32,1.¹⁰⁰ But the qualifications of teachers remained seemingly inadequate. For example, Quail¹⁰¹ estimated that one-third of black teachers were teaching beyond the limits for which they are trained or academically qualified.

In Table 8.25, the qualifications of teachers for South Africa as a whole (excluding Transkei and Bophuthatswana) is shown. Although teacher qualifications show a marginal improvement between 1976 and 1979, with 83,1 per cent of teachers being professionally qualified in 1979 as compared to 80,7 per cent in 1978 and 81,0 in 1976, the qualifications of teachers remain very low. In 1979, 52,8 per cent of teachers possessed only a Junior Certificate (Standard 8) or its equivalent, and 13,2 per cent had a Standard 6 qualification. Hence, 66,0 per cent of teachers possessed a Standard 8 qualification or less. This represented a marginal improvement on the 65,5 per cent in 1978 and the 66,2 per cent in 1976. But the percentage of teachers possessing Matriculation certificates or the equivalent plus Primary or Secondary teachers certificates was only 13,0 per cent (compared with 11,0 per cent in 1978 and 12,1 per cent in 1976). The percentage of teachers with completed University degrees remained extremely low (2,1 per cent), as did those who had not completed their degrees (1,6 per cent).

Thus the vast majority of black teachers in South Africa are really only qualified to teach at primary schools at a time when the demand is increasingly for secondary school teachers. Accordingly, teachers are increasingly called upon to teach at levels for which they are inadequately qualified. In 1978, of the 4 391¹⁰² teachers in Ciskei, 1 046¹⁰³, or 23,8 per cent, were employed in secondary schools, and of these only 15 per cent had University degrees.¹⁰⁴ Of the primary school teachers, 96 per cent were "professionally qualified".¹⁰⁵ According to the South African Department of Education and Training, enrolment and qualifications of primary school teachers "will be sufficient to meet the growing demand for schooling and will lead to improvements in the ratio of qualified to unqualified teachers and in the ratio of teachers to pupils."¹⁰⁶

In 1980 there were 5 303¹⁰⁷ teachers in Ciskei, 1 411¹⁰⁸ (22,6 per cent) of whom were in secondary schools. Thus, while the position of

primary education is itself far from satisfactory from the point of meeting the effective basic need for education, the position of secondary education would appear to be even worse. Accordingly, Quail concluded: "It seems clear that the alarming drop-out rate (87 per cent) at secondary school is a consequence of the shortage of qualified teachers. The commission suggests that the Ciskei government should give the highest priority to this problem, and should, if at all possible, increase both the size and number of bursaries available for secondary school teacher training at Fort Hare university and the Lennox Sebe teacher training college."¹⁰⁹

In Ciskei, teacher training courses are provided at the University of Fort Hare (not yet under Ciskei authority) and six teacher training colleges. In 1978 2 561 students were enrolled at the teacher training colleges,¹¹⁰ but by 1980 this had fallen to 2 115.¹¹¹ In 1980, 293 students at Fort Hare out of a total of 3 030¹¹² were enrolled in the Faculty of Education, compared with 112 in 1976 and 185 in 1978. But only one-fifth of students at Fort Hare were from Ciskei itself.¹¹³ In 1979, 61 degrees, diplomas and certificates were conferred by the Faculty of Education at Fort Hare, compared with 30 in 1976 and 62 in 1977.¹¹⁴ To help overcome the general shortage of senior secondary teachers with degrees, the Department of Education and Training recently established a senior secondary course for aspirant teachers with a matriculation certificate.

In summary, the basic need for education in Ciskei would appear on closer examination not to be as satisfactorily met as may be suggested by the relatively high level of literacy. While enrolment rates are high in a South African context, they are not necessarily so in a global sense and the failure to adequately satisfy the basic need for education, especially in qualitative terms, is reflected in a high failure and drop-out rate at both the primary and secondary levels of education. This failure is partly the result of the extremely high proportion of the Ciskei population that is of school-going age, which has resulted in poor access to and a low quality of education. Hence, the consumption of education services remains low and education continues to represent an important area of concern for any Basic Needs policy directed at Ciskei.

8.3.2. Health

In Chapter 5, life expectancy at birth (years) and infant mortality rate (per 1 000 live births) were suggested as measurements of the "core" basic need, health. In Chapter 8.1, it was tentatively concluded that life expectancy at birth in Ciskei would be likely to be less than the national figure of 57,5 years, and infant mortality greater than 100 per 1 000 live births, the estimated rate for Mdantsane in 1978.¹¹⁵ Furthermore, the South African Medical Journal in 1979 reported that "in South Africa as a whole half of all blacks who die are less than five years old, compared to 7 per cent in the case of the white group. Using 1976 figures, (the report) gave infant mortality rates for whites as 19 per thousand births, compared to a coloured rate of 112 per thousand births. Figures for blacks were not available. (The report) noted that infant mortality rates dropped dramatically in urban areas or when good clinic services were available...."¹¹⁶

Such indicators cannot provide an absolute measurement of the extent to which health as a basic need is satisfied in Ciskei at any given time. However, it is clear that the life expectancy at birth in Ciskei is lower, and the infant mortality rate higher, (and therefore the state of health less favourable) than that of whites and coloureds in South Africa as a whole. But Ciskei's position relative to the other black areas in South Africa is uncertain.

Unfortunately, further empirical data relating to the state of health in Ciskei or the other black regions are not readily available. Hence, it is necessary to look at whatever data are available in relation to the inputs for health services, as well as those related to results (outputs) before further conclusions can be drawn. In Table 8.26, the number of people per clinic and per hospital bed is shown for ten designated black areas in South Africa.

Perhaps the most basic medical service that can be provided is a clinic, and in the cited 1979 report of the South African Medical Journal, it was suggested that infant mortality rates dropped dramatically when good clinic services were available. Hence, the extent to which the basic need, health, is satisfied can be expected to be positively related to the availability of clinic services. In 1981 there were 92 clinics in

Ciskei, thus giving 7 275 persons per clinic. Ciskei's performance in this respect therefore compared favourably with that of the other black areas in Table 8.26. Only Kangwane (5 181 persons per clinic) and Venda (7 171 persons per clinic) appeared in a more favourable light, and Ciskei's performance was considerably better than that of the remaining seven black states.

In terms of persons per hospital bed, Ciskei's position is less impressive. In 1978 there was a hospital bed occupancy rate of 88,4 per cent in Ciskei.¹¹⁷ In 1981 there were 338 Ciskeians for every hospital bed available. Only Qwaqwa (639 per bed) and Lebowa (337 per bed) performed less favourably. Kangwane (194 per bed), Bophuthatswana (224 per bed) and Venda (244 per bed) all did considerably better.

But such figures do not give any idea of the distribution of health facilities. Visagie¹¹⁸ found that 70 per cent of all children born in Ciskei in 1978 were born in clinics or hospitals, which suggests that at least 70 per cent of Ciskei inhabitants were within reach of such facilities. The same survey found that 80 per cent of Ciskei women were in favour of having their children born in a clinic or hospital. Hence, when the 20 per cent not in favour of having their children born in a clinic or hospital are included, access to a clinic or hospital would seem to be somewhat higher than 70 per cent.

But not all indicators of distribution are as favourable. Quail concludes: "The present distribution of health facilities no longer matches that of the population in the Ciskei, which has been disturbed in recent years by extensive resettlements."¹¹⁹ Thus, in evidence to the Quail Commission, Ciskei's Minister of Health stated that there was no doctor within reach of the Thornhill-Sada-Ntabethemba area, where some 7 or 8 per cent of the total Ciskei population live.¹²⁰ If one recognises that "over 80 000 people have been resettled in the Ciskei rural areas between 1973 and 1980 in the course of the homelands consolidation",¹²¹ then the health facilities available to this 12 per cent of the total Ciskei population can also be expected to be largely inadequate. A further disturbing factor is that in 1977 government expenditure on health services outside the black states was R30 per head of population - nearly three times greater than the R11 per head of population in Ciskei.¹²²

To the extent that infant mortality rates are negatively related to the availability of clinic services as suggested above, Ciskei is relatively well-endowed vis-à-vis the other black regions in Table 8.26. However, infant mortality in Ciskei is very high when compared to whites in South Africa and as well as on a global scale. In 1980, infant mortality in "Low-income economies" was 94 per 1 000, in "Middle-income economies" 80 per 1 000, in "High-income oil exporters" 99 per 1 000, in "Industrial market economies" 11 per 1 000 and in "Nonmarket industrial economies" 25 per 1 000.¹²³ In Table 5.2.2 the 1975 infant mortality per 1 000 live births was 19 in "Developed Countries", 60 in "Semi-developed (non-oil)", and only the figure of 116 per 1 000 births in "Semi-developed (major oil-producers)" and 124 in "Less-developed" nations is comparable with Ciskei's performance.

Against this background, clinic services are therefore still inadequate in Ciskei. As far as the quality of health services is concerned, Ciskei's position would appear less favourable. However, to arrive at a more reliable assessment of the level of basic needs in this respect one would like to have more detailed information about both curative and preventative services in Ciskei. Furthermore, some areas of Ciskei are better endowed with health services than others. Present indications are, however, that the basic need, health, is inadequately satisfied in Ciskei and any purposive Basic Needs strategy would have to take this deficiency into account.

8.3.3 Water Supply and Sanitation

In Chapter 5, infant mortality and the percentage of the population with access to clean water and sanitation facilities, were suggested as measurements of the joint "core" basic needs, water supply and sanitation. In Chapter 6, the positive correlation between infant mortality and diseases related to poor water supply and waste disposal was emphasised. Hence, a close relationship between the level of satisfaction of the "core" basic need, health, and those of water supply and sanitation, was indicated.

In the previous section, the paucity of data relating to the quantitative assessment of health conditions in Ciskei was noted. The same problem would appear to be true, a fortiori, for water supply and sanitation, and

published data relating to the proportion of the population with access to sanitation facilities and clean water are difficult indeed to obtain. Previously in this Chapter, infant mortality in Ciskei was deemed to exceed 100 deaths per 1 000 live births. Moreover, in the preceding paragraph, the basic need, health, was concluded to represent a high priority relative to white South African as well as global standards. To the extent that inadequate water supply and sanitation are contributory causes of high infant mortality rates, the satisfaction of these "core" basic needs in Ciskei can be said to be complementary, as was discussed in Chapter 6.¹²⁴ Not only does the joint basic need of water supply and sanitation appear to be an imperative of development policy in Ciskei, but more quantitative information on the subject is clearly a necessity.

8.3.4 Nutrition

In Chapter 5, it was suggested that the basic need for nutrition might be measured by calorie consumption (per head per day) and protein consumption (grams per head per day). But, as was the case with the other "core" basic needs discussed in this Chapter, the available data for Ciskei in respect of these indicators are limited. No published statistics on calorie or protein consumption as such would seem to exist, and thus less direct substitute indicators have been investigated.

In Chapter 6, nutritional deficiencies were said to be the outcome of three underlying factors: inadequate income levels, the suboptimal use of income, and the suboptimal use of food. Despite the fact that a considerable part of annual expenditure in cash and consumption by black households in Ciskei are on food, nutrition would seem to be poor. The extent and causes of this deficient nutrition will be investigated in this section.

In Table 8.27, household expenditure on food is shown for a sample of households divided into Large Urban Areas, Small Urban Areas, and Rural Areas, and into five groups according to income levels. On the basis of this data it is evident that household income levels are much higher, on average, in Large Urban Areas than Small Urban or Rural Areas. The average total expenditure per household was R3 732,41 in Large Urban Areas, R1 693,21 in Small Urban Areas, and R1 956,00 in Rural

Areas.¹²⁵ Of this total expenditure, a large proportion was clearly spent on food; this being given as 37,9 per cent, 49,7 per cent, and 43,4 per cent, in Large Urban, Small Urban, and Rural Areas respectively. As a result of involuntary resettlement of people, the Small Urban Areas in Ciskei may well represent more poverty than the Rural Areas.

The proportion of total expenditure allocated to food rises sharply as the average level of household incomes declines. Thus, in Large Urban Areas expenditure on food rises from 28,7 per cent in the highest income groups to 53,2 per cent in the lowest. In Small Urban Areas and Rural Areas the corresponding increases are from 32,9 per cent to 70,4 per cent and from 29,8 per cent to 61,0 per cent respectively. Similarly, the percentage of (average) household expenditure on food is higher in the Small Urban and Rural Areas than in the more prosperous Large Urban Areas. As would be expected, however, expenditure per household on food in the higher income groups is significantly greater than that of the lower income groups.

The significance of these observations is evident when the distribution of households within each category (above) and for each income group is considered in Table 8.28. The greatest proportion of households in each category is clearly in the lower income groups. But it is in the lower income groups that the greatest portion of expenditure is on food. Thus, in Large Urban Areas, 60,6 per cent of the sample groups were concentrated in those income groups that applied between 44,9 and 53,2 per cent of their expenditure on food; 93,9 per cent of the sample group in Small Urban Areas spent between 40,5 and 70,4 per cent of their income on food; and 89,2 per cent of the sample group in Rural Areas spent between 42,1 and 61,0 per cent of their income on food. Thus, not only does the percentage of expenditure on food increase as income declines, but it is also in the lower income groups that the greatest proportion of the population in each locational category would seem to be found.

These conclusions are supported by two studies of black households in the nearby city of East London.¹²⁶ In 1970, a sample of 7 571 households was found to allocate 39,9 per cent of their total expenditure to food, and in 1975, 30 153 households spent 37,9 per cent of their income in this manner. Both these findings support the results for Large Urban

Areas discussed previously. Studies in South Africa's black states found that average expenditure on food varied from a minimum of 36,3 per cent (Bophuthatswana) to a maximum of 50,8 per cent (Lebowa).¹²⁷ Studies outside these states found a lower average percentage of expenditure on food, reaching a minimum of 32,8 per cent on the East and West Rand,¹²⁸ where average income of black people is generally thought to be at its highest level in South Africa.¹²⁹

Despite the prevailing high percentage of expenditure on food, there is evidence of widespread malnutrition in Ciskei. The cause of this would not seem to be an insufficient proportion of income spent on nutrition (the suboptimal use of income), but rather inadequate income levels as such. Thus, the Page Report stated that the average income of Ciskeian households in 1974 was "well below the 'mealie-meal line' as opposed to the 'bread line', regarded by many as pure luxury."¹³⁰

In Table 8.29, the percentage increase in average expenditure on food above that of the immediately lower income group, is shown for the three categories of places in Table 8.27. In almost every case the percentage increase is significant as income rises, and in every case it is positive. This suggests that the need for food is not adequately met in the case of low-income households, and, as a result, a significant part of increased income is spent on food. The large increases for the highest-income groups may of course reflect a change from basic to more preferred non-basic (and more expensive) foodstuffs. However, further evidence suggests that this is not the case, and that the basic need for food, for lower-income groups at least, is not being satisfied in Small Urban or Rural Areas, or even the more prosperous Large Urban Areas.

Two indicators supporting such a conclusion are the high rate of infant mortality and the incidence of malnutrition in Ciskei. In Chapter 8.1 and 8.3.2 it was noted that actual infant mortality rates in Ciskei are unknown because many births are not reported. In Mdantsane more than one in ten children were reported to die in their first year.¹³¹ Mdantsane falls into the more prosperous "Large Urban Area" classification of Table 8.27, where average expenditure on food was R1 412,44, compared with R841,84 and R851,72 in Small Urban and Rural Areas respectively, and it was concluded that infant mortality in Ciskei was likely to exceed 100 per 1 000 live births. To the extent that infant mortality is the result

of poor nutrition, nutrition in the Small Urban and Rural Areas would seem to be less favourable than in the Large Urban Areas where expenditure on food is greater (and infant mortality lower).

A survey in 1978 by Visagie¹³² indicated that malnutrition in Ciskei was widespread, with up to 4,5 per cent of children in the 6 to 23 months age group suffering from marasmus, and up to 27 per cent from kwashiorkor. In the same year a further survey conducted by medical doctors for the Ciskei government revealed that 50 per cent of all two- and three-year-old children in Ciskei were malnourished, and one in ten children in the urban areas and one in six in the rural areas were actually suffering from forms of malnutrition, such as kwashiorkor or marasmus.¹³³ This figure excluded those children who died before the age of one year.

A third survey, which recorded the weight of children in the eight-year age group, revealed that in Mdantsane three out of four, and in rural areas eight out of ten, children were found to be undersized.¹³⁴ Thirty-three per cent of the adult population in the Hewu district were said to suffer from pellagra and fifty per cent of children from marasmus.¹³⁵

The survey by Visagie also reported numerous vitamin and mineral deficiencies, some of serious proportions, and a high incidence of pellagra, to which it noted: "... as long as any population uses maize as an overwhelming staple food, pellagra will remain a serious problem."¹³⁶ In the remainder of this section it will be shown that not only is maize the staple food for the majority of Ciskeians, but for some people the consumption of even this product is infrequent.

In Table 8.30 the dietary pattern in a sample of Mdantsane households is shown. Diet is clearly heavily concentrated in carbohydrates (maize, bread and sugar), with 50 per cent of households consuming proteins (meat and eggs) less than weekly. But the diet is not only unbalanced, the frequency of consumption also tends to be irregular. Thus 67 per cent of households ate three times a day, 28 per cent twice a day, but 5 per cent ate only once a day.¹³⁷ This was the pattern in Mdantsane, the most prosperous of the Large Urban Areas. Consequently, the dietary pattern in the poorer Small Urban and Rural Areas would be expected to be less satisfactory.

This conclusion is supported by Tables 8.31 and 8.32, where the dietary patterns of Elukhanyweni and Glenmore households are shown. Both Elukhanyweni and Glenmore are Small Urban Areas and resettlement areas, but the dietary pattern of Elukhanyweni households is markedly better than that of households in Glenmore. In both areas diet is heavily concentrated in carbohydrates, but in Elukhanyweni protein consumption and the frequency of consumption of each type of commodity is higher. The dietary pattern of Elukhanyweni households compared favourably with that of households in Mdantsane, but Glenmore households were considerably worse off. In Glenmore, 60 per cent of the households interviewed ate 3 times a day, 34 per cent twice a day, and 6 per cent once a day.¹³⁸ Households in Sada, another resettlement area, fared worse, with 32 per cent of households eating three times a day, 63 per cent twice a day, and 5 per cent once a day.¹³⁹ In Kammaskraal, a Rural Area, 45 per cent of households ate three times a day, 49 per cent twice a day, and 6 per cent once a day.¹⁴⁰

Clearly, dietary patterns vary considerably for different locations. But it is equally apparent that in all locations diet is concentrated towards carbohydrates, and the consumption of proteins and vitamins is irregular and insufficient. In all the locations discussed, large numbers of households appear to be malnourished, and it is only the extent of this malnourishment that varies between different places. In Table 8.33, the dietary pattern of three areas, Mdantsane, Dimbaza and Elukhanyweni, is contrasted with that of Sada, Glenmore and Kammaskraal (the "haves" versus the "have nots"¹⁴¹). For all items of consumption the first group is considerably better than the second, and the different nutritional performances of different locations is emphasised.

Such a conclusion is supported by Tables 8.34 and 8.35, where the six different locations discussed in this section are shown separately. Even the best nutritional area, Mdantsane, displayed a highly unbalanced diet pattern. In Table 8.34, only 34 per cent of Mdantsane households ate vegetables on a daily basis, 5 per cent ate meat and 34 per cent drank milk daily. More than 50 per cent of households ate meat, and 45 per cent drank milk less than weekly; 5 per cent of households ate only one meal a day, and 67 per cent ate three meals a day. In the remaining five areas the position was worse, with Sada, Kammaskraal and Glenmore performing particularly badly. Both Dimbaza and Mdantsane are "Large

Urban Areas", but better nutritional performance is not necessarily confined to this category, as the resettlement area, Elukhanyweni, also performed relatively well.

The reasons for the relatively poor nutritional performance in Ciskei would seem to be twofold: firstly, there is widespread ignorance of nutritional health care, and, secondly, despite the high proportion of total expenditure devoted to food, income levels are still too low on average to satisfy the basic need for nutrition. To meet these twin problems, the survey by Visagie recommended the adoption of comprehensive educational programmes, but, at the same time it emphasised that "malnutrition cannot be controlled in the present Ciskei situation by even universal knowledge of its symptoms and treatments."¹⁴² Thus the survey also recommended the widespread adoption of food fortification programmes, (such as skim milk powder fortified with Vitamins A and D, and the fortification of maize with riboflavin and nicotinic acid). Quail (1980) reported that such schemes would cost approximately R1 million a year.¹⁴³ In 1979 the Ciskei government distributed subsidised skim milk to underweight children at an annual cost of R60 000, but further funds were not available.¹⁴⁴ Nevertheless, Quail recommended that "funds for the fortification schemes merit the highest priority."¹⁴⁵

In summary, the available evidence seems to suggest that the basic need for nutrition in Ciskei is not adequately satisfied. Any economic policy directed at satisfying basic needs in Ciskei would also have to focus particular attention on the basic need for nutrition. Given the already very high levels of expenditure on food as a percentage of household income, it seems unlikely that expenditure on food can be raised without raising income levels too. Hence, the complementarity of Basic Needs satisfaction and economic growth. Even in the most prosperous areas of Ciskei, the Large Urban Areas, nutrition is inadequate for large numbers of households and thus average incomes should rise. In Rural and Small Urban Areas the need for such an increase in income to meet the basic need for nutrition is even more urgent. At the same time, a policy of nutritional education could assist in achieving a greater balance in dietary patterns, but such a policy would achieve little unless accompanied by policies designed to raise average income levels. The size of the problem is magnified by the fact that the largest portion of

the population would seem to fall into the lower income groups. In the sample represented in Tables 8.27 and 8.28, a minimum of 80,4 per cent of households in Large Urban Areas, 58,6 per cent in Small Urban Areas, and 59,2 per cent in Rural Areas, had average levels of expenditure on food below the sample average for all households. Thus the proportion of the total population comprising the target group is likely to be very large.

8.3.5 Shelter

In Chapter 6, particular attention was given to nutrition and housing as basic needs not because these so-called "private-consumption" needs were deemed to be of greater importance than "public-consumption" needs, but rather because they represented an area in which individual action should have the greatest potential impact. Food and housing typically consume the largest part of total household expenditure, especially in a less-developed country, while housing is a very important part of any country's fixed capital formation. The decision to purchase or build a house was said to be probably the most important long-term investment decision an individual is likely to make.

In Chapter 8.3.4, nutrition in Ciskei was found to comprise 37,9 per cent, 49,7 per cent, and 43,4 per cent of household expenditure in Large and Small Urban Areas and Rural Areas, respectively, in 1981. Expenditure on housing was typically the second-most important item of total household expenditure, comprising 20,2 per cent, 14,6 per cent, and 16,9 per cent of household income in large and Small Urban Areas and Rural Areas, respectively.¹⁴⁶ Thus the satisfaction of the "core" basic need, housing, not only meets a basic need directly, but is also one that absorbs a very large part of total household expenditure. The provision of cheaper housing would, therefore, not only satisfy a "core" basic need as such, but will release more income for the potential satisfaction of other basic needs (e.g. nutrition or education). Furthermore, investment in housing may encourage regional income growth via the typical Keynesian multiplier. Housing has a low import content and, hence, leakages are bound to be small and the size of the multiplier relatively large. In Chapter 3, it was suggested that the cumulative effect of the multiplier might benefit the already prosperous regions more than the poorer regions. In the same way, investment in housing in poor regions may, via the multiplier, result in increased income and

economic growth within these regions; this would then ultimately lead to the greater satisfaction of basic needs in general, and the achievement of that critical threshold where meaningful participation in the economy becomes possible.

Quail states: "The shortage of housing is one of the most serious problems facing black South Africans generally and those in the Ciskei in particular."¹⁴⁷ In Chapter 5, the number of persons per room and area per person, were suggested as meaningful measures of the "core" basic need, housing. Such indicators are not readily available and so other potentially meaningful variables have therefore been investigated. In Chapter 5, it was also argued that the need for housing was a more critical basic need in urban than in rural areas. This conclusion is supported for Ciskei by Quail, who suggests that "the most critical shortages occur in or near towns"¹⁴⁸; and by Martins, who estimated that black households in the Large Urban Areas contributed 74,9 per cent of the total cash expenditure on housing in Ciskei in 1981.¹⁴⁹ Accordingly, attention will be focused in this chapter on urban housing, where the problem is considered to be more acute and less easily satisfied by individual action alone than in rural areas.

In Table 8.36, the number of housing units and the population size in proclaimed towns in Ciskei are shown for 1977 to 1981; the rate of growth in population and number of housing units, and the population per housing unit (occupancy rate) are shown for the same period in Tables 8.37 and 8.38. The population in proclaimed towns in Ciskei increased by 38,4 per cent between 1977 and 1981. Over the same period the number of housing units increased by 16,4 per cent. This resulted in an increased average occupancy rate per housing unit from 7,23 in 1977, to 8,60 in 1981. The occupancy rate in proclaimed towns in 1981 varied from 6,85 in Kayaletu, to 11,86 in Zwelitsha. The greatest proportion (71,0 per cent) of the urban population in 1981 lived in Mdantsane, 12,3 per cent lived in Zwelitsha, 7,1 per cent in Sada, and 6,8 per cent in Dimbaza. Between 1977 and 1981 the population of Mdantsane rose by 41,0 per cent, and the number of houses by 25,1 per cent. Thus occupancy increased from 7,30 to 8,22 persons over this period. In the remaining proclaimed towns a similar pattern was experienced, and in all towns, occupancy rates deteriorated between 1977 and 1981. This was in spite of relatively large increases in the number of housing units in Dimbaza (14,7 per

cent), Ilitha (146,9 per cent), Mdantsane (25,1 per cent), and a total increase of 16,4 per cent for urban Ciskei as a whole. Clearly, housing in the proclaimed towns has fallen far short of the increases in population (38,4 per cent) over this period.

The occupancy rate per housing unit in Ciskei exceeded that in proclaimed towns in all the other Black states in South Africa, as is shown in Table 8.39. The true occupancy rates may in fact be even higher than those reflected by Tables 8.38 and 8.39. Quail¹⁵⁰ estimated the population of Mdantsane in 1980 to be 250 000, which would give an occupancy rate for that year of 12,63, rather than 8,05 as calculated above.

Occupancy rates reflect the quantity of housing available but not necessarily its quality. In Tables 8.40 to 8.47, the quality of a sample of housing is considered in terms of the number of rooms per house, the type of walls and roofs, and the availability of electricity. In 1981, 21,4 per cent of black households in Large Urban Areas, 30,0 per cent in Small Urban Areas and 97,9 per cent in Rural Areas, owned the houses in which they lived.¹⁵¹ Houses (both rented and self-owned) were on average larger, in terms of the number of rooms, in Large Urban than Small Urban and Rural Areas. All the self-owned houses in the survey contained four rooms or more in the Large Urban Areas, and the comparable figure for Small Urban and Rural Areas was 53,4 per cent and 38,4 per cent, respectively. In Small Urban Areas, 23,3 per cent of owned houses had one or two rooms, and in Rural Areas 37,8 per cent of houses were in this category. Rented houses tended to be smaller in terms of the number of rooms than self-owned houses. Thus 95,8 per cent of rented houses in Large Urban Areas contained four rooms or more, while for Small Urban and Rural Areas the corresponding figures were 26,1 per cent and 33,4 per cent, respectively. In Small Urban Areas, 72,5 per cent of rented houses had one or two rooms, and in Rural Areas, 33,3 per cent had two rooms. Thus houses in Large Urban Areas tended to have more rooms than those in Small Urban and Rural Areas. Furthermore, self-owned houses tended to have more rooms than rented houses in all three areas.

In terms of the type of walls erected in construction, houses in Large Urban Areas tended to be built of more durable material than those in Small Urban and Rural Areas. In Large Urban Areas, 95,5 per cent of self-owned and 98,0 per cent of rented houses were built with brick or

concrete walls. In Small Urban areas, 50,0 per cent of self-owned houses and 98,6 per cent of rented houses were built with brick or concrete walls, while in Rural Areas the comparable figures were 50,5 per cent and 83,3 per cent, respectively. Thus, whereas almost no houses in Large Urban Areas had (traditional) clay walls, in Small Urban and Rural Areas clay was frequently used. However, whereas clay was a popular material for self-owned houses in these areas, very few rented houses had clay walls. This would suggest that the housing authorities - the chief source of rented housing - were reluctant to build with materials other than brick or concrete, whereas people building their own houses tended to resort to the traditional (cheaper) clay. Nor should clay walls necessarily be seen as inferior to brick or concrete,¹⁵² although they are likely to be less durable.

A similar pattern may be observed in type of roof material used in construction. Corrugated iron or asbestos was used in 98,6 per cent of self-owned houses in Large Urban Areas, 76,7 per cent in Small Urban Areas and 72,2 per cent in Rural Areas. All the rented houses in the surveys made use of these materials. As was the case for type of walls, rented houses tend to be built of a more durable material than self-owned houses, and more use of traditional (grass) materials is made in Small Urban and Rural Areas. Again, the traditional material does not necessarily imply inferiority, but is likely to be less durable than asbestos or corrugated iron.

The most marked difference between housing in Large Urban Areas, and Small Urban and Rural Areas, can be observed in the availability of electricity. In Large Urban Areas, 73,1 per cent of self-owned houses had access to electricity, but in only 0,4 per cent of self-owned houses in Rural Areas, and none in Small Urban Areas, was electricity available. The availability of electricity in rented houses in Large Urban Areas was considerably lower (19,6 per cent), although in 2,9 per cent of houses in Small Urban Areas electricity was available. Electricity is not normally considered a basic need as such, but is likely to contribute towards a more congenial environment. Clearly (but not surprisingly) houses in Large Urban Areas are considerably better endowed in terms of access to this source of power.

From the above indicators it is apparent that housing in Large Urban Areas tends to be more spacious in terms of the number of rooms, have better access to electricity and to be built of more durable materials. Rented housing tends to be built of more durable (non-traditional) materials, but to have fewer rooms and poorer access to electricity. The fact that traditional (cheaper) methods of production are more favoured for self-owned houses than rented houses, suggests that the housing authorities may be reluctant to adopt cheaper methods of construction lest this be seen as a lowering of standards. But the result may well be that the standards adopted are too high to satisfy the basic need for housing at a price which Ciskeians can afford. This in turn could be the reason why housing construction in urban areas has lagged behind population growth, with resultant increases in occupancy levels. It should also be remembered that the high occupancy rates mean that a large proportion of houses are occupied by several families. Indeed, Ciskei may well "face disaster in its housing policies if it continues to rely solely on present housing methods."¹⁵³

Housing construction methods in Ciskei differ from area to area. For example, resettlement areas tend to be characterised by temporary, low-quality housing, while the established urban areas have more permanent structures on the whole. But in many cases "temporary" housing has become permanent.¹⁵⁴ In Table 8.48, the proportion of temporary houses in established towns (Mdantsane, Dimbaza and Sada) is relatively low, but it is high in the resettlement areas (Elukhanyweni, Kammaskraal and Glenmore). The quality of housing may be expected to deteriorate where temporary accommodation is widely prevalent, and, hence, the established towns, in general, possess higher quality housing than the resettlement areas.

From 1972/73 to 1979/80, R66,01 million was spent on urban development in Ciskei by the Ciskei government, the Ciskei Development Corporation and the South African Development Trust.¹⁵⁵ Of this amount, some R50 million was spent on housing and related services in Mdantsane.¹⁵⁶ The standard type of housing in Mdantsane (and other towns as well, but not in resettlement areas) are the so-called NE 51/6 and the NE 51/9 units.¹⁵⁷ The former consist of "four rooms with no ceilings, and outside sanitation. Walls are unplastered, painted concrete blocks and roofs are of asbestos sheeting. Floors are of uncovered concrete."¹⁵⁸

The new, NE 51/9 type of housing unit makes provision for an inside shower and toilet. In Mdantsane in 1980, 69 per cent of houses were of the NE 51/9 type and 31 per cent of the NE 51/6 type;¹⁵⁹ and rents were R16,00 and R15,45 per month, respectively.¹⁶⁰ The construction cost of a NE 51/9 house was R3 500 in 1980. Residents may purchase these houses from the Ciskeian government at a (1982) price of R2 600, which reflects a considerable subsidy on the actual cost. In addition, there is an owner-financed scheme whereby the home-owners can themselves finance the building of a NE 51/9 house, or an improved version of it, by means of loans from the Ciskei National Development Corporation. In 1980, 20 per cent of households in Mdantsane owned their homes, about 10 per cent were lodgers and the rest rented them from the local authority.¹⁶¹

Quail noted: "Where a population has achieved stability, an annual replacement rate of 2 to 3 per cent of the existing housing stock is considered normal."¹⁶² In Ciskei between 1977 and 1981, the population of the proclaimed towns grew by 8,47 per cent per annum, while the number of housing units increased by 3,86 per cent per annum over the same period.¹⁶³ This was reflected in rising occupancy levels and number of families on waiting lists for official housing.¹⁶⁴ Quail concluded: "When the population is growing at the present rate, and when there is a housing backlog such as exists in almost all [these] areas, the normal rate of new housebuilding needs to be in the region of 10 per cent of the existing housing stock if the population is to be properly housed."¹⁶⁵ As existing housing strategy falls far short of such a level, there is clearly a need for a considerable increase in the rate of housing construction if the basic need for housing in Ciskei is to be met.

In Chapter 6, it was argued that an acceptable level of housing could be afforded by almost all households even in a relatively poor community, and failure to satisfy this need was frequently the result of inappropriately high housing standards being set by the authorities. This would appear to be true in the case of Ciskei and, hence, there would appear to be a need for "a transition from minimum standard housing to a policy based on what Ciskeians could afford."¹⁶⁶ Failure to do so will lead to "an ever-increasing annual housing budget which could never be self-supporting or self-generating; [and] ... an alarmingly rapid deterioration in the government's ability to overtake the existing

housing backlog and to meet the growing demand for houses."¹⁶⁷

In view of the cardinal importance of appropriate (or redirected) housing policy in a poor community like Ciskei, the relevant section in the Quail Report is therefore quoted at some length:

"Half of all Ciskeian South Africans live in rural areas, and in some of these areas the technique of building traditional Xhosa housing has not been lost. Wherever natural materials are available - grass, trees, clay, water and kraal manure - housing, often of a surprisingly high standard, can be built quickly and cheaply. Traditional housing does not offer great durability - although well-maintained houses have been known to be habitable for more than fifty years, which is longer than the official standards for bricks and mortar - but this type of housing offers better protection from rain, wind and sun than is often achieved by the much costlier forms of construction used to establish temporary, and sometimes permanent, housing for those being resettled. Galvanised sheet steel, corrugated or with other sectional forms, or split poles on a wooden frame, are the materials generally used for housing (as well as for school and other buildings) in the resettlement areas of Glenmore, Thornhill and Oxten. Uninsulated steel frames offer no protection at all from heat and cold. Indeed, temperatures inside such structures may exceed both maximum and minimum temperatures outside. And split pole houses leak and are damaged by the wind. As a result of the inferior materials and construction methods in use, those being resettled are often having to adapt the housing provided - by adding clay insulation to the inside or the outside of the steel houses - or are even abandoning the housing provided and building their own traditional housing. The commission is in no doubt that the question of adequate housing demands the most urgent attention of the Ciskei and the South African governments. Resources are limited enough as it is, without them being wasted on housing schemes ill matched to their surroundings."¹⁶⁸

Fortunately, the need for a reorientation of housing strategy has been accepted by the South African government. Instead of complete housing schemes, policy is now directed at making serviced plots available on

which people may build their own homes.¹⁶⁹ Minister (of Community Development) Kotze sketches the role of the government as follows:

"In future, Government resources... will be directed towards the following priorities;

1. The provision of serviced sites for housing for individuals and the Private Sector as a whole.
2. The provision of houses ;for the aged and under-privileged, in collaboration with local authorities, church bodies, welfare institutions and other interested parties.
3. Within the constraints of available funds, to make an effective contribution for the very poor, who cannot fend for themselves in any other way.
4. The practical support of supervised self-help building schemes and developments."¹⁷⁰

The first step towards such a policy (in South Africa) is to be the sale of some 500 000 homes to all races, and the provision of 90 per cent housing loans to people unable to obtain financial assistance from the private sector, as well as loans for materials to be used in self-help projects.¹⁷¹

It is not the intention to discuss this (South African rather than Ciskeian) policy at length here,¹⁷² but it is important to note that such a policy does incorporate several of the features of a basic needs housing strategy discussed in Chapter 6. The role of the government is no longer seen as the provider of housing as such, but rather of the necessary infrastructure and assistance required for private persons to provide their own housing. Such a policy in a territory like Ciskei would have the advantages of enabling people to provide their own housing within the constraints of their income, help surmount the obstacle provided by the shortage of available government funds for direct expenditure on housing, and help people satisfy their own basic need for housing directly. Such a policy should, therefore, also help Ciskei reach the critical threshold of Basic Needs satisfaction necessary for sustained economic development.

8.4 SUMMARY

In Chapter 7, it was argued that improved satisfaction of basic needs could in principle lead to increased labour productivity and, via a cumulative process, to increased output and income levels. Higher incomes could in turn mean further improved satisfaction of basic needs, greater labour productivity and even greater output and income levels. Thus the satisfaction of basic needs could be seen as a means towards the end of improved living standards and the reduction of poverty, and hence an instrument of development policy.

From the analysis of basic needs in Ciskei, it is apparent that government expenditure has been such that the "core" basic needs have evidently been catered for, at least to some extent, for some time. Yet, there has been nothing like a concerted strategy, and expenditure on basic needs was the result of ad hoc measures, rather than a conscious strategy or development policy as such. Basic needs were therefore seen simply as ends in themselves, rather than as means to the end of self-sustained economic development.

In the case of Ciskei, more information about the satisfaction of basic needs, especially health, and water supply and sanitation, is required at the present stage. Such information should not only be seen in quantitative terms (as "inputs"), but also be evaluated qualitatively (as "outputs"). In other words, basic needs should be viewed functionally as thresholds to the goal of self-sustained economic development. This applies particularly to education, where the total supply may be misleading, more significant measures being quality, access and actual consumption. Data for health, and water supply and sanitation, are not readily available, and again should reflect access and usage as well as availability. Nutritional data should not only reveal the extent and nature of poor nutrition (malnutrition) but also its causes, such as, inadequate expenditure on food on account of low income levels, or inappropriate nutritional patterns of consumption. Data on shelter should take into account the appropriateness of standards and types of shelter, rather than simply the number of houses as such.

At the same time, the extent to which basic needs are complementary should be investigated; e.g. the effect the improved satisfaction of education would have on shelter, shelter on health, etc. The stronger such complementarities, the lower total government expenditure on basic needs would have to be. Similarly, if expenditure on basic needs is inappropriate or ill-directed, a revision of standards and redirection of resources may be necessary. In the case of Ciskei, it may well be that total expenditure on basic needs may not be inadequate as such at the present stage, but rather that co-ordination of existing expenditure is required to yield a purposive development policy.

A powerful case for the suitability of a Basic Needs strategy for Ciskei may be suggested by the intermediate nature of economic development within its borders. To the extent that some basic needs are already satisfied, at least to some degree and some more than others, certain preconditions for economic development can be said to already exist. Yet it cannot be claimed that Ciskei has reached the "take-off" stage into self-sustained economic growth in the Rostovian sense. Nevertheless, a deliberately co-ordinated Basic Needs strategy may well move Ciskei away from the danger of slipping back into the so-called "Low-Level Equilibrium Trap." In other words, a more scientifically designed, co-ordinated and deliberately applied strategy, whereby basic needs become the means towards self-sustained economic growth, should at least be able to establish the "preconditions for take-off" necessary for sustained economic development.

8.5 NOTES

1. Charton, N., (ed.), Ciskei : Economics and Politics of Dependence in a South African Homeland, (Croom Helm: London, 1980), p. 9.
2. Ibid., p. 9.
3. Quail, G.P., et.al., Ciskei Commission Report, (Conference Associates: Pretoria, 1980), p. 15.
4. This is compared with a population density of 23,7 persons per square kilometer for South Africa as a whole (including the 9 designated black areas).
5. Benso, Statistical Survey of Black Development 1981, Part II, (Benso: Pretoria, 1982), Table 14.
6. Ibid., Table 14.
7. Ibid., Table 14.
8. Ibid., Table 21.
9. Ibid., Table 26.
10. Ibid., Table 10.
11. Ibid., Table 12.
12. In 1980 the total economically active population of Ciskei was 136 220 (Ibid., Table 7).
13. Ibid., Table 9.
14. Charton, N., (ed.), op. cit., p. 10.
15. "Economically active" in this Table is defined as "persons pursuing an occupation, including part-time and temporary workers as well as unemployed" while "unemployed" is defined as "persons who desire to work but are not employed full-time or part-time."

16. Bekker, S.B., Black, P.A., and Roux, A.D., Development Issues in Ciskei, (Unpublished : Rhodes University, 1982), p. 8, estimate unemployment to be 25 per cent.
17. Charton, N., (ed.), op.cit., p. 10.
18. Benso, 'Statistical Survey of Black Development, 1981, Part II', Table 27.
19. Ibid., Table 27.
20. Ibid., Table 22.
21. Ibid., Table 23.
22. It should also be noted that these calculations do not include income from many informal sector activities, the contribution of which may be quite considerable.
23. Cited in, Surplus Peoples Project, 'Forced Removals in South Africa : the Eastern Cape,' The Surplus Peoples Project, vol. 2, (University of Cape Town : Cape Town, 1983), p. 44.
24. S.A.I.R.R., Survey of Race Relations, 1980, (S.A.I.R.R. : Johannesburg, 1981), calculates Household Subsistence Levels of R170,66 (Peddie district) and R196,00 (East London).
25. Calculated from Tables 8.8 and 8.9.
26. World Bank, World Development Report 1982, (OUP: New York, 1982), p. 111.
27. In terms of a per capita income of R262 in 1976 (Quail, G.P., op.cit., p. 60) Ciskei would fall into the Less-developed group of countries categorised in Table 5.2 above for this year.
28. Thereby avoiding the problem of converting the 1980 Ciskei income figure into US dollars and, so, attempting to discover an appropriate exchange rate.

29. Page, D., (ed.), Strategies and Guidelines for the Physical Development of the Republic of Ciskei, (Institute for Planning Research : Stellenbosch, 1982), p. 68.
30. Ibid., p. 68.
31. Page (Ibid., p. 84), attributes this comparatively high literacy level to the fact that education was introduced into this region at an early stage after first contact with the British in the early 19th century.
32. Ibid., p. 73.
33. Ibid., p. 73.
34. Eastern Province Herald, 'The Science Committee of the President's Council,' Eastern Province Herald, vol.139, no.71, 24 March 1983, p. 5.
35. Rand Daily Mail, 'Malnourishment Problem in Ciskei', Rand Daily Mail, 21 July 1980, p. 4.
36. Black, P.A., 'Regional Economic Strategy and the Black Homelands', in Truu, M.L., (ed.), Public Policy and the South African Economy, (Oxford University Press: Cape Town, 1976), pp. 93-100.
37. Incomes earned by people who live in Ciskei but work on a daily basis in "white" South Africa outside Ciskei's borders.
38. People who work on a contract basis in "white" South Africa for a fixed period of time.
39. Black, P.A., op.cit., p. 99.
40. Using the figure for the period 1972 to 1977 in Benso, Statistical Survey of Black Development, 1980, (Benso: Pretoria, 1981), Tables 51, 52 and 53, multipliers of 1,44, 1,43 and 1,44 were found for 1975, 1976 and 1977 respectively (despite substantial differences in data in those tables compared with those given here in Tables

8.16 and 8.17). Only for 1972-1973 and 1973-1974 did this value differ significantly, but this would seem to be the result of an incorrect calculation of black Ciskeian workers income in 1973 and the correction of this error in 1974.

41. Black (Black, P.A., op.cit., p. 99) found a smaller deviation in the multiplier from 1,202 to 1,500, but also found that there was no direct relationship between regional size and the size of the multiplier. Using the figures from Benso, 'Statistical Survey of Black Development, 1980', op.cit., Tables 51, 52 and 53, a deviation in the multiplier coefficient from 1,20 to 1,67 was found, but again there was no direct relationship between regional size and the size of the multiplier.
42. Perhaps the result of greater endogenous government expenditure associated with "independence" or of greater direct investment by the RSA in these areas to promote their economic wellbeing.
43. Black, P.A., op.cit., p. 94.
44. Quail, G.P., op.cit., p. 63.
45. Ibid., p. 70.
46. See Wilson, T., 'The Regional Multiplier - A Critique', Oxford Economics Papers, vol. 20, 1968, pp. 374-93.
47. Union of South Africa, Summary of the Report of the (Tomlinson) Commission for the Socio-Economic Development of the Bantu Areas within the Union of South Africa, U.G. 61/1955, (Government Printer: Pretoria, 1955).
48. Union of South Africa, White Paper on the Government's attitude towards the recommendation of the Tomlinson Commission, W.P. - f1956, (Government Printer: Pretoria, 1956).
49. Of an estimated population in 1980 of 666 000, 309 000 lived in urban areas, and more than 80 per cent of the urban population lived in Mdantsane and Zwelitsha (Quail, G.P., et.al., op.cit., p. 67).

50. Table 8.15.
51. Benso, 'Statistical Survey of Black Development, 1981, Part II', op.cit., Table 10.
52. Ibid., Table 12.
53. Table 8.15.
54. Benso, 'Statistical Survey of Black Development, 1981, Part II', op.cit., Table 10.
55. Ibid., Table 12.
56. Table 8.15.
57. See Chapter 5 above.
58. Wilson, T., op.cit., p. 357.
59. Black, P.A., op.cit., p. 97.
60. Benso, 'Statistical Survey of Black Development, 1981, Part II', op.cit., Table 48, gives the total capital investment by industrialists and the Industrial Development Corporation in the establishment of industries in the "border areas" of Ciskei as R166 550 000 and the estimated black employment as 14 645. Hence the total capital investment per black employment opportunity was R11 372.
61. Benso, 'Statistical Survey of Black Development, 1981, Part II', op.cit., Tables 42 and 44, gives the total capital investment by industrialists and the Ciskei Development Corporation as R32 625 000 and the estimated black employment as 3 076. Hence the total capital investment per black employment opportunity was R10 606.
62. Wilson, I., op.cit., p. 380.

63. Black, P.A., op.cit., p. 97.
64. Quail, G.P., op.cit., p. 70.
65. Ibid., p. 70.
66. Benso, 'Statistical Survey of Black Development, 1980', op.cit., Table 116.
67. Quail, G.P., op.cit., p. 68.
68. In return the entrepreneur had to make his factory available for purchase by Ciskeians at market value after 20 years.
69. Benso, 'Statistical Survey of Black Development, 1981, Part II', op.cit., Table 44.
70. Ibid., Table 42.
71. Ibid., Table 43.
72. Table 8.1.
73. Chapter 3.3 above.
74. Richardson, H.W., 'Regional Economics', op.cit., p. 96.
75. Ibid., p. 96.
76. South African Digest, 'The Promotion of Industrial Development : An Element of a Co-ordinated Regional Development Strategy for Southern Africa', supplement to South African Digest, 2 April 1982; and, R.S.A., The Good Hope Plan for Southern Africa, (Government Printer : Pretoria, 1981).
77. Pretoria - Witwatersrand - Vereeniging, Durban - Pinetown, Cape Town - Western Cape, and Port Elizabeth - Uitenhage.

78. Republic of South Africa, White Paper on the Information Document about the Promotion of Industrial Development as an Element of a Co-ordinated Regional Development Strategy for Southern Africa, (Department of Foreign Affairs and Information : Pretoria, 1982).
79. Bekker, S.B., Black, P.A. and Roux, A.D., op.cit., p. 12.
80. South African Digest, op.cit., p. 9.
81. Ibid., p. 9.
82. Bekker, S.B., Black, P.A., and Roux, A.D., op.cit., p. 13.
83. Page. D., op.cit., p. 83.
84. Benso, 'Statistical Survey of Black Development, 1981, Part II', op.cit., Table 50.
85. Ibid., Table 9.
86. Ibid., Table 9.
87. Quail, G.P., op.cit., p. 25.
88. S.A.I.R.R., 'Survey of Race Relations, 1980', op.cit., p. 453.
89. It must of course be remembered that should there be a high failure rate at primary schools within a region, a high number of primary school pupils may be older than 14 years, and, hence, favourably distort the primary school enrolment rate as a per cent of the population aged 5 to 14 years, when it should in fact point to a failure to adequately meet this basic need.
90. The appropriate age group is often 6 to 11 years (World Bank, 'World Development Report, 1982', op.cit., p. 170). If Ciskei's primary school enrolment were expressed as a percentage of the number of blacks in this age group, the enrolment rate would obviously be much higher. However, 5 to 14 years was considered more appropriate because in the South African education system,

children, on average, begin school at 5¹/₂ or 6 years and, hence, should only finish Std 5 at 13 years of age.

91. Quail, G.P., op.cit., p. 29, underlining added.
- 91a. A similar problem is against which yardstick should the satisfaction of the need for education be measured. In other words, at what level and quality of education can the basic need for education be considered to have been satisfied. As was stressed in Chapter 5, the concept of basic needs is dynamic; as economic development occurs, so the level of what is considered to be the "basic" need will change. In general, however, one can state that the level at which basic needs can be considered to be satisfied, is that level of education necessary for the productive utilisation of an individual within an economic system.
92. Ibid., p. 27.
93. Benso, 'Statistical Survey of Black Development, 1981, Part II', op.cit., Table 56.
94. Quail, G.P., op.cit., p. 70.
95. Benso, 'Statistical Survey of Black Development, 1981, Part II', op.cit., Table 60. In real terms this increase is negligible. In 1970 Rands, expenditure per pupil was R33,02 in 1977/78 and R33,95 in 1979/80 (indexes calculated from Ibid., Tables 26 and 28).
96. Quail, G.P., op.cit., p. 27.
97. Ibid., p. 27.
98. Benso, 'Statistical Survey of Black Development, 1981, Part II', op.cit., Table 50.
99. Table 8.19 above.
100. Benso, 'Statistical Survey of Black Development, 1981, Part II', op.cit., Table 52.
101. Quail, G.P., op.cit., p. 26.

102. Benso, 'Statistical Survey of Black Development, 1981, Part II', op.cit., Table 50.
103. Ibid., Table 52.
104. Quail, G.P., op.cit., p. 28.
105. Ibid., p. 28.
106. Ibid., p. 26.
107. Benso, 'Statistical Survey of Black Development, 1981, Part II', op.cit., Table 50.
108. Ibid., Table 52.
109. Quail, G.P., op.cit., p. 30.
110. Benso, 'Statistical Survey of Black Development, 1981, Part II', op.cit., Table 52.
111. Ibid., Table 52.
112. Benso, 'Statistical Survey of Black Development, 1981, Part II', op.cit., Table 96.
113. Ibid., Table 95.
114. Ibid., Table 97.
115. Rand Daily Mail, op.cit., p. 4.
116. Quail, G.P., op.cit., p. 30.
117. Quail (Ibid., p. 32) gives a total of 506 000 in-patient days for a total of 1 569 hospital beds in 1978, which means some 88,36 per cent of beds must have been occupied on average at all times.
118. Cited in Quail, Ibid., p. 30.
119. Ibid., p. 32.

120. Ibid., p. 32.
121. Nash, M., and Charton, N., (eds.), An Empty Table ? Churches and the Ciskei Future, (Johannesburg : South African Council of Churches, 1981), p. 64.
122. Quail, G.P., op.cit., p. 32.
123. World Bank, 'World Development Report, 1982', op.cit., Table 21.
124. The case studies in the Surplus Peoples Project [Surplus Peoples Project, op.cit., Part 3] reveal frequent complaints about inadequate sanitation and water supply, which are frequently linked to poor health and disease by those interviewed.
125. Martins, J.H., op.cit., Tables 22, 23 and 24.
126. Benso, 'Statistical Survey of Black Development, 1980', op.cit., Table 60.
127. Ibid., Table 60.
128. Ibid., Table 60.
129. In 1977 the total per capita income of blacks in the National States was R355, but for "continuously absent citizens" it was R417. Ibid., Table 57.
130. Page, D., op.cit., p. 83.
131. Claim by Dr. Trudi Thomas at the 'Ciskei Malnutrition Symposium', Rand Daily Mail, op.cit., p. 4.
132. Cited in Quail, G.P., op.cit., pp. 30-31.
133. Rand Daily Mail, op.cit., p. 4.
134. Ibid., p. 4.
135. Acting Assistant-Secretary for Welfare in Ciskei, Mr M. Nduna, at 'Ciskei Malnutrition Symposium', Ibid., p. 4.

136. Quail, G.P., op.cit., p. 31.
137. Table 8.35.
138. Table 8.35.
139. Table 8.35.
140. Table 8.35.
141. Surplus Peoples Project, op.cit., p. 230.
142. Quail, G.P., op.cit., p. 30.
143. Ibid., p. 31.
144. Ibid., p. 31.
145. Ibid., p. 31.
146. Martins, J.H., op.cit., pp. 41-43.
147. Quail, G.P., op.cit., p. 33.
148. Ibid., p. 33.
149. Martins, J.H., op.cit., p. 14.
150. Quail, G.P., op.cit., p. 34.
151. Martins, J.H., op.cit., p. 14.
152. Foster, C., 'Daub home answer for black housing,' Weekend Post, 13 June, 1981, p. 15.
153. Eastern Province Herald, 'Housing disaster warning', op.cit., p. 4.
154. Surplus Peoples Project, op.cit., p. 232.
155. Ibid., p. 191.
156. Ibid., p. 191.

157. Ibid., p. 191.
158. Ibid., p. 191.
159. Ibid., p. 192.
160. Ibid., p. 191.
161. Ibid., p. 192.
162. Quail, G.P., op.cit., p. 36.
163. Table 8.36.
164. Surplus Peoples Project, op.cit., p. 192.
165. Quail, G.P., op.cit., p. 36.
166. Eastern Province Herald, 'Housing disaster warning', op.cit., p. 4.
167. Ibid., p. 4.
168. Quail, G.P., op.cit., pp. 36-37.
169. Evening Post, 'Total shift in housing policy,' Evening Post, 10 February 1983, p. 10.
170. Department of Community Development, Housing, vol. 1, 1983, p. 1.
171. Evening Post, op.cit., p. 10.
172. See also, Department of Community Development, 'Aanpassing van beleid met betrekking tot die verkoop van wonings wat uit die Nasionale Behusingsfonds gefinansier is,' Circular Minute, no.8, 1983; and Kotze, S.F., Opening van die jaarvergadering van die OVS Munisipale Skakelvereniging, 27 Augustus 1982, (Department of Community Development : unpublished, 1982).

8.6 STATISTICAL APPENDIX

8.6.1 Contents

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Table 8.1¹ : GDP of Ciskei according to economic activity at current prices (Rands)

	1970	1970	1975	1975	1980	1980
	R('000)	%	R('000)	%	R('000)	%
Agriculture and Forestry	3 440	16,3	8 358	15,3	10 980	8,3
Manufacturing	2 189	10,4	4 008	7,3	29 319	22,2
Electricity, Gas & Water	-	-	64	0,1	99	0,1
Construction	1 472	7,0	7 146	13,0	21 563	16,4
Trade and Catering	808	3,8	1 419	2,6	4 700	3,6
Transport	1 570	7,4	3 033	5,5	5 842	4,4
Financial Services	3 691	17,5	6 407	11,7	9 552	7,2
Public Administration	3 017	14,3	8 504	15,5	15 800	12,0
Education	3 700	17,6	12 451	22,7	23 900	18,1
Health	923	4,4	2 992	5,5	9 300	7,0
Other Services	269	1,3	460	0,8	864	0,7
TOTAL	21 079	100,0	54 842	100,0	131 919	100,0

1. Benso, 'Statistical Survey of Black Development, 1981, Part II', op.cit., Table 21 (for 1975 and 1980 figures); and Benso, 'Statistical Survey of Black Development, 1978, (Benso : Pretoria, 1978), Table 18 (for 1970 figures).

Table 8.2¹ : Economically active Black population according to industrial group, 1980

	Agricul- ture	Mining	Manufac- turing	Elec- tricity	Constr- uction	Commerce	Trans- port	Finan- cing	Serv- ices	Unspeci- fied & Unemployed	Total Econo- mically Active	Not Econo- mically Active	Total
CISKEI	11 540	1 480	28 040	580	4 640	14 040	4 900	900	31 760	38 340	136 220	533 120	669 340
% of Total Economically Active	8,47	1,09	20,58	0,42	3,41	10,31	3,60	0,66	23,31	28,15	100	-	-
% of TOTAL	1,72	0,22	4,19	0,09	0,69	2,10	0,73	0,13	4,75	5,73	20,35	79,65	100

1. Benso, 'Statistical Survey of Black Development, 1981, Part II', *op.cit.*, Table 7.

Table 8.31 : Distribution of income, 1980 (per cent)

Annual Income (Rands)	% of Households	
	Rural	Urban
0 - 800	26	5
801 - 1 600	33	15
1 601 - 2 600	17	25
2 601 - 3 400	8	16
3 401 +	16	39

1. Surplus Peoples Project, op.cit., p. 44.

Table 8.41 : Household size, 1980 (per cent)

Size	Mdantsane	Dimbaza	Sada	Elukhanyweni	Kammaskraal	Glenmore
1 - 4	23	19	5	10	16	19
5 - 8	72	48	82	69	60	41
9 +	5	33	13	21	24	40
Ave	6,1	7,3	6,8	7,1	7,0	7,3

1. Surplus Peoples Project, op.cit., p. 331.

Table 8.5¹ : Real gross domestic and national product (income) per capita at 1970 prices (Rands)

	Ciskei	Kwazulu	Qwaqa	Lebowa	Gazankulu	Kangwane	Transkei	Bophuthatswana	Venda
Real GDP									
1975	50	43	61	49	36	33	70	117	50
1976	69	47	63	48	38	26	67	130	51
1977	66	48	71	40	38	67	67	110	55
1978	71	44	80	38	38	47	71	115	60
1979	69	44	74	45	43	58	76	138	63
1980	70	45	68	46	44	54	85	159	69
Real GNP									
1975	127	158	249	123	107	167	156	248	110
1976	171	170	258	126	109	176	150	262	114
1977	166	172	261	120	108	216	151	257	122
1978	169	182	256	120	108	202	155	262	131
1979	163	187	235	127	113	224	160	283	142
1980	168	196	249	137	120	229	174	314	154

1. Benso, 'Statistical Survey of Black Development, 1981, Part I', *op.cit.*, Table 57; and Benso, 'Statistical Survey of Black Development, 1981, Part II', *op.cit.*, Table 59.

Table 8.6¹ : Real GDP and GNP per capita as percentage of RSA at current prices

	RSA	Ciskei	Kwazulu	Qwaqa	Lebowa	Gazankulu	Kangwane	Transkei	Bophuthatswana	Venda
Real GDP										
1975	100	7,82	6,72	9,54	7,66	5,63	5,16	10,94	18,29	7,82
1976	100	11,06	7,53	10,10	7,69	6,09	4,17	10,74	20,84	8,17
1977	100	10,97	7,97	12,79	6,65	6,31	11,13	11,13	18,28	9,14
1978	100	11,66	7,22	13,13	6,24	6,24	7,72	11,66	18,88	9,85
1979	100	11,03	7,03	11,83	7,19	6,87	9,27	12,15	22,06	10,07
1980	100	10,36	6,66	10,06	6,81	5,51	7,99	12,58	23,53	10,21
Real GNP										
1975	100	20,78	25,85	40,73	20,12	17,50	27,32	25,52	40,57	17,99
1976	100	28,72	28,55	43,33	21,16	18,30	29,56	25,19	44,00	19,15
1977	100	27,88	28,89	43,84	20,15	18,14	36,28	25,36	43,16	20,49
1978	100	29,10	31,34	44,08	20,66	18,60	34,79	26,69	45,12	22,56
1979	100	28,23	30,40	42,76	20,04	18,04	33,74	25,89	43,76	21,88
1980	100	25,94	30,26	38,44	21,15	18,53	35,36	26,86	48,48	23,78

1. Calculated from Benso, 'Statistical Survey of Black Development, 1981, Part I', *op.cit.*, Table 56; and Benso, 'Statistical Survey of Black Development, 1981, Part II', *op.cit.*, Table 28. RSA GNP and GDP per capita calculated in Table 8.11.

Table 8.7¹ : Ranking of designated black areas as percentage of real GDP and GNP per capita of RSA at 1970 prices

	Ciskei	Kwazulu	Qwaqa	Lebowa	Gazankulu	Kangwane	Transkei	Bophuthatswana	Venda
Real GDP									
1975	4=	7	3	6	8	9	2	1	4=
1976	2	7	4	6	8	9	3	1	5
1977	5	7	2	8	9	3=	3=	1	6
1978	3=	7	2	8=	8=	6	3=	1	5
1979	4	8	3	7	9	6	2	1	5
1980	3	8	5	7	9	6	2	1	4
Real GNP									
1975	6	4	1	7	9	3	5	2	8
1976	4	5	2	7	9	3	6	1	8
1977	5	4	1	8	9	3	6	2	7
1978	5	4	2	8	9	3	6	1	7
1979	5	4	2	8	9	3	6	1	7
1980	6	4	2	8	9	3	5	1	7

1. From Table 8.5.

Table 8.8¹ : Population of RSA, 1975-1980 ('000)

	1975	1976	1977	1978	1979	1980
RSA	25 343	26 055	24 550 ²	24 012 ³	24 639 ³	24 986 ⁴
Transkei	-	-	2 197 ⁵	2 237 ⁵	2 288 ⁵	2 324 ⁶
Bophuthatswana	-	-	-	1 228 ⁵	1 276 ⁵	1 323 ⁶
Venda	-	-	-	-	-	316 ⁶
Total	25 343	26 055	26 747	27 477	28 203	28 949

1. RSA, Bulletin of Statistics, Dec. 1982, (Central Statistical Services : RSA, 1982), p. 1.1.
2. De facto population of Transkei excluded.
3. De facto population of Transkei and Bophuthatswana excluded
4. De facto population of Transkei, Bophuthatswana and Venda excluded
5. Calculated from Benso, 'Statistical Survey of Black Development, 1981, Part II', *op.cit.*, Table 12.
6. *Ibid.*, Table 6.

Table 8.9¹ : Real GDP and GNP per capita of RSA at 1970 prices (R million)

GDP - RSA	1975	1976	1977	1978	1979	1980
Market prices ¹	27 454	31 002	34 327	39 868	47 642	61 857
Real GDP (1975 prices) ²	27 454	27 528	27 264	28 343	29 872	33 120
Real GDP (1970 prices) ³	16 212	16 256	16 100	16 737	17 640	19 558
Real GDP per capita (1970 prices) ⁴	639,7	623,9	601,9	609,1	625,5	675,6
GNP - RSA						
Market Prices ¹	26 234	29 588	32 696	38 009	45 603	59 302
Real GDP (1975 prices) ²	26 234	26 272	25 969	27 021	28 594	31 752
Real GNP (1970 prices) ³	15 491	15 514	15 335	15 956	16 885	18 750
Real GNP per capita (1970 prices) ⁴	611,3	595,4	573,3	580,7	598,7	647,7

1. RSA, South African Reserve Bank Quarterly Bulletin, Dec 1982, (Pretoria : 1982, p. 5-82.

2. Calculated from Ibid., where Real GDP (1975 prices) = GNP (Market prices)/GNP (1975 prices) x GDP (Market prices).

3. Real GDP (1970 prices) = Real GDP (1975 prices) x GDP (1970 prices) 1975/GDP (Market Prices) 1975 = Real GDP (1975 prices) x 0,5905, where GDP (1970 prices) for 1975 = R16 144 million, and GDP (market prices) for 1975 = R27 339 million (RSA, South African Reserve Bank Quarterly Bulletin, March 1980, (Pretoria 1980), p. 5-80.

4. Population figures taken for each year from Table 8.8.

5. Real GNP (1970 prices) = Real GNP (1975 prices) x 0,5905.

Table 8.10¹ : GNP per capita per level of development as a percentage RSA, 1980 (per cent)

Level of Development ²	1980 GNP per capita (\$) ³	1980 GNP per capita as % RSA
Low-Income Economies	260	11,30
China and India	270	11,74
Other Low-Income	230	10,0
Middle-Income Economies	1 400	60,87
Oil Exporters	1 160	59,43
Oil Importers	1 580	68,70
High-Income Oil Exporters	12 630	549,13
Industrial Market Economies	10 320	448,70
Nonmarket Industrial Economies	4 640	201,73

1. World Bank, 'World Development Report, 1982', op.cit., pp. 111 - 112.

2. The levels of development are determined as follows: "The economies included in the World Development Indicators are classified by GNP per capita. This classification is useful in distinguishing economies at different stages of development. Many of the economies included are also classified by dominant characteristics - to distinguish oil importers and exporters and to distinguish market and non market industrial economies. The groups used [in the tables] are 33 low income developing economies with a per capita income of \$410 or less in 1980; 63 middle income developing economies with a per capita income of more than \$410; 4 high income oil exporters; 19 industrial market economies; and 6 non market industrial economies", *Ibid.*, p. 103.

3. Figures are a weighted average.

Table 8.11¹ : GNP per capita of African countries as a percentage of RSA, 1980 (per cent)

Country	GNP per capita (\$)	GNP p.c. as % of RSA	Country	GNP per capita (\$)	GNP p.c. as % RSA
Chad	120	5,2	Ghana	420	18,3
Ethiopia	140	6,1	Kenya	420	18,3
Somalia	-	-	Lesotho	420	18,3
Mali	190	8,3	Mauritania	440	19,1
Burundi	200	8,7	Senegal	450	19,6
Rwanda	200	8,7	Angola	470	20,4
Upper Volta	210	9,1	Ciskei	-	22,7
Zaire	220	9,6	Liberia	530	23,0
Malawi	230	10,0	Zambia	560	24,3
Mozambique	230	10,0	Egypt	580	25,2
Sierra Leone	280	12,2	Zimbabwe	630	27,4
Tanzania	280	12,2	Common	670	29,1
Guinea	290	12,6	Congo, Peoples Rep.	900	39,1
Central Af. Rep.	300	13,0	Morocco	900	39,1
Uganda	300	13,0	Nigeria	1 010	43,9
Benin	310	13,5	Ivory Coast	1 150	50,0
Niger	330	14,3	Tunisia	1 310	57,0
Madagascar	350	15,2	Algeria	1 870	81,3
Sudan	410	17,8	South Africa	2 300	100,0
Togo	410	17,8	Libya	8 640	375,7

1. World Bank, 'World Development Report, 1982', op.cit. pp. 111-112. (South Africa's GNP per capita = \$ 2 300).

Table 8.12¹ : Adult literacy per ethnic group (per cent)

Ethnic Group	%
Xhosa	72,7
Zulu	65,6
Swazi	64,2
South Sotho	61,8
North Ndebele	64,1
South Ndebele	59,7
Tswana	67,9
North Sotho	73,5
Shangaan	58,5
Vhavenda	65,3
Other	68,1
TOTAL	66,9

1. Benso, 'Statistical Survey of Black Development, 1981, Part I', op.cit., Table 15. Literacy is taken to mean all persons (15 years and older) with the ability to read and write.

Table 8.131 : Global adult literacy and life expectancy at birth per level of development (per cent, years)

Level of Development ²	Adult Literacy (1977) ³	Life Expectancy at birth (1980) ³
Low-Income Economies	50	57
China and India	54	59
Other Low-Income	34	48
Middle-Income Economies	65	60
Oil Exporters	57	56
Oil Importers	73	63
High-Income Oil Exporters	25	57
Industrial Market Economies	99	74
Nonmarket Industrial Economies	100	71

1. World Bank, 'World Development Report, 1982', op.cit., pp. 111 - 112. Adult literacy rate is here defined as "the percentage of persons aged 15 and over who can read and write", (Ibid., p. 164), while Life Expectancy at birth "indicates the number of years new born children will live if subject to the mortality risks prevailing for the cross-section of population at the time of their birth." (Ibid., p. 164).

2. Same as in Table 8.10.

3. Figures are weighted averages.

Table 8.14¹ : Adult literacy and Life Expectancy at birth in African Countries (per cent, years)

Country	Adult Literacy (1977)	Life Expectancy at birth (1980)	Country	Adult Literacy (1977)	Life Expectancy at birth (1980)
Chad	15	41	Ghana	-	49
Ethiopia	15	40	Kenya	50	55
Somalia	60	44	Lesotho	52	51
Mali	9	43	Mauritania	17	43
Burundi	23	42	Senegal	10	43
Rwanda	50	45	Angola	-	42
Upper Volta	5	39	Liberia	25	54
Zaire	58	47	Zambia	44	49
Malawi	25	44	Egypt	44	57
Mozambique	28	47	Zimbabwe	74	55
Sierra Leone	-	47	Cameroon	-	47
Tanzania	66	52	Congo, Peoples Rep. of	-	59
Guinea	20	45	Morocco	28	56
Central Afr. Rep.	39	44	Nigeria	30	49
Uganda	48	54	Ivory Coast	41	47
Benin	25	47	Tunisia	62	60
Niger	5	43	Algeria	35	56
Madagascar	50	47	South Africa	-	61
Sudan	20	46	Libya	-	56
Togo	18	47			

1. World Bank, 'World Development Report, 1982', op.cit. pp. 111-112. Definitions the same as in Table 8.13.

Table 8.15¹ : GNP of Ciskei at factor cost (Rands)

	1975		1976		1977		1978		1979		1980	
	R million	%	R million	%	R million	%	R million	%	R million	%	R million	%
Black Ciskeian Workers	44,9	30,0	51,2	29,9	59,0	30,0	75,8	32,2	88,6	32,5	110,5	32,4
Non-Black Residents	3,5	2,3	4,0	2,3	4,4	2,2	6,1	2,6	6,6	2,4	8,4	2,5
Black Frontier Commuters	41,0	27,4	46,2	27,0	52,6	26,7	62,1	26,4	72,9	26,7	90,5	26,6
Black Migrants	60,4	40,3	70,0	40,8	81,0	41,1	91,5	38,8	104,8	38,4	131,3	38,5
TOTAL	149,8	100	171,4	100	197,0	100	235,5	100	272,9	100	340,7	100

1. Benso, 'Statistical Survey of Black Development 1981, Part II', op.cit., Tables 25 and 26.

Table 8.16¹ : Real GNP of Ciskei, 1975 - 1980, at 1970 prices
(R' 000)

	1975	1976	1977	1978	1979	1980
GNP	35,0	35,9	36,8	42,4	43,7	47,6

1. Benso, 'Statistical Survey of Black Development, 1981, Part II', op.cit., Table 28.

Table 8.17¹ : Gross National Income of Ciskei (R millions)

Year	1975	1976	1977	1978	1979	1980
Black Commuter Income (Yc)	41,0	46,2	52,6	62,1	72,9	90,5
Black Migrant Income (Ym)	60,4	70,0	81,0	91,5	104,8	131,3
Total Exogenous Income (Yx)	101,4	116,2	133,6	153,6	177,7	221,8
Black Ciskeian Workers Income	44,9	51,2	59,0	75,8	88,6	110,5
Non-Black Ciskeian Workers Income	3,5	4,0	4,4	6,1	6,6	8,4
Total Endogenous Income (Yn)	48,4	55,2	63,4	81,9	95,2	118,9
Total Income (Y)	149,8	171,4	197,0	235,5	272,9	340,7
dY from previous year	-	21,6	25,6	38,5	37,4	67,8
dYx from previous year	-	14,8	17,4	20,0	24,1	44,1
k=dY/dYx	-	1,46	1,47	1,93	1,55	1,54

1. Adapted from Table 8.15.

Table 8.18¹ : Gross National Income of the Black States in South Africa (R millions)

	Ciskei	Kwazulu	Qwaqa	Lebowa	Gazankulu	Kangwane	Transkei	Bophuthatswana	Venda	Total
	R million	R million	R million	R million	R million	R million	R million	R million	R million	R million
1975										
Yx	101,4	568,6	28,9	212,1	50,4	48,3	341,0	335,1	32,5	1718,3
Yn	48,4	165,9	5,5	86,5	19,7	9,6	202,1	155,0	22,5	715,2
Y	149,8	734,5	34,4	298,6	70,1	57,9	543,1	490,1	55,0	2433,5
1980										
Yx	221,8	1611,4	110,7	540,1	127,9	182,6	738,2	835,2	92,2	4460,1
Yn	118,9	389,6	27,6	190,1	59,1	43,9	533,3	491,7	57,8	1912,0
Y	340,7	2001,0	138,3	730,2	187,0	226,5	1271,5	1326,9	150,0	6372,1
dYx	120,4	1042,8	81,8	328,0	77,5	134,3	397,2	500,1	59,7	2741,8
dY	190,9	1266,5	103,9	431,6	116,9	168,6	728,4	836,8	95,0	3938,6
k=dY/dYx	1,58	1,21	1,27	1,32	1,51	1,25	1,83	1,67	1,59	1,44

1. Benso, 'Statistical Survey of Black Development, 1981, Part I', *op.cit.*, Tables 52, 53 and 54; and Benso, 'Statistical Survey of Black Development, 1981, Part II', *op.cit.*, Tables 25 and 26.

Table 8.19¹ : Black primary pupils, teachers and number of pupils per teacher 1977-81

Year		1977	1978	1979	1980	1981
Ciskei	Pupils	146 821	156 620	162 638	174 313	184 260
	Teachers	2 916	3 297	3 446	3 835	4 245
	Pupils per teacher	50,4	47,5	47,2	45,5	43,4
Independent Black States ²	Pupils	1 096 096	1 141 717	1 179 977	1 188 903	1 195 430
	Teachers	18 446	19 772	20 813	20 780	21 739
	Pupils per teacher	59,4	57,7	56,7	57,2	55,0
Self-governing Black States ³	Pupils	1 168 580	1 308 438	1 390 700	1 495 764	1 551 763
	Teachers	20 651	23 301	24 950	27 315	29 807
	Pupils per teacher	56,6	56,2	55,7	54,8	52,1
RSA	Pupils	1 256 448	1 215 296	1 292 005	1 370 017	1 364 547
	Teachers	23 903	24 159	26 731	27 580	30 823
	Pupils per teacher	52,6	50,3	48,3	47,4	44,3
Total RSA and Black States	Pupils	3 521 124	3 665 451	3 862 682	3 991 684	4 111 740
	Teachers	63 000	67 232	72 494	75 675	82 369
	Pupils per teacher	55,9	54,5	53,3	52,7	49,9

1. Benso, 'Statistical Survey of Black Development, 1981, Part I', *op.cit.*, Table 83; and Benso, 'Statistical Survey of Black Development, 1981, Part II', *op.cit.*, Table 51.

2. Transkei, Bophuthatswana, Venda and Ciskei.

3. Kwazulu, Qwaqwa, Lebowa, Gazankulu, Kangwane and Kwandebele.

Table 8.20¹ : Primary school enrolment as per cent of blacks between 5 and 14 years

		1980
Ciskei	No of Blacks between 5 and 15 years	190 000
	Primary school enrolment	174 314
	Primary school enrolment as % of number between 5 and 15 years	91,74
Independent Black States ²	No of Blacks between 5 and 15 years	1 441 568
	Primary school enrolment	1 188 903
	Primary school enrolment as % of number between 5 and 15 years	82,47
Self-Governing Black States ³	No of Blacks between 5 and 15 years	1 846 920
	Primary school enrolment	1 495 744
	Primary school enrolment as % of number between 5 and 15 years	80,99
RSA	No of Blacks between 5 and 15 years	2 129 040
	Primary school enrolment	1 307 017
	Primary school enrolment as % of number between 5 and 15 years	61,39
Total RSA and Black States	No of Blacks between 5 and 15 years	5 417 528
	Primary school enrolment	3 991 684
	Primary school enrolment as % of number between 5 and 15 years	73,68

1. Benso, 'Statistical Survey of Black Development 1981, Part I', op.cit., Table 8; Benso 'Statistical Survey of Black Development, 1981, Part II', op. cit., Table 9; and Table 8.19.

2. Transkei, Bophuthatswana, Venda and Ciskei.

3. Kwazulu, Qwaqwa, Lebowa, Gazankulu, Kangwane and Kwandebele.

Table 8.21¹ : Number enrolled in primary school as percentage of age-group

Level of Development	Number enrolled primary school as percentage of age group 2 in 1979
Low-Income Economies	94
China and India	102
Other Low-Income	64
Middle-Income Economies	97
Oil Exporters	97
Oil Importers	96
High-income Oil Exporters	81
Industrial Market Economies	102
Nonmarket Industrial Economies	100

1. World Bank, 'World Development Report, 1981', *op.cit.*, Table 23.
2. Figures are a weighted average.

Table 8.22¹ : Matriculation and Senior Certificates conferred as a percentage of Form III certificates 2 years earlier

		1978	1979	1980
Ciskei	a) Matriculation and Senior Certificates conferred	594	705	873
	b) Form III Certificates conferred two years earlier	2 127	2 963	6 024
	c) a/b %	27,9	23,8	14,5
Independent Black States ²	a) Matriculation and Senior Certificates conferred	4 473	6 040	8 937
	b) Form III Certificates conferred two years earlier	16 733	17 556	30 681
	c) a/b %	26,7	34,4	29,1
Self-governing Black States ³	a) Matriculation and Senior Certificates conferred	6 013	9 338	16 601
	b) Form III Certificates conferred two years earlier	13 194	18 398	34 338
	c) a/b %	45,6	50,8	48,3
RSA	a) Matriculation and Senior Certificates conferred	2 791	4 193	10 269
	b) Form III Certificates conferred two years earlier	12 960	8 548	19 058
	c) a/b %	21,5	49,1	53,9
Total RSA & Black States	a) Matriculation and Senior Certificates conferred	13 277	19 571	35 807
	b) Form III Certificates conferred two years earlier	42 887	44 502	84 077
	c) a/b %	31,0	44,0	42,6

1. Benso, 'Statistical Survey of Black Development 1981, Part I', *op.cit.*, Tables 87 and 88; Benso, 'Statistical Survey of Black Development, 1981, Part II', *op. cit.*, Tables 55 and 56.

2. Transkei, Bophuthatswana, Venda and Ciskei.

3. Kwazulu, Qwaqwa, Lebowa, Gazankulu, Kangwane and Kwandebele.

Table 8.23¹ : Form III Certificates as a percentage of Higher Primary Certificates awarded three years earlier

		1979	1980
Ciskei	a)Form III Certificates conferred	4 948	3 176
	b)Higher Primary Certificates three years earlier	9 008	10 654
	c)a/b %	54,9	29,8
Independent Black States ²	a)Form III Certificates conferred	32 911	29 359
	b)Higher Primary Certificates three years earlier	50 662	53 371
	c)a/b %	65,0	55,0
Self governing Black States ³	a)Form III Certificates conferred	45 297	37 497
	b)Higher Primary Certificates three years earlier	58 849	67 724
	c)a/b %	77,0	55,4
RSA	a)Form III Certificates conferred	27 278	19 557
	b)Higher Primary Certificates three years earlier	72 046	61 429
	c)a/b %	37,9	31,8
Total RSA and Black States	a)Form III Certificates conferred	105 486	86 413
	b)Higher Primary Certificates three years earlier	181 557	182 524
	c)a/b %	58,1	47,3

1. Benso, 'Statistical Survey of Black Development, 1981, Part I', *op.cit.*, Tables 86 and 87;

Benso, 'Statistical Survey of Black Development, 1981, Part II', *op. cit.*, Tables 54 and 55.

2. Transkei, Bophuthatswana, Venda and Ciskei.

3. Kwazulu, Qwaqwa, Lebowa, Gazankulu, Kangwane and Kwandebele.

Table 8.241 : 1979 enrolment per standard as a percentage of enrolment in one lower standard in 1978

STANDARD	CISKEI
Sub A	-
Sub B	70,87
Std 1	91,83
2	89,30
3	101,21
4	88,10
5	99,70
6	79,38
7	92,72
8	91,46
9	59,69
10	68,82

1. S.A.I.R.R., 'Survey of Race Relations, 1979,' op.cit., p. 497;
S.A.I.R.R., 'Survey of Race Relations, 1980', op.cit., p. 459.

Table 8.25¹ : Teacher qualifications RSA and Black States

	1975 ²		1978 ³		1979 ⁴	
	No	%	No	%	No	%
Professionally qualified with :						
Std 6	11 610	18,18	9 929	14,87	9 593	13,17
Junior Certificate or equivalent	30 665	48,01	33 770	50,58	38 472	52,80
Technical Certificate and 'Other'	339	00,53	53	00,08	56	00,08
Matriculation or equivalent						
+ Primary Teachers Certificate	7 723	12,09	5 434	08,14	6 708	09,21
+ Secondary Teachers Certificate	-	-	2 027	03,04	2 764	03,79
Incomplete Degree	-	-	1 087	01,63	1 126	01,55
Degree	1 405	02,20	1 359	02,04	1 524	02,09
Special Teachers Certificate	-	-	207	00,31	280	00,38
Total	51 742	81,01	53 866	80,68	60 523	83,06
No Professional Qualification but:						
Junior Certificate or lower	10 882	17,04	10 757	16,11	9 753	13,39
Technical Certificate	179	0,28	171	00,26	189	00,26
Matriculation or equivalent	833	1,30	1 650	02,47	2 030	02,79
Incomplete Degree	96	0,15	131	00,20	131	00,18
Degree	136	0,21	189	00,28	238	00,33
Total	12 126	18,98	12 898	19,32	12 341	16,94
TOTAL	63 868	100,00	66 764	100,00	72 864	100,00

1. Excluding Transkei and Bophuthatswana for 1978 and 1979.
2. S.A.I.R.R., *Survey of Race Relations, 1977*, (S.A.I.R.R. : Johannesburg, 1978), P. 475.
3. S.A.I.R.R., *'Survey of Race Relations, 1979'*, *op.cit.*, p. 501.
4. S.A.I.R.R., *'Survey of Race Relations, 1980'*, *op.cit.*, p. 473.

Table 8.26¹ : Health facilities in the Black States, 1981

	CLINICS		HOSPITALS		
	Number	Population per clinic	Number	Beds	Population per bed
Ciskei	92	7 275	5	1 981	338
Transkei	171	13 589	34	7 630	305
Venda	44	7 171	4	1 296	244
Bophuthatswana	128	10 338	10	5 912	224
Kwazulu	130	26 217	29	8 521	400
Qwaqwa	10	15 648	1	245	639
Lebowa	131	13 278	17	4 614	377
Gazankulu	38	13 474	6	1 517	338
Kangwane	31	5 181	2	826	194
Kwandebele	10	15 625	-	-	-
TOTAL	785	13 713	108	32 542	331

1. Benso, 'Statistical Survey of Black Development, 1982, Part I', *op.cit.*, Table 96; and Benso, 'Statistical Survey of Black Development, 1982, Part II', *op.cit.*, Table 61.

Table 8.27¹ : Household Expenditure on Food in Ciskei

Income Group	R	R 00,00 - 1 199,99	R1 200,00 - 2 199,99	R2 200,00 - 3 399,99	R3 400,00 - 5 199,00	R5 200,00 +	Total
Large Urban Areas ²	R %	794,64 53,2	1 065,78 49,7	1 247,45 44,9	1 392,56 35,4	2 268,74 28,7	1 412,44 37,9
Income Group	R	R 00,00 - 799,99	R 800,00 - 1 599,99	R1 600,00 - 2 599,99	R2 600,00 - 3 999,99	R4 000,00 +	Total
Small Urban Areas ³	R %	639,96 70,4	735,70 54,3	934,85 55,5	967,71 40,5	1 678,83 32,9	841,84 49,7
Rural Areas ⁴	R %	424,87 61,0	733,64 53,5	884,26 46,9	1 263,93 42,1	1 671,25 29,8	851,72 43,4

1. Martins, J.H., *op.cit.*, Tables 22, 23 and 24.
2. Based on a sample of 313 households.
3. Based on a sample of 99 households.
4. Based on a sample of 287 households.

Table 8.28¹ : Household Distribution per Income Group

Income Group	R	R 00,00 - 1 199,99	R1 200,00 - 2 199,99	R2 200,00 - 3 399,99	R3 400,00 - 5 199,00	R5 200,00 +	Total
Large Urban Area	Sample Number %	36 11,54	74 23,71	79 25,32	62 19,87	61 19,55	312 100
Income Group	R	R 00,00 - 799,99	R 800,00 - 1 599,99	R1 600,00 - 2 599,99	R2 600,00 - 3 999,99	R4 000,00 +	Total
Small Urban Area	Sample Number %	28 28,28	30 30,30	18 18,18	17 17,17	6 6,06	99 100
Rural Area	Sample Number %	75 26,13	95 33,10	49 17,07	37 12,89	31 10,80	287 100

1. Martins, J.H., *op.cit.*, Tables 22, 23 and 24.

Table 8.29¹ : Percentage Increase in Expenditure on Food per Income Group

Income Group	R	R 000,00 - R1 200,00 1 799,99 2 199,99	R1 200,00 - R 2 200,00 2 199,99 3 399,99	R2 200,00 - R3 400,00 3 399,99 5 199,00	R3 400 - R 5 200,00 5 199,00
Large Urban Areas	%	34,12	17,05	11,63	62,92
Income Group	R	R 000,00 - R 800,00 799,99 1 599,99	R 800,00 - R 1 600,00 1 599,99 2 599,99	R1 600,00 - R2 600,00 2 599,99 3 999,99	R2 600 - R 4 000,00 2 999,99
Small Urban Areas	%	14,96	27,07	3,52	73,48
Rural Areas	%	72,67	20,53	42,94	32,23

1. Table 8.27 (above).

Table 8.30¹ : Dietary Patterns in Mdantsane Households

Food items	Daily	Twice weekly	Weekly	Less than weekly
Carbohydrates: Maize	83	15	1	1
Bread	94	0	1	5
Sugar	90	2	3	5
Proteins: Meat	5	18	27	50
Eggs	10	18	10	62
Vitamins: Milk	34	4	17	45
Greens	34	44	18	4
Other: Tea/Coffee	95	1	1	3
Fat	40	6	27	27

1. Surplus Peoples Project, *op.cit.*, p. 190.

Table 8.31¹ : Eating Frequency in Elukhanyweni Households (per cent)

Commodities	Daily	Twice weekly	Weekly	Monthly
Carbohydrates: Maize	93	7	-	-
Bread	85	3	6	5
Sugar	98	-	1	1
Proteins: Meat	4	11	41	45
Eggs	16	9	16	60
Vitamins: Milk	23	8	10	60
Greens	27	40	30	5
Other: Tea/Coffee	99	1	-	-
Butter	42	14	15	28

Table 8.32² : Eating Frequency in Glenmore Households (per cent)

Commodities	Daily	Twice	Less than Weekly
Carbohydrates: Maize	89	11	-
Bread	51	33	16
Sugar	81	5	14
Proteins: Meat	-	30	70
Eggs	3	16	81
Fish	-	8	92
Vitamins: Milk	30	24	46
Vegetables	8	62	30
Other: Tea/Coffee	81	5	14
Margarine	32	36	32

1. Surplus Peoples Project, *op.cit.*, p. 275.

2. *Ibid*, p. 303.

Table 8.33¹ : Diet in Sada, Glenmore and Kammaskraal (2) contrasted with Mdantsane, Dimbaza and Elukhanyweni (1), 1981 (per cent).

Items	DAILY		LESS THAN WEEKLY	
	(1)	(2)	(1)	(2)
Greens	19-34	8-9	4-2	15-30
Margarine/fat	40-54	22-39	27-29	32-44
Meat	4-6	0-2	33-50	60-78
Potatoes/rice	9-15	1-5	27-30	43-56
Fish	0-4	0-1	74-79	90-96
Eggs	0-10	2-4	60-76	72-81
Sugar	83-98	81-91	1-6	2-14
Tea/Coffee	84-99	81-91	0-5	2-14
Cheese	5-9	0-3	79-90	92-99
Milk	14-34	15-30	45-60	46-72
Jam	9-18	3-27	66-88	64-96

Table 8.34² : Diet pattern of Households (per cent)

Item	Mdantsane ³		Dimbaza		Sada		Elukhanyweni		Kammaskraal		Glenmore	
	daily	ltw ³	daily	ltw	daily	ltw	daily	ltw	daily	ltw	daily	ltw
Maize	80	2	75	8	97	0	93	0	90	0	89	0
Vegetables	34	4	19	12	8	15	27	5	9	28	8	30
Meat	5	50	6	33	1	67	4	44	2	78	0	70
Milk	34	45	14	55	18	46	23	60	15	72	30	46

1. Surplus Peoples Project, *op.cit.*, p. 231.

2. *Ibid.*, p. 338.

3. Less than weekly.

Table 8.35 : Number of meals per day (per cent)

Location	Three	Two	One
Mdantsane ¹	67	28	5
Dimbaza ²			
Sada ³	32	63	5
Elukhanyweni ⁴			
Kamaskraal ⁵	45	49	6
Glenmore ⁶	60	34	6

1. Surplus Peoples Project, op.cit., p. 190.
2. Unknown.
3. Ibid., p. 231.
4. Unknown.
5. Ibid., p. 318.
6. Ibid., p. 303.

Table 8.361 : Number of housing units and population in proclaimed towns in Ciskei, 1977-1981.

Towns	1977	1978	1979	1980	1981
Dimbaza					
Population	9 555	10 970	12 595	14 460	16 601
Housing Units	1 697	1 700	1 679	1 759	1 947
Ilitha					
Population	1 302	1 886	2 733	3 960	5 738
Housing Units	260	258	602	610	642
Kayaletu					
Population	1 262	1 287	1 312	1 338	1 364
Housing Units	215	157	199	199	199
Mdantsane					
Population	123 157	134 204	146 242	159 360	173 654
Housing Units	16 880	18 062	18 755	19 788	21 117
Ntselamanzi					
Population	126	126	126	-	-
Housing Units	12	12	8	-	-
Sada					
Population	14 432	15 090	15 780	16 500	17 253
Housing Units	2 898	2 900	2 921	2 408	1 994
Zwelitsha					
Population	26 909	27 671	28 454	29 260	30 089
Housing Units	2 478	2 502	2 504	2 514	2 538
Total					
Population	176 743	191 234	207 242	224 878	244 699
Housing Units	24 440	25 591	26 668	27 278	28 437

1. Benso, 'Statistical Survey of Black Development, 1981, Part II', op.cit., Table 14.

Table 8.371 : Annual change in population and number of housing units, 1977-1981 (per cent).

Towns	1977/78	1978/79	1979/80	1980/81	1977/81
Dimbaza					
% change in population	14,8	14,8	14,8	14,8	73,7
% change in housing Units	0,2	-1,2	4,8	10,7	14,7
Ilitha					
% change in population	44,9	44,9	44,9	44,9	340,7
% change in housing Units	-0,8	1,5	133,3	1,32	146,9
Kayaletu					
% change in population	2,0	1,9	2,0	1,9	8,1
% change in housing Units	-27,0	26,8	0,0	0,0	-7,4
Mdantsane					
% change in population	9,0	9,0	9,0	9,0	41,0
% change in housing Units	7,0	3,8	5,5	6,7	25,1
Ntselamanzi					
% change in population	0,0	0,0	0,0	-	-
% change in housing Units	0,0	-33,3	-	-	-
Sada					
% change in population	4,6	4,6	4,6	4,6	19,5
% change in housing Units	0,1	0,7	-17,6	-17,2	-31,2
Zwelitsha					
% change in population	2,8	2,8	2,8	2,8	11,8
% change in housing Units	1,0	0,1	0,4	1,0	2,4
Total					
% change in population	8,2	8,4	8,5	8,8	38,4
% change in housing Units	4,7	4,2	2,3	4,2	16,4

1. Table 8.36.

Table 8.38¹ : Population per housing unit in proclaimed towns, 1977-1981

Towns	1977	1978	1979	1980	1981
Dimbaza	5,63	6,45	7,50	8,22	8,53
Iliitha	5,01	7,31	4,54	6,49	8,94
Kayaletu	5,87	8,20	6,59	6,72	6,85
Mdantsane	7,30	7,43	7,80	8,05	8,22
Ntselamanzi	10,50	10,50	15,75	-	-
Sada	4,98	5,20	5,40	6,85	8,65
Zwelitsha	10,86	11,06	11,36	11,64	11,86
Total	7,23	7,47	7,77	8,24	8,60

1. Table 8.36.

Table 8.391 : Population per housing unit in proclaimed towns in the Black States in South Africa, 1981.

	1981
Bophuthatswana	5,64
Ciskei	8,60
Venda	7,93
Kwazulu	8,36
Qwaqwa	4,75
Lebowa	7,03
Gazankulu	5,44
Kangwane	7,46
Kwandebele	4,14
Total ²	7,46

1. Benso, 'Statistical Survey of Black Development, 1981, Part I', op.cit., Table 39; and Benso, 'Statistical Survey of Black Development, 1981, Part II', op.cit., Table 15.

2. Excluding Transkei.

Table 8.401 : Distribution of own houses by number of rooms for Black households, 1981

Number of rooms	Large Urban Areas		Small Urban Areas		Rural Areas	
	Number	%	Number	%	Number	%
1	-	-	2	6,6	-	-
2	-	-	5	16,7	12	13,2
3	-	-	10	33,3	12	13,2
4	36	53,7	5	16,7	14	15,4
5+	36	46,3	8	26,7	53	58,2
Total	67	100,0	30	100,0	91	100,0

1. Martins, J.H., op.cit., p. 75.

Table 8.411 : Distribution of rented houses by number of rooms for Black households, 1981

Number of rooms	Large Urban Areas		Small Urban Areas		Rural Areas	
	Number	%	Number	%	Number	%
1	5	2,0	2	2,9	-	-
2	-	-	48	69,6	2	33,3
3	3	1,2	1	1,4	2	33,3
4	165	67,1	15	21,7	1	16,7
5+	73	29,7	3	4,4	1	16,7
Total	246	100,0	69	100,0	6	100,0

1. Martins, J.H., op.cit., p. 75.

Table 8.421 : Distribution of own houses by type of wall for Black households, 1981

Type of Wall	Large Urban Areas		Small Urban Areas		Rural Areas	
	Number	%	Number	%	Number	%
Stone	3	4,5	-	-	7	2,5
Clay	-	-	15	50,0	120	42,7
Brick	34	50,7	14	46,7	140	49,8
Concrete	30	44,8	1	3,3	2	0,7
Other	-	-	-	-	12	4,3
Total	67	100,0	30	100,0	281	100,0

1. Martins, J.H., op.cit., p. 76.

Table 8.431 : Distribution of rented houses by type of wall for Black households, 1981

Type of Wall	Large Urban Areas		Small Urban Areas		Rural Areas	
	Number	%	Number	%	Number	%
Stone	2	0,8	1	1,4	-	-
Clay	1	0,4	-	-	1	16,7
Brick	128	52,3	33	47,8	5	83,3
Concrete	112	45,7	35	50,8	-	-
Other	2	0,8	-	-	-	-
Total	245	100,0	69	100,0	6	100,0

1. Martins, J.H., op.cit., p. 76.

Table 8.44¹ : Distribution of own houses by type of roof for Black households, 1981

Type of Roof	Large Urban Areas		Small Urban Areas		Rural Areas	
	Number	%	Number	%	Number	%
Grass	-	-	6	20,0	61	21,7
Corrugated iron	6	9,0	19	63,4	201	71,5
Asbestos	60	89,6	4	13,3	2	0,7
Other	1	1,4	1	3,3	17	6,1
Total	67	100,0	30	100,0	281	100,0

1. Martins, J.H., op.cit., p. 78.

Table 8.451 : Distribution of rented houses by type of roof for Black households, 1981

Type of Roof	Large Urban Areas		Small Urban Areas		Rural Areas	
	Number	%	Number	%	Number	%
Grass	-	-	-	-	-	-
Corrugated iron	10	4,1	15	21,7	6	100,0
Asbestos	235	95,9	54	78,3	-	-
Other	-	-	-	-	-	-
Total	245	100,0	69	100,0	6	100,0

1. Martins, J.H., op.cit., p. 77.

Table 8.461 : Distribution of own houses by electricity available for Black households, 1981

Electricity Available	Large Urban Areas		Small Urban Areas		Rural Areas	
	Number	%	Number	%	Number	%
Yes	49	73,1	-	-	1	0,4
No	18	26,9	30	100,0	280	99,6
Total	67	100,0	30	100,0	281	100,0

1. Martins, J.H., op.cit., p. 78.

Table 8.471 : Distribution of rented houses by electricity available for Black households, 1981

Electricity Available	Large Urban Areas		Small Urban Areas		Rural Areas	
	Number	%	Number	%	Number	%
Yes	48	19,6	2	2,9	-	-
No	197	80,4	67	97,1	6	100,0
Total	245	100,0	69	100,0	6	100,0

1. Martins, J.H., op.cit., p. 78.

Table 8.48¹ : Nature of dwellings, 1981 (per cent)

	Mdantsane	Dimbaza	Sada	Elukhanyweni	Kammaskraal	Glenmore
Tent	0	1	0	3	42	3
Shack	3	3	0	0	25	0
Temporary House	11	17	8	72	32	94
Permanent House	86	79	92	25	1	3

1. Surplus Peoples Project, *op.cit.*, p. 338.

CHAPTER 9 : CONCLUSION

In this thesis an attempt has been made to show that the concept of economic development goes beyond the measurement of national or regional output and their rates of growth. In a sense, all development is regional; geographically, a region may be simply a part of a wider national entity or, alternatively, consist of a number of national states, or it may in principle even coincide with the political boundaries of a particular national state. Regional growth theories (such as Export Base theory and its extensions) and location theories are essentially based on the measurement of broad economic aggregates and, therefore, ignore the fact that regions (in all senses of the word) may well differ in their receptiveness or ability to respond to economic development efforts. Economic development does not only mean regional development from a geographical point of view; it also means development of the individuals within a region, or of society as a whole.

The widespread disappointing performance of economic growth in failing to substantially reduce poverty and to create the conditions of self-sustained economic development in less-developed countries, may well result from a failure to recognise that economic development does not take place in a social vacuum. The missing ingredient between economic growth and development may, therefore, be vested in the people of a region, rather than in the properties of a territory itself. It has thus been argued here that the "missing link" for the achievement of a threshold for sustained economic development may be filled by the satisfaction of basic needs, at least to a required minimum level. On this logic, a Basic Needs strategy was integrated into the wider elements of a development policy based upon location and growth theory. Ciskei was then considered as a typical case study of a less-developed region in South Africa, and it was concluded that both government and private expenditure could be better co-ordinated if a Basic Needs strategy was consciously adopted. If such a strategy were to prove successful in Ciskei, this would imply a much wider field of potential application, certainly in South Africa and probably in much of the Third World.

The satisfaction of basic needs should be seen as the cause of development, not the consequence of a lack of development. Failure to adequately satisfy basic needs may well result, for example, in famine

and epidemics, which would then necessitate expenditure of a "basic needs" nature anyway. But such Basic Needs expenditure would amount to a social welfare policy (in a rather desperate sense) and not an economic development policy of the kind discussed in this thesis. Thus basic needs in the context of development policy should be viewed as a means to an end, rather than as an end in itself. Failure to do so may result in a reversal of cause and effect, and expenditure on basic needs would then be a consequence of poverty and misery rather than a cause of development.

This thesis has attempted to show that cause and effect can indeed be reversed in this manner. In other words, a diagnosis of the problems of economic development is necessary, and only after a correct diagnosis has been made can a useful Basic Needs strategy (as a means to the end of economic development) be applied. Rather than to draw up a development blueprint, an attempt was made to diagnose the problems retarding development in the broadest sense. Thus, instead of a specific set of policy measures, an alternative general strategy of development has been suggested here. This was done at a conceptual rather than an operational level, as operational measures without prior conceptual diagnosis are very likely to miscarry, or only succeed by chance.

Such a conceptual framework is not applicable to Ciskei alone. A solid foundation of economic growth represented by an adequate provision of basic needs may be precisely what many developing countries need to replace their somewhat precarious type of existence where economic growth can be easily reversed. In times of prosperity a structural deficiency in the satisfaction of basic needs may become temporarily obscured in a developing country. However, during the recent world recession, a frequent problem has been the following : A developing country may find it difficult to apply the necessary resources towards export production which would further the cause of economic recovery, on account of the underlying poverty which the recession itself has now served to reveal. Scarce resources must therefore be belatedly applied to poverty alleviation, at the expense of economic growth. Basic needs may thus be an essential component or dimension of development policy, something which has been overlooked in the uncritical application of growth theory to underdeveloped regions.

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