RELEVANCE AND THE CURRICULUM: THE CASE OF
THE YEMEN ARAB REPUBLIC.

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ABSTRACT

The question of relevance in education in general, and in the curriculum in particular, is a major concern in present-day educational discourse. Often the interpretation of the concept is far too narrow, emphasizing vocational issues and ignoring more general ones, and concentrating on immediate rather than long-term problems. Such an interpretation, if rigidly adhered to, would result in an education irrelevant to present needs and changes in the field of education and in society. For the purpose of this thesis, relevance in education is taken as relating to a number of issues connected with the quality of education and the quality of life: the relationship of the content and system of education to the socio-economic and cultural environment in both the local and the global dimensions; relationships within the structure of education itself, as well as issues concerned with concepts of knowledge in relation to culture; with methodology; with the interests and stages of development of the learners. The whole process needs to be viewed in the context of the nature and stages of human development.

The diffuse nature of the issue of relevance makes it necessary to find an organizing conceptual framework that will act as a base for a curriculum that incorporates external and internal, individual and social, local and global aspects of relevance. Such a framework is provided by a fusion of the concept of "Basic Human Needs" as derived from an analysis of the theories of Abraham Maslow, with some central educational principles, to draw up a list of the learning needs most conducive to present requirements for the improvement of the quality of life of the individual, of the society and of humanity at large.
An important aspect of a relevant curriculum is the ordering of priorities: this will depend on the socio-economic and cultural context in which the curriculum is to operate. An analysis of the Yemeni background indicates a duality in perceptions of priorities: changing socio-economic conditions, urge public and official interest towards development-oriented education, in particular, towards a vocational and technical bias in the content of education, while strong traditional constraints militate against all attempts to modernize and improve the quality and relevance of education.

The survey of the present situation, undertaken as field-work for this thesis, reinforces this dual perception; according to the survey, religious and cultural concerns emerge as the major educational issue. However, high priority was also accorded to literacy, communication skills, personality development and skills and attitudes related to the conduct of everyday life.

A curriculum relevant to the Yemeni context must therefore attempt to broaden the scope of the traditional perceptions of life and of the education offered in schools. Such a curriculum must be based on the learning needs that emerge from the analysis of the Yemeni context; it must relate to the Yemeni local and national setting, within the wider context of universal human needs and values.
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INTRODUCTION

This thesis is an attempt to examine the issue of relevance in education in the light of new trends in the field of education, and of the socio-economic and cultural forces currently influencing and shaping the conditions of human life, with particular reference to the Yemeni context. From reading through current educational literature, it became apparent that despite the fact that almost all current educational work refers to the theme of relevance, very little of the literature has been devoted to the analysis of the concept of relevance itself. Many writers now shy away from applying the concept of relevance even when dealing with aspects of education that demand considerable clarity in their interpretation of what is relevant, such as the relationship between education and work; education and development; education and basic needs; education and cultural identity; education and peace; and education and environment. This reluctance may be attributed to the over-pragmatic misinterpretations of the concept that have gained currency, the most damaging of which must be the tendency to interpret relevance exclusively in terms of immediacy: the fallacy that in order to be relevant, education must be region and culture-specific, specific to certain vocational pursuits, and to the material conditions that inspire the motivation of the learner.

An examination of some recent trends in education indicates that the concept of relevance may become an overall organizing concept for both the external and internal efficiency and qualitative improvement of education and of the living standards of the learner and the collective to which he belongs. In the Yemeni context, I found that the central issue around which present educational changes revolve, is the question of the direction and content of the curriculum. In relating curricular aims and
content to the needs and aspirations of the individual learner, in his local, national and human context, it became apparent that in the world of today, it is impossible to deal with issues relevant to the individual without examining the social dimension; or to deal with aspects of immediate and local interest without reference to the national context, or of the latter in isolation from the wider human dimension at the global and international level. Thus, throughout this thesis, all the issues are approached in terms of their relevance to all these dimensions: individual, community, national, international and universal.

The first section deals with theory: the concept of relevance is examined; the argument is that the concept still has validity, but it needs a new interpretation to fit in with present needs and changes. A relevant education takes the individual as its starting point, relating his needs to those of society at the local, national and human levels, bearing in mind the nature of the process of learning, the stages of child development and the fact that education is oriented towards the future, since the future is the direct result of what takes place in the present. An emphasis on learning, implies that qualities, skills and attitudes needed for holistic development, are the matter of a relevant education, rather than the transmission of information. The second chapter analyses the concept of development and the role education is expected to play in the evolution or construction of society. In the last quarter-century or so, radical changes have taken place in the concept and strategy of development. Social development tends more and more to be seen in terms of the quality of individual life. The concept of quality of life in this context implies more than the satisfaction of basic material needs: it implies the development of the individual, of the qualities and potential for rationality and creativity that contribute to the improvement of human life. Some of the
ways in which development planning is attempting to promote these ends, include a concern for endogenous development and cultural identity, for self-reliance with direct participation in the planning process as an essential element; concern for human rights, freedoms, human interdependence and co-operation, the quest for peace and justice and for the intelligent use of resources and better techniques of interaction with the environment. Such a diversity of issues requires some central organizing concept to act as a framework for planning. The concept of basic human needs, analysed in chapter three, provides such a framework. This concept, as developed by Maslow, incorporates spiritual as well as material, intellectual and emotional needs. Maslow’s hierarchy of needs covers all areas of concern in current development planning, from the ecological issues involved in the question of resources, to the issues of human dignity concerned in the problems of peace, rights and freedom.

A number of educational principles are derived from each category of needs, each of which is seen as having three dimensions: the individual, both as an individual person and as a representative of the species; the socio-cultural dimension, including the local, national and global; and the ecological dimension including physical and natural resources and the ways in which human beings interact with nature. Translated into the context of education, a number of learning needs that derive from these general needs, are listed, in terms of knowledge and understanding, skills and attitudes. These components are to be related to the context in which the system is to operate.

Chapter four is devoted to curriculum planning and the methods of selecting and organizing the content of education. The scope of the curriculum should include all aspects of needs, of domains of knowledge
and learning experiences. Its organization and sequence should be based on
the immediate needs and interests of the learner, the theories of child
development, of moral, personal and cognitive development, and theories
of learning and instruction.

The second section (chapters five, six and seven) provides an analysis of
the Yemeni socio-economic and educational background. Major issues
arising from this analysis are the urgent need for the satisfaction of basic
material needs such as food, water, health, shelter and education, with
high concern for problems of personal and cultural identity and
intellectual and spiritual development. In principle most of the ideas and
trends that emerged from the examination of the concepts of education,
development and human needs, are present in the Yemeni context, in
particular in recent official policies. Yet the educational system and its
curricula fall short of meeting these demands, and even of achieving the
aims and objectives which have been assigned to them. The need for
change and for a more relevant curriculum is not only apparent from an
objective analysis of current practice but is also well appreciated at both
public and official levels.

The third section consists of the application of the findings of the theory
section to Yemen. In order to determine priorities for a more relevant
curriculum, a field-work survey was undertaken, from which a set of
educational needs were identified which could be taken as modifying
criteria for the selection and organization of the content of the
curriculum. Chapter Nine, the final chapter, is an attempt to draw up a
framework for a more relevant curriculum for Yemeni schools at the
general level, in which the concept of basic human needs is the unifying
factor to which Yemeni needs and priorities are related. This chapter also
includes a number of suggestions for possible ways of drawing up and implementing plans for teaching methods, learning activities and school organization; together with certain recommendations for teacher training and the improvement of the machinery for curriculum planning and renewal.

**Methodology in treating the literature**

In dealing with such a multidimensional issue as relevance in education, I found it necessary to use a combination of historical, comparative and evaluative methods in the analysis of the relevant literature. The treatment of the literature is:

- historical in the sense that I tried to trace approaches to issues such as relevance, education and development in Yemen, from certain points in the past, particularly since the end of World War II;
- comparative in the sense that different perspectives and conflicting views and theories are dealt with in each area;
- evaluative in the sense that ideas and arguments are critically analysed and then a choice is made for what is considered as the most relevant and practical alternative(s).

**Difficulties and shortcomings**

The way in which this thesis approached the problem of relevance differs to some extent from the usual procedure followed in studies at this academic level, which concentrate on in-depth analysis of a concept or phenomenon. The nature of the material for this study, however, required the investigation of a number of concepts and areas, most of which are in themselves multidimensional and broad in scope. The attempt to coordinate these wide-ranging topics and to translate them into practical suggestions for the improvement of the curriculum, necessitated some
sacrifice of depth of analysis in favour of a holistic and more practical approach.

The most serious difficulties encountered in the course of working on this paper were: the subtlety and complexity of the central theme of relevance and the lack of a major cohesive body of literature representing many of the key concepts used in this work, such as relevance in education and the concept of 'Basic Human Needs' as interpreted in this work; the problems associated with the collection of data in the Yemeni context in circumstances where written records are scant and field research virtually unknown.
A - The Quest for relevance

In the search for the meaning of relevance in education it may be useful at the outset to pose some questions, the answers to which may throw some light on the issue:

- what is the nature and scope of the phenomenon of relevance?;
- what is meant by relevant education and what might constitute a relevant educational content?;
- what are the implications of educational relevance for the management of education, including the selection and development of content?

These questions suggest that no educational content can be truly relevant unless it is based on a clear view of the concept of education and its aims and functions in a particular society at a particular time. Even when such a content exists or is agreed upon, it could be distorted before it reaches the learner, if the teaching, administrative and evaluative methods are not appropriate to achieving the aims of education.

Ambitious as it is to attempt to answer these questions, an attempt may be made to clarify, as far as possible, the nature and scope of the issue of relevance: how the concept developed; how it is used by different exponents; and its place in educational theory and practice.

If we take a simple definition of the concept 'relevance' to mean 'giving the particular student in the particular place the right sort of education for him' (Beeby, 1969:22), we may be justified in suggesting that 'relevance' is embodied in any educational theory even if only implicitly.
For example, an examination of Plato’s ideas of education, or indeed, those of any other educational thinker, indicates that what had been proposed was perceived as a relevant educational programme for their particular students in the kind of society they lived in. But what was relevant to the young aristocracy of Athens in the fifth century B.C., may not be relevant to the youth of the emerging pluralist forms of democracy in the rapidly changing societies of the late twentieth century A.D. Relevance therefore, cannot be separated from its temporal and spatial, as well as intellectual contexts.\(^{(1)}\)

Since the end of the Second World War, particularly in the late 1960’s as the available literature suggests, the notion of relevance has received great attention in educational discourse, and indeed in other areas of human concern outside education.\(^{(2)}\) Relevance in education became, as West (1969) puts it, a “powerful term - so powerful that it can make or break an educational programme”. The issue of relevance at present underlies many studies and programmes concerned with educational research and policy-making at both national and international levels.

Brooke, examining the issue of relevance in the Latin American context, states that “the call for relevance is not... confined to those recently decolonized countries eager to localize their curriculum.....There exist equally compelling arguments for the long-independent countries of Latin America”. (Brooke, 1982:74). This statement still restricts the problem of relevance to developing countries, whereas in reality it has become a global phenomenon. In North America, for instance, a vast literature exists on issues related to relevance. Michael Apple writes that “the critical examination of schools does not end in the ghettos... the suburban schools have been criticised...for their lack of relevance...Nor are the private schools immune”. (Apple, 1971:503).
The question of relevance in the present time has acquired a significance that goes beyond diagnoses that concentrate only on the immediate situation and seek to remedy only the most obvious symptoms. It is even hoped that a relevant educational system can help to remedy the causes of many of the ills of modern society, such as poverty in all its manifestations; the threat of war; oppression and misunderstanding between individuals, groups and nations. A relevant education is intended to improve the quality of human life as a whole. It is within this optimistic framework that the emphasis upon equality and participation, and the recognition of the importance of the individual in the issues that preoccupy human beings of the present time acquire meaning. Education is also expected to lead individuals towards the preparation for change, for living in the unknown future. Education is seen therefore, as a catalytic agent of change. At the root of change we must seek changes in attitudes; the development of the will, sincerity and honesty with the self and with others. The role of education thus starts with the development of better attitudes to change itself in order to ensure change as improvement.

In industrialised nations on the whole, the problem of making education relevant is both complex and acute, for their systems have developed into stratified, rigid structures and have generated well-established traditions on the basis of which the content of education is selected and organised, and which hinder quick change. These highly rational systems have in the past evolved, not only without regard to minority or individual needs, or indeed, depending on the level of stratification in the society, majority needs, but often with the direct intention of suborning those needs to the formation of a system amenable to control or exploitation. The English and French systems provide examples of how traditions characterised by
academic content and elitist structures, can long resist radical innovation, especially in the case of higher education.\(^{(4)}\)

Developing nations on the other hand, still have the advantage of flexibility, in that even though their educational systems and curricula may be said to be irrelevant for the most obvious reason - viz, they are imported and alien - they have not acquired that structural rigidity that typifies Western institutions. Even the elites, who are often accused of defending, or who genuinely do accept the foreign models of educational ideas and techniques, cannot overtly defend the uncritical adoption of such models.

In one significant respect industrialized countries are better able to conceive and support radical change: the combination of freedom of thought and high level of general education. Apart from the superiority of these nations' financial and technical resources, they often consider innovation and the search for solutions to social and educational problems as serious public matters open to collective debate in which different groups in society, among them intellectuals, politicians and professionals, take part. Crucial to this process, information on the issues is usually freely available, to the public as well as to those concerned with their implementation.

In developing countries such issues take the form of political decisions. The individual is powerless in such circumstances; information, freedom of expression and participation is virtually denied except to the officials. This perhaps is a result of the reluctance, indifference or simply the fear of change in those who are responsible for planning change in their society.
The nature of the problem

The quest for relevance then, is a universal one, although it may differ from country to country, or may be expressed in different ways. A major global problem is the question of what education should be relevant to.

Attitudes to relevance vary according not only to the interest groups who espouse them, but also to the time at which they are being advanced. The criticisms that have been levelled at education by both moderate and radical reformers since the sixties (5), may be interpreted as a new and uneasy appreciation of the necessity, in an age of rapid technological change and in a pluralistic world culture, to improve the quality and relevance of education. Within this period, consciousness was raised among leaders in the Third World, and different groups in developed countries - the working classes, women, racial minorities; these groups tried to create and assert their identity and establish their claims to survival, in a psychological climate that is beginning to value co-operation over resources above competition for them. Therefore the quest for relevance is present in some form or other wherever reform is taking place, whether it is mentioned explicitly or not. "Innovative educators throughout the world have continued in the 1970's to work towards the ideal of more relevant and diversified schooling, even though 'relevance' as a catch-phrase or slogan has faded from the headlines."

(Sinclair and Lillis, 1980:21)

The first wave of educational reform and "modernisation" in the sixties, based on the idea of national economic growth, both in industrialised and developing countries, has been severely and rightly criticised for the marginalization of the needs of the individual in this model. Misinterpretations were frequent; whole systems were dismissed as
irrelevant on the grounds that they were a post-colonial inheritance or an inert subsidiary of cultural imperialism. In the process of attacking such systems, some radical critics have advocated theories which bear little relation to practical and political realities. Other over-simplifications include accusations that the content of education is too theoretical, with no bearing on the lives of the people in rural areas or conversely, too pragmatic, with scant attention paid to any subject matter other than the purely vocational. In sociology, a new area concerned with the sociology of knowledge is generating much debate about the nature, organisation and distribution of knowledge and the psychosocial influence of linguistic and cultural background. In the field of pedagogy many argue that discovery learning strategies are superior to exposition; while others, Ausubel, for instance, finds much potential for meaningful learning in traditional methods.

Clearly such claims always contain elements of truth, truth that is violated when it is used polemically. To assert that a liberal academic type of education, for instance, is completely irrelevant to a child from a working class or rural background; that an education with a practical bias or based on traditional views of human nature, for example those offered in religious systems, has no relevance to children growing up in the industrialised West or in the urbanised sectors in developing countries, is itself an irrelevance.

New perceptions of relevance

Amid this conceptual confusion and these contradictions, certain perceptions have been developed by various international agencies which wield considerable influence in both developing and industrialised countries. The framework within which relevance was discussed in the
literature of the late 1970's is both more radical and more realistic than that of the 60's, for it takes into consideration all aspects of the educational process: its academic, political and practical functions. It also allows for the needs of the individual and the requirements of the society, not only at the local and national levels, but also at the international level.

The World Bank Education Sector Paper (1980) finds that the issue of relevance "involves a process of re-thinking the substance of education on the basis of both 'authenticity' and 'modernity', which are seen as an effective combination for rejecting, at the level of institutions and at the level of content, imported patterns and ready-made formulae". The Paper goes on to assert that "the concept of relevance pertains not only to relationships between the national life and culture and the external world, but also to the educational needs of different population groups within a country, especially "ruralists (sic), women, migrants and ethnic groups". (World Bank, 1980:20). Some of the official pronouncements of UNESCO provide an optimistic and comprehensive perspective of relevance: a perspective that tends towards a balanced model of education that would deal with all aspects of human life and individual needs.

However, it may be useful to point out at the outset that dangers arise when such normative principles are adopted as slogans, which Komizar calls 'ceremonial slogans', (Komizar, 1961:196), when no attempt is made to implement them, since the advisory nature of the function of UNESCO does not guarantee influence on national policy.

To revert to the subject of relevance, the Director-General of UNESCO, A.M. M'Bow, points out that "the search for a cultural identity is an
absolute necessity if education is to be made compatible with the aspirations and situations of \textit{the people} and it would therefore seem to be the precondition of true democratization...for this relevance, which would ensure that the child is not cut off from reality, would help diminish failure and wastage". (UNESCO, 1976a:5).

Yet it must also be ensured that the child is not cut off from the wider human reality: a narrow interpretation of relevance that confines the child's experience to the realities provided by his immediate environment, is no more beneficial in today's world than the abstract academic bias of traditional educational ideas which by-passed such experience.

The Meeting of Experts on the Methodology of Curriculum Reform suggests the following context within which relevance may be tackled: "Education...which does not have its roots in the actual cultural and social circumstances of a country leads to nowhere...The assimilation of national traditions and cultural values provides, at the same time, a basis for the appreciation of cultures and other systems of moral and aesthetic values. There is no break or incompatibility between national cultures and universal culture, between the past and the future." (Unesco, 1976b:11). If the dangers of too much patriotism and too much cultural dogmatism are avoided, it is within this national and universal framework that relevance in education may find authentic meaning.

Relevance in education should not be seen only in relation to the socio-cultural context, but rather must start with the individual, who is after all the ultimate aim of education, and indeed, the central goal of development. The idea of relevance may be likened to a web, with the individual at the centre, linking him with the surrounding society and
cultures and finally the human community at large. Hummel rightly argues that "it is the individual who is the final purpose of development; the individual in the enjoyment of all his fundamental rights...it is the welfare of the individual in the full sense of the word; it is the quality of life." (Hummel, 1977:131).

The development of the individual is not merely the dream of those often accused of being visionaries; it is the reality of life. Abstractions such as national ethos, cultural or ideological constructs have no real existence without the human beings who give them life and bestow meaning and value upon them. In religious teleology, when God created Earth, He created man to inhabit it and give it life and meaning, at the same time to enjoy what resources nature offers.

William Bunge feels that the source of development and human survival, which has been threatened by technology and the exploitation of nature, is man himself: "the human mind is a biological instrument, not an economic one. Growing and training the human mind, the raising and education of the young; this is the ultimate natural resource of the species." (Bunge, 1973:287). Wealth and 'progress' are not the only criteria of development; in the sphere of cultural excellence and social well-being, the quality of the individual life is the ultimate arbiter.

Therefore a relevant education must "relate, at one and the same time, to the aspirations of individuals - children, young people and adults, and of the various social groups and to the requirements of differing or conflicting considerations." (Unesco, 1976b:5). This is by no means an easy undertaking for educators, and may be opposed by those who may have vested interests in the form of educational provision, but it is the only
possible alternative if discussion about improving the quality of human life, about bridging the poverty and human gap, and about adding to or enriching human civilisation is to be taken seriously; and if people are honest when talking about helping the child to actualise and develop himself.

The translation of these ideals into practice is within our technological capacity; if this transformation does not occur, it is an indication that human psychological evolution has not kept pace with technological evolution, since such ideals, and probably nobler ones, existed centuries ago, in some religious traditions such as Islam, or in some educational ideas. For example, many of the present themes of the present work are to be found in Comenius' works written four centuries ago.(7)

Common pitfalls

It is as unlikely that an educational system can be made relevant in one blow, so to speak, as that it was wholly irrelevant in the first place. Even when a radical change becomes imminent, as is the case in those countries that undergo radical political change or those in which colonial influence - language, cultural and ideological values - still persist, change cannot take place overnight if it is to be authentic and continuous. Change can be proclaimed by official decree, but only on paper. There is no guarantee that such proclamations will be translated into action, even when material resources abound and buildings can be erected and materials purchased.

Such official measures are the logical starting point, but this has to be followed by the search for suitable alternatives and by the preparation of peoples' attitudes to change, to encourage them to understand and internalise the ideas rather than merely to grasp them superficially or to
manipulate the language in which they are expressed. Such a fundamental change may take a generation to pass through the educational institutions for formal learning.\(^8\) To change the attitudes of a large number of people, if indeed they change at all, is much more difficult than to come up with technical plans and ready-made solutions for social and educational problems.

Lessons learned from the experience of the last twenty-five years of both developing and industrialised countries, in their attempts to provide a better education for all, suggest that when a system is to be evaluated for relevance, those involved must beware of making priori judgements; of seeking out examples of what they diagnose as irrelevance rather than looking objectively at what they find and accepting anything that conforms to generally recognized criteria for relevance. They must begin with an attempt to survey the curriculum as a whole: to define a philosophy of the curriculum as a guideline for relevant planning. The researcher or the policy-maker whose intention is to plan a relevant programme, must be aware of the complexity of the social, economic and political structures and their real working, so that their effects on what he may propose can be predicted and allowed for at the outset. The very minimum required of him should be an ability to appreciate the enormous complexity of human nature and peoples' needs and aspirations.

Indiscriminate change in the content of education often occurs as a result of change in the political leadership, taking the form of new ideologies or different versions of the same ideology. Sometimes an ambitious administration, instead of creating new ideas, tries to adopt existing models without allowing for those aspects of local life that may affect the implementation of these ideas, so that in some cases programmes may
be institutionalised but not accepted, a practice which inevitably leads to failure. (9)

In some countries, especially underdeveloped rich ones, change has become an end in itself, merely a matter of following the fashion. Paul Hurst (1960) notes such practices in some of the Middle Eastern countries in terms of their use of technology. The criteria for selecting an innovation are high cost and in particular its elitist symbolic value rather than its usefulness.

Hummel is very critical of this kind of practice: "some countries have the tendency to choose - one is tempted to say 'a la carte' or according to the fashion" (Hummel, 1977:133). This sort of "bandwagon" policy often results in superficial, and in some cases harmful change: change in terminology rather than in real practice. As a cosmetic exercise, it can be very expensive both in terms of money and time; it may also discourage people from attempts at genuine change.

Ki-Zerbo describes an example of this situation: "quite often reforms were superficial. Certain publishing houses, yielding to easy solutions, thought that in order to Africanize a textbook it was enough to alternate Mistral and Camara Laye, or else Abraham Lincoln and Sundiata, or that it was enough to replace the apple tree with a mango tree and put under the tree a little Traore instead of a little Dupont." (Ki-Zerbo 1972:419). This account might look trivial on the surface, but sadly, it reflects a real situation in many countries where large amounts of money, effort and time are spent on such superficial tinkering.

Such policies of uncritical adaptation were very common in the 1960's
when many newly-established governments were struggling for their survival. They wanted to improve their countries on the basis of indigenous development, but lacked the ideas and techniques; and indeed, some lacked the will and sincerity to make intelligent and genuine changes. So ready-made solutions were accepted, either enthusiastically or reluctantly. In this way, many piecemeal solutions were mistaken for relevant change. Withey notes that sometimes irrelevance is a result of emotional bias or some other abdication of rationality: "he must be right; after all, he is a sincere man; Brand X must be the best because everybody is buying it, and so on." (Withey 1975:169). Such responses are typical of the attitudes to experts and their opinions in many developing countries. Their judgements are seldom disputed or questioned. In some cultures questioning the taken-for-granted is equated with disbelief or impoliteness, and this may be the reason why many undesirable ideas continue to be accepted. To avoid these dangerous pitfalls in the search for relevance, the system under observation should be analysed in such a way as not to confuse emotional, political, ideological or other bias with relevance, and as to dismiss as irrelevant only those areas and elements that have outlived their usefulness and those that foster values which could harm not only the particular society but the human community as a whole.

What is meant by relevance?
Despite the wide use of the notion of 'relevance', and the concern with making educational programmes relevant, the concept itself is still vague and lacks the necessary theoretical clarity that would guide educators in their efforts to make education relevant. John Francis (1973) points out that many attempts have been made to define 'relevance' but so far they have not led to a consistently acceptable formulation. Scheffler (1971)
notes that there is a theoretical vagueness and uncertainty surrounding the concept. In this section an attempt will be made to examine some of the definitions of the concept, how it has been debated, and finally to develop a working definition for the purpose of this thesis.

'Relevant', according to the Oxford Educational Dictionary, means 'bearing upon', 'connected to', 'pertinent to', the matter in hand. Bernstein's Reverse Dictionary equates 'relevant' with 'appropriate', 'applicable', and 'germane'. Roget sees 'relevance' as having an association with 'congruence' and 'harmony'. This set of definitions suggests that the concept of 'relevance' cannot be understood in isolation from the matter or subject to which it relates.

Relevance, Scheffler asserts, "is not an absolute property: nothing is relevant or irrelevant in and of itself." (Scheffler, 1971:109). It is then, a relative and contextual concept, in that if something is to be described as relevant or irrelevant, "there must be at least two objects - one that may be relevant or irrelevant, another to which it may be so." (Price 1974). The formula 'X is relevant to Y' must be followed in any situation where relevance is discussed.

The use of relevance in education, Withey suggests, "involves an extension of [the] central propositional usage to an 'evaluative' use, wherein 'relevant' is synonymous with 'suitable', 'acceptable' and 'appropriate'. (Withey, 1975:170). This usage necessitates some reference to the conceptual features of education, to moral principles and to theories of knowledge and the human mind. Withey seems to suggest that what can be seen as relevant should be appropriate to what we know of the concept of education, the theory of epistemology, and in psychology; these must also
be examined in the light of moral principles. Following this line of analysis Scheffler offers three interpretations of relevance: "the first is primarily epistemological, concerning the nature and warrant of knowledge. The second is primarily psychological, having to do with the character of thought. The third is mainly moral, treating of the purpose of schooling." (Scheffler 1971:109)

The question of the purpose of education also forces an examination of the other side of the equation: relevant to what or to whom? Haydon states that "the notion of 'relevance' operates in a teleological context; no point could be said to be relevant to a random series of unconnected assertions, but if an argument is properly so called, the series of assertions within it will be purposeful, and a point will be relevant not just because it has something to do with the subject-matter, but because it contributes to the pursuit of the purpose." (Haydon, 1973:225). The debate over whether education should be relevant to the society or to the individual, can never be finally settled, especially in a time of rapid change, global interdependence and increasing concern for freedom. The best that can be done is a temporary balance, with more or less emphasis on the socialization or personal development component, depending on the stage of development of the society to which the definition of education is to be applied.

In reality there seem to be no contradictions between the ideas advocated by any of the educational camps: knowledge-centred, child-centred or society-centred, and the many factions within each camp, provided they are genuine in their concern for humanity. It seems logical that there must be something to be learned which is worthwhile and useful; someone to learn, and a society to learn and live in: X must be
In the light of the above analysis of different interpretations of relevance, we may suggest the following steps for the process of reaching a relevant programme:

- First, we have to be clear about the matter in hand, by which we mean the concept of education, its content; in this case we have to look into the nature of knowledge, how it is organised and transmitted;
- Second, we should understand the nature of the human mind: how it acquires knowledge, how it influences and is influenced by, the environment; in which context this human being lives;
- Third, we must formulate and justify the purpose of education in the light of our knowledge of the nature of the concept and content of education, the immediate and expected needs of the individual in both his immediate and the wider community; all these in accordance with certain moral principles that have been defined by commonly accepted human criteria;
- Fourth, we must designate suitable strategies and techniques that will enable the learner, in his interaction with what has been considered worthwhile, to achieve the aims of the process; these aims are in the first instance his own aims; in the second, the aims of his society, and third, the aims of the human community.

Relevance in this sense suggests a series of interdependent, related and interlocking assertions based on the analysis of the nature and content of the educational process and its context; these assertions must arise from the outlined aims of the process and must lead to the pursuit of those
aims by means of suitable procedures designed for achieving them. When we use terms such as worthwhile, meaningful, useful and interesting, we are not providing alternatives to relevance; rather they are concomittants of relevance. An educational programme must also be seen in the light of the rewards that accrue to it in the eyes of the individual within his immediate context and the wider human world. The rewards are not entirely material - getting a job or learning practical skills - they may well be intellectual, spiritual and psychological, or indeed a combination of all these, because man functions in many dimensions.

Problems arise when one comes to translate these principles into action; problems of the limitations of resources, human, technical and material, and philosophical limitations of how to determine criteria for a relevant programme. In these circumstances we do not necessarily dismiss anything that is valuable and important as irrelevant. Rather we can introduce another concept, that of 'priority'. This concept is by no means new, but it has been confused with relevance. Priority implies that although a set of alternatives is relevant we cannot undertake it all here and now; instead we must choose those elements which are of immediate urgency in our context, and of most immediate meaning and use to the learner. This should not mean that we have abandoned our ideal or consider what has been left out as irrelevant; rather the immediate priorities and the stage of the childrens' development determine what must be done first, so that one can reach one's ideal as the process develops.

This interpretation of relevance is wider and more complete than the restricted interpretations that view relevance in terms of preparing and familiarizing the child with his immediate surroundings, locality or
society, and those who interpret the concept in terms of complete reliance on the child's felt needs and interests. The former view which has become widely used, may foster closed-mindedness and cut the child off from the real world, and may further deprive those already deprived in their surroundings. The latter, on the other hand, may imply a denial of some other worthwhile activities that are valuable and useful to the society and consequently to the individual as an active and responsible member of society, but whose value may not be immediately apparent to the student's perception. Both lines then, foster the dichotomy between what is valuable or universally worthy and what is of immediate interest and use, and between the individual and society, to the extent that they have come to be seen as two opposing, if not inimical, forces.

An alternative approach would be one in which relevance becomes the covering principle or criterion for education, as the network that links and co-ordinates all educational principles and activities, to produce the well-integrated and learning man. In this approach, the individual is to be placed in the centre of the process of development and education, and what appears to have immediate relevance to solving his problems or satisfying his needs, is not necessarily or exclusively that which answers his immediate social needs, as some of the advocates of child-centred education advise, nor is it exclusively that which answers immediate economic needs, as those who advocate a pragmatic approach or as the advocates of basic needs programmes might recommend. Relevance to the individual, in the context of a humanist interpretation of human nature, encompasses social and economic content, but the person is more than the sum of these needs, and a more holistic view of relevance would see the education of the individual simultaneously as an end in itself, and as a means to establish a workable society, on the basis that intelligent,
well-balanced individuals will create for themselves a rational society. What is relevant to the individual must also necessarily be relevant to the society, for the society and its concerns are the collective version of individual concerns. If what is socially worthwhile is not meaningful and teachable to the learner, it is inert knowledge, and if what is relevant to the learner is not of social value and does not contribute to solving social problems, it merely amounts to egocentrism. We are dealing with what Bruner calls 'social relevance and personal relevance' on the basis that what is socially relevant is or should ultimately be seen as relevant by the individual.

A paradox arises from the fact that we sometimes talk about 'society', meaning the values and needs of the economy, which in fact refers to the needs and values of the dominant groups - dominant class or state rulers, in which case the needs and values of minority groups are dismissed or relegated to the second order; on the other hand when we talk about the 'individual' the term often implies 'individualism' rather than 'individuality'. Individuality implies the recognition of individual differences and needs within a common, harmonious society. To identify individual differences is to afford each person a reasonable chance of meeting his needs and aspirations and to enable the individual to live within the society, rather than to foster those elements that would alienate him from his own reality.

Prospects for Relevance
Instead of eliminating those valuable elements which may appear to be difficult for the learner, other methods can be used to facilitate the process of learning. When it is decided that something is valuable, has worth and bearing on the learner's needs and aspirations, i.e. that it is
relevant, it becomes the task of the school to overcome any dichotomy between what is worthwhile and valuable and what is useful and interesting. This obviously requires new teaching/learning strategies and new approaches to organising educational programmes. Subjects or areas of experience need, thus, to be enlivened and made relevant to the learner without losing their social or academic relevance.

William Glasser, who attributes to lack of relevance the failure of many children to learn, argues that children should be taught techniques of making their learning relevant: "schools usually do not teach a relevant curriculum; when they do, they fail to teach the child how he can relate this learning to his life outside school." (Glasser, 1969: 50). These ideas bring to mind Bruner's views about readiness, when he argues that one should not just wait until children are ready but that children can be prepared for readiness to learn particular content. Bruner's 'spiral curriculum' is a significant strategy for the implementation of relevance as perceived here.

Such a perspective of relevance in which cultural heritage as well as everyday life experience are equally important; in which the 'nomothetic' and the 'idiographic' goals are to be balanced; in which the concrete is seen essentially as an expression of the abstract, and the local experience is a means of comprehending the national and the global; requires a very careful and skillful engineering to weave all these threads into one programme. It implies the following characteristics:

- Coherence and congruence between the concept and aims of education, based on, and derived from the economic, social, cultural and educational characteristics of the milieu in which
the person to be educated will live, and the needs, aspirations and abilities of the learner at a particular stage of his development;

- Coherence and congruence between the educational aims and the syllabi, learning activities and content, teaching/learning methods and material of all kinds;

- Coherence and congruence between the planned curriculum and the instructional system: teaching/learning objectives and classroom/real life activities inside and outside the school;

- Coherence and congruence between all the above-mentioned and the evaluation strategies, both formative and summative; and the incentive system. (cf. Verodia, 1981:273-4).

Such a perspective of relevance will require a suitable research strategy and techniques that will be capable of identifying the socio-cultural and economic needs of the social system and its conception of the functions of the educational process, and also of identifying the needs and aspirations of the individual and relating them to social needs and aspirations; all of these within a framework of global humanism. This also implies greater flexibility in the content of education, which must be capable of changing and growing in accordance with the changes that are taking place in the world outside the school. This flexibility and diversity require reasonable autonomy for the teacher and imply an upgrading of his skills and motivation if he is to participate in such a relevant programme which without the active role of the teacher, could not be implemented.

To work out a relevant educational content in accordance with this view of
relevance, it is essential to examine the 'matter in hand', the socio-economic context, and the needs of the individual. The "matter in hand" is so thorny and complex that human beings have been trying to grasp it and to get it organised since the dawn of civilisation. The difficulties involved in this endeavour are compounded by the fact that the "matter" changes continually. The process of coping with these ever-changing realities is the process of education, and it is now necessary to attempt an examination of this exceptionally complicated concept.

B - The Concept of Education

"Education does not lend itself to a definition, and certainly not to one that can endure as unalterable." (Smith 1957:7)

Education, like such concepts as justice, democracy and truth, does not admit of the kind of conceptual clarity that lends itself to an easy and clear-cut definition. The difficulty of finding an adequate definition for education is probably as old as education itself. Today the concept of education has broadened and become even more complex, with the expansion of scientific knowledge and technology and the consequent breakdown of many of the institutions of traditional society, resulting in what might be called an 'institutional overload' in the area of education. Education in modern society is forced by default to be responsible for virtually all aspects of the upbringing of the individual and to contribute to the smooth running of society and to its economic prosperity; while, as an institution, it often receives little recognition and support for this variety of functions.

Nevertheless, despite this difficulty of definition, most educators start from some attempt to define the concept. Peters (1966) notes that it is
neither easy nor desirable to define education; John White, who advocates taking the aims of education as the point of departure, argues that "if one begins by delineating the concept of education, one runs the risk of overlooking a whole dimension of possible aims at the outset." (White 1982:5). But despite these reservations, both Peters and White commence by giving a definition of education, albeit in broad, general terms: "education is upbringing" in the case of White; in the case of Peters, "education is...a family of procedures by means of which individuals are initiated into worthwhile activities, modes of conduct and norms of thought and awareness." (in Beeby 1969:152)

Any definition one may adopt must, however, be regarded as relative: for "definitions of education are made within the ethos of their time", and by inference of their place. (Musgrave 1970:14). The first requirement therefore, for any definition of education relevant to the needs of modern life must be flexibility: an inbuilt capacity to adapt to changing conditions and circumstances.

In the interest of neatness of classification, it has become customary to divide educational thought into 'schools' or 'models', such as 'knowledge-centred', 'society-centred', 'child-centred' or other types of classification. A more general classification will be adopted here: that of 'traditional' and 'progressive' schools, the basic tenets of which, in the respective literatures, often appear to be mutually exclusive. The former represents those who believe that the central themes of education are the nature of knowledge and the requirements of socialisation; the latter has come to represent those who regard education as a process of individual, 'person-centred' development, emphasising interpretations of the processes involved in education and the person's experience rather than the content...
to be transmitted.

One of the reasons for the high degree of controversy involved in the debate between advocates and opponents of these 'theories' and their off-shoots arises from the lack of that flexibility to which reference has just been made: instead of being taken for what they are, temporal and specific responses to the needs and state of knowledge of their times, they are taken for final answers, systems incorporating universal truths, rather than the small step towards a nearer approximation to truth, which any advancement in knowledge actually is. The fact that many ideas from both perspectives and many other interpretations overlap, also reflects the lack of conceptual clarity in the area of education.

This lack of clarity is apparent even at the etymological level: there is some confusion as to which of the two Latin terms, 'educere' (meaning to lead out), or 'educare' (meaning to bring up), was the source of the modern usage of education. The idea has been that the two theories mentioned earlier are based on these two terms: the traditional school which emphasises 'instruction', the transmission of knowledge, is based on the idea of 'educare', and the progressive school which emphasises 'discovery', and learning by experience (the heuristic approach), is based on the idea of 'educere'. (cf. Schofield, 1962:65).

The same conceptual discrepancy is apparent in Arabic: the term 'tarbiya' (education) meaning 'upbringing', 'rearing' or 'breeding' is used of children, animals and plants. Though its modern usage involves 'teaching', 'instruction' and 'pedagogy', when applied to human beings it implies good conduct and discipline rather than the acquisition of knowledge. The nearest equivalent of the English term 'educated' as used in today's
educational discourse may be the Arabic term 'muthakaf', which means 'cultured'. Therefore Arabic did not originally associate 'upbringing' with the acquisition of knowledge, but rather with the nurturing concept of cultivation.

The concept of education that relates education to knowledge, is best exemplified in the Greek intellectual tradition, which puts a high emphasis on morality, and in this tradition knowledge is the means of developing moral values. For Socrates, 'knowledge is virtue' and those who acquire true knowledge never do wrong. (Smith 1979:19). This view of the close relation between knowledge and virtue still persists in the liberal tradition and many humanist schools of thought, though the kind of knowledge and the methods of transmission may differ.\(^{(15)}\)

Plato emphasized the 'social training' function of education: "the particular training in respect of pleasure and pain, which leads you to hate and love that which you might to hate and love, is called education." (The Laws; q.in Schofield:31). The implication that rationality can be developed by training, and that the content of such training is knowledge, is still central to the traditional view of education: modern interpretations of this view concentrate either on the nature of knowledge, as do the ideas of Hirst, Peters and Phenix,\(^{(16)}\) or on the function of education as an agent of socialization as in the work of the French sociologist, Emile Durkheim.\(^{(17)}\)

The ideas underlying traditional interpretations of the concept and function of education imply a static value-system; a fixed universal form of truth, into which the individual is to be initiated by those who are already in command of this socially approved knowledge. This provides the basis for a hierarchical distribution of knowledge: fundamentally, forms of
knowledge that are aimed at preserving the stability of the social system are valued and knowledge that might threaten social stability becomes marginal.\(^{(18)}\)

The philosophy of the 'progressive' school is partly based on the ideas of Jean Jacques Rousseau, who advocated education as a natural process, rightly diagnosing an overemphasis on the academic and formal aspects of education as alienating. Rousseau was an early advocate of such 'progressive' forms of education as learning from first hand experience and learning by doing.

John Dewey (1859 – 1952) is generally accepted as being the most important influence on modern 'child-centred education', and his influence has been world-wide. Dewey defines education as 'growth' which is to him its only moral end. He rejects the idea of absolute ends: knowledge is never an end in itself; it is purely instrumental. His educational theory is child-centred, but does not neglect the social dimension as Rousseau's does. The role of school, in Dewey's view, is to serve as a community-based social institution, the chief mediator between the developing individual consciousness and the complexity of social life. In 'The School and Society', Dewey proposes that "to do this means to make each one of our schools an embryonic community life, active with types of occupations that reflect the life of the larger society that is worthy, lovely and harmonious." (Dewey 1964:310). Dewey brought the practical and utilitarian values of education to the fore, taking both the society and the individual into consideration, and welding the present and the future together.

Education based on religious ideals has always been one of the means used
to attempt to bridge the gap between one-sided conceptions of man and of the function of education. Islam, for example, provides a comprehensive view of education based on a holistic vision of the symbiotic nature of the relationship between man, society and the world. Islam sees man as a whole, mind, soul and body; as an individual and as a social being, essentially good but susceptible to social corruption; contending that mankind and nature are subject to one God whose worship and obedience are the purpose of life.

However, the concept of Islamic education has undergone many changes in character, like any other concept. A more general view of educational theory in Islam is being developed through the work of Muslim scholars who are trying to find ways of making education relevant to what is going on in the world without sacrificing the principles of Islam. The First Conference on Muslim Education held in 1977 offers this definition of education: "education is a means of training body, mind and soul through the imparting of knowledge of all kinds." (FCME 1977:15) It also emphasises the point that "education is the means not merely of acquiring intellectual knowledge but also of moulding the nature and character of people so that they may individually and collectively become the symbol of Islamic values...and witness...of true nobility and human greatness, to the rest of mankind." (Ibid:14) So education, according to this view, is a means of moulding the nature and character of the ideal man, God's representative on Earth. The aims of education were also spelt out as "the balanced growth of the total personality of man through the training of man's spirit, intellect and rational self, feelings and bodily senses", with a view to "the realisation of complete submission to Allah (God) on the level of the individual, the community and mankind at large." (Ibid:78) According to Islamic epistemology, knowledge that has to be transmitted
is of two kinds: 'given' or 'revealed' knowledge, and acquired or learnt knowledge. The former includes what was revealed in the Koran and what has been accumulated from the genuine Islamic tradition; and the latter involves knowledge acquired through scientific and logical methods, provided it does not oppose or endanger Islamic principles and faith. (cf. ibid: 78-81). The above view of education provides a balanced concept of human life and brings to light the spiritual aspects of man, especially that of the 'soul' which is neglected in the modern techno-scientific age, where 'scientific' rationality as the only valid source of truth has usurped all responsibility for human action. Muslim scholars concerned with educational theory accept modern scientific methods of empirical, historical analysis and logical deduction, but the scientific method at its present stage of development is not as yet compatible with the consideration of spiritual issues, so that a metaphysical approach features very strongly in the Islamic tradition. (19)

Islamic educational theory is closely compatible with the views held by humanist educators in the past and present. If Muslim nations can develop creative means of preserving the distinctive identity of Islam, means that involve learning from other human traditions and with these insights looking afresh at their particular vision of Islam, there is great potential for human development in a social system with a strong religious bias. The latter provides a central ethical structure, a consensus value-system on which to base an educational system, despite the fact that religion was in the past so often used to fuel what has been described as "enthusiasm based on fanaticism and intolerance." (Suchodolski, 1963c: 8).

Modern conditions of mass-education, based on the general move towards democracy and participation in socio-economic development in this
century require a new interpretation of the concept and aims of education, one with an emphasis on personal autonomy; on equality and social justice, as a basis for responsibility and co-operative decision-making.

Traditional education essentially transmits only one culture, usually that of the governing elite; this culture was aimed at developing the cognitive faculty and preparing the leaders of the society. Educational systems that grew around this function regarded practical activities and learning through direct experience, which is the natural process of learning, as inferior to the academic education offered in books. Now new cultures and new needs have established their place in social organization and a new system of education is required. Schooling has indeed become a global phenomenon and is now accepted as a human right which no person can be denied, if our wishes are that: "all men should be educated fully to full humanity; not any one individual, nor a few, nor even many, but all men together and single, young and old, rich and poor, of high and lowly birth, men and women, in a world all whose fate it is to be born human beings...that every man should be wholly educated, rightly formed not only in one single matter or in a few or even in many, but in all things which perfect human nature." (Comenius, q. in Rusk, 1979:66). Bearing in mind that we live in an age of intellectual obsolescence resulting from rapid changes in knowledge and skills and in traditional cultural values, it is necessary to develop a system relevant to this new pluralistic context.

Can any of the schools of thought examined above, either traditional or progressive, provide such a concept and a system which would encompass all these requirements? The answer is obviously no; none of them alone can provide a complete answer to today's needs and hopes. Yet one cannot reject all the claims they make about the nature of man, society and
education, in particular its content and methods. These claims, however, can only be understood in the light of their time and place. If an alternative is to be developed, it must avoid falling into the old traps of rigidity and exclusiveness. It may be 'eclectic' in nature in the sense that it salvages whatever is valid in each of the previous systems, and adds only what is required by the present stage and conditions of human evolution.

The concept of 'lifelong' education, as the modern expression of the humanist tradition, may be seen as one of the more realistic responses to the educational crisis, arising from the needs and circumstances of the present and the future. Lifelong education provides a flexible and comprehensive framework within which all systems and different modes of learning can find their place, provided that the 'scientific-humanism' suggested by the Faure Commission is not taken for the only possible philosophy to inform lifelong education, since some of the main features of the latter are: to learn of different aspects of human experience from past experience, including the spiritual; to improve the present quality of human conditions; and to prepare every individual for the future.

The concept of lifelong education, though the idea is by no means new, has developed and acquired global acceptance as a response to meeting present and future educational requirements in a rapidly changing world. For the first time in human history a world-wide concern about the quality of life for all people has emerged. Profound and rapid change in the span of the individual lifetime; the dizzy acceleration of scientific knowledge and technological advancement; the impact of technology on all spheres of life, have created a need for continuous learning to cope with these changes and to initiate change rather than merely to adapt to change initiated by
others; "for the first time in human history, education is now engaged in preparing men for a type of society which does not yet exist." (Learning to Be:13)

The concept of lifelong education appears to be the most comprehensive response to these demands for an education relevant to a changing world. The concept, though it is not exclusively modern, is still lacking in specificity and requires clarification of many aspects. Dave defines lifelong education as "a process of accomplishing personal, social and professional development throughout the lifespan of individuals in order to enhance the quality of life of both individuals and their collectives". (Dave,1976:34). He emphasizes the totality and flexibility of lifelong education; of the need for an autonomous but sharing approach to learning, and for a variety of learning styles; he emphasizes the themes of learning opportunity, motivation and educability over the transmission of knowledge. (Ibid:35-6).

Lengrand points out that the aim of education to transmit knowledge has lost its efficacy, and that its function of helping man to become creative and critical must be placed in the forefront. It is high time that man learned how to learn and how to become what he wants to be; that he learned not only to know the world but also to interact with it and improve it. To do this Lengrand proposes that "it is necessary to draw education out of the school framework so that it involves the totality of human activities, relating to leisure as well as to work, to affective as well as cognitive development, to physical activities, to consumption, to man as a political being."(in Dave and Stiemerling, 1973:32).

Lifelong education neither necessitates deschooling, nor accepts that the
only institution that can or should dispense knowledge and skills is the school. "The concept of education limited in time (to school age) and confined in space (to school buildings) must be superseded. School education must be regarded not as the end but as the fundamental component of total educational activity, which includes both institutionalised and out-of-school education." (Learning to Be, 1972:233).

The very title of the Faure Commission report: 'Learning to Be', draws attention towards two central concepts that have hitherto been neglected or marginalised in educational philosophy: the centrality of the concept of learning, and the notion of 'Being'. The first of these, learning, has too long been sacrificed, in traditional theories, to the identification of 'education' with 'teaching' and 'instruction' rather than with learning: a mind full of bits and pieces of knowledge and a docile personality have been the traditional ideal of what Paulo Freire calls the 'banking concept of education' (Freire, 1972:46) rather than an enquiring mind and a bias towards problem-posing and problem-solving by an assertive self-confident personality. A distinction between 'teaching' and 'learning' is provided by Donald Lemke: "Teaching is an organised process through which one person tries to communicate and to impart some of his knowledge, skills, or abilities to another. It is also called an instructional process. One demonstrates, or instructs another. One person is in the position of a giver and the other in the position of the receiver... Learning is more than a process of receiving. It is a process of internalisation... a process by which a person comes to understand... (and) in which active forces are moving and taking hold of the individual perspective of a person. It is a process of insight into problem situations... a process of experience... which helps to change the perception of the involved individual." (Lemke, 1980:1)
As for the concept of Being, this ideal has for long been associated with oriental philosophy; it has been inimical to the activist, materialist, western tradition to imagine so passive a life ideal as mere Being. Gabriel Marcel presents the two drives of ‘Being’ and ‘Having’, as opposing ideals, with Having as the preferred alternative of the newly-formed consciousness of the emerging proletariat in the industrialised nations; (Marcel, 1965) while, in Paulo Freire’s terms, the alienation of the masses of the oppressed in developing nations, from their right to form their own definitions of reality, has promoted for them the ideal of ‘being like’, i.e. assuming the characteristics of the oppressors, rather than Being-in-itself. (Freire, 1972:25). The idea of Having is a materialistic concept based on what one owns rather than what one is; it fosters competition for resources and stresses the idea of having more, rather than reflecting on the purpose for which goods are to be acquired. “It is a question of possessing more money, more importance, more power over people, more of everything.” (Suchodolski, 1983b:10). In his analysis of Marcel’s ideas about these two concepts, Gerald Kreyche points out that the confusion between having and being has also resulted in the confusion of the attitudes that belong to each of them. His examples are: wonder and curiosity, wisdom and science, friend and acquaintance etc., of these “wonder, wisdom, friend” all belong to the realm of Being; curiosity, science and acquaintance to that of Having.” Kreyche goes on to say that: “if a thing is loved because it is valuable, i.e. has a pragmatic use, we have not risen above the level of Having to that of Being. We reach the latter only when we see that a thing is valuable because it is loved.” (Kreyche, 1979:45)

This conception requires an ability on the part of the person to realise
himself as a human being rather than as someone who is judged by wealth, strength or position. This may be made possible "only when individuals are encouraged to improve themselves - find their own educational paths forward, assess their own abilities and competencies, rely on their own judgement and have faith in their values." (Hawes, 1983:4).

In the light of current crises of human civilisation in the areas of food, energy, the arms race and obsession with technology, a new urgency is attached to the idea that the human race, as a result of repeated maldistributions of power, economic, political and interpersonal, and the subsequent distortions of definitions of reality, has never developed the capacity for simply living life to the fullest without the need to dominate or struggle for mere physical survival. The situation of oppression and exploitation that has resulted from the drive to acquisition, and has traditionally been supported by maintenance learning, has been recognized and diagnosed. Now there is hope that man has reached a higher stage of evolution where he can actualize himself and tolerate and help others to actualize their full being. Education as a lifelong process of learning, both self-learning and interactive learning, with the aim of enabling each person to fulfill himself on the basis of self-actualization through 'innovative', 'participatory' and 'future-oriented' learning, seems to be a feasible and logical concept on which to base a pluralistic human society in a time of rapid change.

Summary and conclusions
The concept of relevance that emerges from these considerations has far-reaching implications for educational policy in both developing and industrialised countries. Earlier interpretations of relevance in education,
which concentrated on the instrumental aspects of education, are no longer adequate. A wider, holistic interpretation is called for, which encompasses the instrumental and the normative, and which will neither sacrifice the development of the individual to that of the collective, nor allow individual development to degenerate into egocentricism. The criteria for relevance, the worth of the content, its meaningfulness and generativeness, its pragmatic utility and appropriateness to the conditions of the learner and to his future conditions, apply to both the individual and social dimensions of education.

Education may be described as a process of upbringing, initiation into worthwhile activities, socialization, moulding of character and as a preparation for life, work and human survival; the modern view regards education as a life-long process of learning, based on the learner's experience and on his direct and conscious interactions with nature and with others, at home, in the community, in the workplace and in school. Of these, school has come to be regarded as the specialist learning institution, the role of which is to enable every individual to learn from his interactions with other environments. At present, the prevailing technological and socio-political conditions are giving a new urgency to such concerns as the quality of the individual life and self-realization; the development of the whole person, with reference both to local and to global circumstances. These concerns imply a need to reassess the nature of man and his role in the world. There is a corresponding interest, reflected in philosophical and educational literature, in the concept of 'Being', as an appropriate goal for human existence and evolution; and in the process of development, as the attempt to provide an appropriate setting for the promotion of such far-reaching goals. A relevant education, therefore, must concern itself with these longterm goals,
within the context of a specific society and a specific time.

This thesis is concerned with education that takes place in formal schools, organised to serve a specific purpose in a specific context. Since socio-economic and cultural conditions determine to a great extent the aims and content of education, and throw some light on what is desirable and what is really possible, education must thus concern itself with these conditions before its role in their development can be defined. The following chapter therefore, deals with the concept of development and the attempts that have been made to make education relevant to development policies and goals.
Footnotes

1. The intellectual context refers, not only to the 'subjects' or aspects of knowledge acquired in school, but to the philosophy of mankind, to the vision of the human condition and of the roles of education that informs the choice and organization of these aspects of knowledge.

2. In the field of international development, in particular, there is considerable concern at present for the relationship between the quality of the individual life and the state of the national and international economy. In other words, development is no longer judged exclusively in terms of economic growth: the relevance of development issues to quality of life is now becoming accepted as a criterion of equal importance.

3. Martin Carnoy (1982:116ff) analyses the ideas of various Marxist writers on education to illustrate how educational systems in capitalist states contribute to the reproduction of capitalist social organization. Michael Young and Basil Bernstein (1971) have shown how knowledge becomes stratified in transmission through educational institution, to some extent how such stratification is likely to take place and how the process is amenable to social control. Ivan Illich also analyses the displacement of the values associated with what he calls the realm of the vernacular, by the adoption of the formalized language of the aristocracy in fifteenth century Spain. (Illich, 1981:29ff)

4. The World Year Book of Education, 1971/72, includes a number of studies showing how universities are responding to social demands.
and how most English and French institutions still preserve their traditional status.

5. Coombs (1966 and 1965) and Beeby (1978) may be regarded as moderate critics; more radical criticisms were expressed by Ivan Illich (1971), Postman and Weingartner (1969), John Holt (1964) and Everett Reimer (1971). Paulo Freire's (1972) educational philosophy is also based on a radically critical view of the values inherent in traditional education. Altbach and Kelly (1978) found that the educational systems inherited from colonial regimes in developing countries lacked relevance to the conditions that prevailed in those countries.

6. The philosophy of deschooling in particular, would require the complete reorganization of society, which makes it a programme of more political than educational content. Critiques of the deschoolers are to be found in Barrow, 1976, and Nassif, 1975.

7. Comenius believed in the democratization of education; in the superiority of learning from experience over learning from books; in the concept of readiness for learning and in peer groups as a source of learning. (cf. Rusk: 63ff)

8. The period that elapsed between the recognition of a need and the appearance of an innovation to meet that need has been estimated as fifty years, followed by a further fifteen years before the innovation was adopted by 3% of schools. (q. in Open University 1976: 34).

9. R.G. Havelock and A.M. Huberman, solving educational problems, 1977,
10. An interpretation of relevance that concentrated exclusively on the child's interests would ultimately deprive him of that component of education which should prepare him for the future: such qualities as rationality, mastery of skills requiring perseverance and determination, do not usually develop automatically: they grow out of challenge and practice.

11. These terms are used by Getzels and Thelen to imply behaviour that responds to the requirements of the institution and to the requirements of the individual, respectively. (in McIntyre, 1972:29)

12. Smith (1957:11) traces the difficulties of defining education from Aristotle to the present time. He quotes Montaigne: "The further I sail [in quest of the meaning of education] the more land I descry and that so dimmed with fogs and overcast with clouds that my sight is so weakened I cannot distinguish the same".

13. The increase in female employment since the Second World War has reinforced the role of the school as custodian of children. In industrial society the school day has to be structured around the commercial day, as becomes apparent when any attempt is made to reorganize the school timetable. At the same time schools are expected to provide the manpower needed by the society; and to attend to both the socialization and personal development dimensions of education with all the conflict implied in this reconciliation. In return for all this, education is in most countries a low-status sector; receiving less financial support, in terms of salaries and public
spending, and being one of the first sectors to suffer from cuts in expenditure in times of crisis.


15. The emphasis on rationality advocated by Hirst and Peters, associates rationality with moral behaviour. This association is more directly implied in Peters' arguments for worthwhile activities. (cf. Peters 1966; 1973).


17. Durkheim saw education as "the influence exercised by adult generations on those that are not yet ready for social life", the object of which "is to stimulate and develop in the child a certain number of physical, intellectual and moral states which are demanded of him by both the political society as a whole, and by the particular milieu for which he is specifically destined". (Durkheim, in Gidden 1972:204).

18. Paulo Freire's concept of the "culture of silence" highlights the phenomenon of the marginalization of Third World perceptions of development and of the resulting 'silencing' of the dominated classes within alienated societies. (Freire 1985:71-81). Young (1971:36ff) has written about the stratification of knowledge and how the educational institution maintains the existing epistemological hierarchy by making "high-status" knowledge available to the most
able pupils, while suggestions for reform are usually confined to "low-status" areas of the curriculum, where any de-stabilizing influence they may have is minimized.


CHAPTER TWO

Development and Education

A - The Concept of Development: the Paradigm’s Progress

Originally ‘development’ is a biological concept borrowed, like many other concepts used metaphorically, by the social sciences. In biology, development suggests changes of an irreversible nature through time, the direction of which is characteristic of that which develops. In his analysis of Dewey’s concept of ‘growth’, Horne sums up his argument thus, “Growth is expansion of living tissue or mental function already present; development is the appearance of new tissue and function”.

(Horne, 1971:131). The process of development then, encompasses growth, whereas growth may occur without development.

In sociology, development is mainly taken to mean social change and growth towards higher forms of organization. It is used interchangeably to mean mere growth, or real development which includes growth and change. In economics, for example, some writers distinguish between development and progress, “development implies change towards new social and economic forms, whereas progress implies actual increases in average living standards”. (O’Keefe, in Meinghan, 1979:19). So in both biology and sociology, development implies both quantitative increase and qualitative change.

The Myth of the Growth Paradigm

What has been regarded as progress by human beings has varied throughout history, according to the amount of scientific knowledge at the disposal of the society, relative material living standards, and availability of enlightened leadership. (1)
In Europe, the Industrial Revolution forged the final link between progress and technology. Previous images of progress had transcendental or spiritual elements usually externalised in organised mass religions. Religion or mystic belief began to lose its hold over the minds of European thinkers as a result of the Renaissance. Later, in the course of the Industrial Revolution, Science itself was eclipsed by its product, technology, which constitutes a more concrete and visible expression of human control over the environment.

As in this chapter, the concepts of progress and development in relation to developing countries and their educational systems, we shall see progress has different implications for different social, economic, cultural and political contexts. If those connected with the economic aspect have gained precedence and supremacy over the others it is for the same reason that technology has come to be equated with progress. They are easily measured and lend themselves, at least in theory, to scientific control.

The idea that progress could be equated with growth in a country's national income, was behind theories of development in the post World War II period of this century. Thus, America, rich and powerful, saved the world for civilisation. The known world was rebuilt economically using American financial and technological aid. Therefore, it must follow that the hitherto unknown world (as the Third World virtually was until after the Second World War), would also be redeemed from poverty and ignorance by planning its economic and political development using American and European history as a model, and their finance and technology as a means to mould themselves according to that model of the 'civilised' world.

Theories of development that emphasize the importance of capital
formation and productivity as the necessary requirements for, and the
valid indicators of progress, were developed by a number of economists,
notably, W A Lewis and W W Rostow. Both theorists essentially
rationalise the importance of economic growth and the modern sector as
the centre of national development, from which prosperity would spread
tnationwide.

Lewis (1955: 9) made it clear that "first it should be noted that our
subject matter is growth, and not distribution". What was important in
his view was to concentrate on the development of the modern sector, and
he found that the main problem was "how to understand the process by
which a community is converted from being a 5% to a 12% saver, with all
the changes in attitudes, in institutions and in techniques which
accompany this conversion." (Lewis, 1955: 225-6).

Rostow seems to have offered a solution to this problem. In his theory of
the 'Stages of Economic Growth', in which almost all developing countries
were regarded as 'underdeveloped', he argued that transfer of ideas and
techniques was desirable and common, "the more general case in modern
history... saw the stage of pre-conditions (for the take-off stage) arise not
endogenously, but from some external intrusion by more advanced
societies". (Rostow, 1960:6). The implication is that those countries still
at their traditional or preconditional stages, should not wait for their
economies to develop endogenously, but should adopt Western technology,
institutions and values. From this point of view the 'modernisation' of
developing countries becomes rather a 'Westernisation' process. This
theory however, was particularly influential in the 50's and 60's, in its
effects on the concurrently emerging nations of the Third World and on the
international agencies working within the United Nations system.
Economic growth occurred, though not at the rate favoured by Lewis, in the Less Developed Countries. The 1960's were designated by the United Nations as the 'First Development Decade', the aim of which was to be a 5% increase in the annual rate of growth of the national income of the LDCs. By the end of the 60's, the Pearson Report recorded an average aggregate annual growth rate for GDP of the LDCs of 4.8% for the years 1950-67. (Le Brun, 1973:276). But aggregate figures, even if they appear satisfactory, obscured regional disparities of distribution; these did not reflect the degree of distributional imbalance between and within nations and also between sectors, for instance, civil and military sectors, which began to become apparent in the 1970's.

**Criticisms of the Growth Paradigm**

These are mainly inspired by:

- the necessity to create mechanisms for more equitable distribution of the surplus that accrues to capital growth;
- issues of social justice and equality that imply a re-reading of history and a virtual restructuring of the institutions of society;
- the cultural aspects of colonialism and imperialism affecting the psychology of those influenced by such cultures;
- the worldwide concern with the fate of humanity at large which is currently threatened by poverty, the arms race, waste and the over-exploitation of the environment.

The rationalisation for the growth model of development was that the increase in national income would 'trickle down' to benefit the poorer sections of the society, a pious hope that was not justified in the event. In 1973, Robert McNamara, President of the World Bank, in a conference in
Nairobi, acknowledged that "economic growth is not equally reaching the poor, and the poor are not significantly contributing to growth". (McNamara, 1973:10). He added that "it was not wise to concentrate on the modern sector in the hope that its high rate of growth would filter down to the rural poor". (Ibid:13).

New objectives directed towards basic needs were important elements of the 1970's development programmes; nutrition, health, education, housing and social welfare were offered in the programme suggested by the General Assembly of the United Nations in 1970, they also appeared in the programme outlined in the 1977 Annual Meeting of the World Bank and the IMF. Later the concept of basic needs became a central feature of development literature.

At the international level, the announcement of the United Nations commitment to international development (7) and the debate on the need for a New International Economic Order, established the problem of world poverty as a major concern in international relations. The United Nations Commission for Trade and Development (UNCTAD) was established in 1964 to analyse and administer ways of redistributing world wealth to redress imbalances in terms of trade adversely affecting the LDCs. The problem however, persisted and became even worse in the late 1970's, as the Brandt Commission Reports indicate. The second Brandt Report recommended measures "to help promote recovery in developing and industrial countries", (Brandt, 1983:152) both of which had begun to feel the chill winds of economic change.

Marxist theories of development criticise the foundations of the capitalist order, interpreting colonialism as an imperialist form of capitalist expansion, and economic policy aimed at growth of GNP as an agent of 'dual' development, whereby growth is confined to a 'modern', urban,
industrial sector which expands at the detriment of the traditional, agrarian economy that had hitherto prevailed in most developing countries. Later, Neo-Marxist development theory took a new direction. The basis of this theory is to be found in the work of the Marxist economist Paul Baran, who writing in 1957, introduced many of the themes later developed by Samir Amin and Andre Gunder Frank, in particular, the suggestion that the advance of Western capitalism was achieved through the conscious exploitation of the 'underdeveloped' parts of the world. In the fifties also, the idea of a developmental dichotomy between the 'centre' and the 'periphery' arose in analyses of Latin American economic history. This theory suggests that the metropolis, or the colonial centre, developed its economy in the Spanish/Indian/Latin American context, through the suppression of indigenous industries; the annexation of indigenous resources, particularly labour, into extensions of the metropolitan economy and the progressive marginalisation of the peasant masses in the developing countries.

Andre Gunder Frank, later expanded the 'centre-periphery' theory into a theory of 'underdevelopment/dependency' which found that "Economic development and underdevelopment are opposite sides of the same coin", (Frank, 1967:9) and envisaged a chain of metropolitan-satellite linkages which survived on dependency relationships, and which when broken anywhere, resulted in the economic stagnation of that area which had hitherto survived by its dependence on its own particular metropolitan centre, now itself cut off from the colonial metropolis. Within this chain of exploitation the final exploiters are the elites of the colonial metropolis, who exploit their lower classes as well as the elites of the 'periphery'. The exploitation of the underdeveloped colonies was indirect. The central western colonial economies functioned as a 'black hole' to use
a simile from physics, absorbing all economies and cultures. Glyn Robertson (1974:11) presents this exploitative relation in the diagram in Figure 1.

**FIGURE 1**

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Cultural Dependency

One of the more serious aspects of dependency theory for education is the psychological dimension of dependency; Ivan Illich points out that "underdevelopment is also a state of mind", i.e. the form of consciousness which presents people to themselves as inferior, an attitude which results in the developing countries' indiscriminate adoption of the manifestations of Western mass-culture, "the surrender of social consciousness to pre-packed solutions". (Illich, 1969:362).

In the race to catch up with the West, or more precisely, to possess what
they already have, elites are formed from the privileged and powerful groups in societies in developing countries, and their advantage maintained by the suborning of the institutions of the society in their favour. They become culturally alienated but politically and economically powerful. Yeakey (1961:175), points out that "Africans have been politically socialised into Western values, tastes and lifestyles disseminated through the media and personal example". Hummel (1977:133) refers to an African research worker saying, "in public, African politicians talk of ‘Africanisation’. In private and in practice, they express their preferences for external services". This phenomenon is not confined to Africa, it prevails in many developing countries.

The Muslim world, despite the great history of Islam, its scientific and philosophical advance in the Middle Ages and its strong religious foundation, has also succumbed to this indiscriminate adoption of Western models of modernity, but without accepting the responsibilities attached to this form of development. Saqib points out that the Western model of modernity has been transferred to Muslim countries on a wholesale basis as if there was no means of modifying it. He is critical of the fact that there is no genuine political change to match the needs of modern social development, "In the Muslim world not one Muslim country seems to have developed a viable modern polity by which leadership assumes power with popular support, and exercises authority by the rule of law so that there is a functional rapport between the state and its citizens". (in Khan, 1981:48-9). As for socio-economic aspects, the situation may be described in Ivan Illich’s words, “in most Third World countries the population grows and so does the middle class. Income, consumption and well-being of the middle class are all growing while the gap between this class and the mass of people widens”. (Illich, 1969:361).
This alienation of the leadership from the people is the political manifestation of the economic gap between the middle class and the masses, a gap that is reproduced at international level between the rich, industrialised nations of the Northern hemisphere, and the poor, so-called developing nations of the Southern hemisphere. The most obvious indicator of the human gap is the increase in the numbers of those living below acceptable living standards. According to Paul Harrison, these are increasing, despite apparent proportionate increase in the numbers of those whose basic needs are being met: "... despite all the effort and real achievements, there were more malnourished people, more seriously poor, more with unmet health and educational needs, at the end of two development decades than at the outset, mainly because provision, for all its expansion, did not keep pace with population growth." Harrison's findings were as follows:

<table>
<thead>
<tr>
<th>Table 1</th>
<th>% of population of developing countries</th>
<th>Year</th>
<th>Actual Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of those described as &quot;seriously poor&quot;</td>
<td>73</td>
<td>1963</td>
<td>1,090 million</td>
</tr>
<tr>
<td></td>
<td>52</td>
<td>1982</td>
<td>1,165 million</td>
</tr>
<tr>
<td>No. of unemployed</td>
<td>56</td>
<td>1974</td>
<td>420 million</td>
</tr>
<tr>
<td></td>
<td>51</td>
<td>1980</td>
<td>450 million</td>
</tr>
<tr>
<td>No. of doctors per 100,000 people</td>
<td></td>
<td>1950</td>
<td>24 *</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1975</td>
<td>28</td>
</tr>
<tr>
<td>No. of people without clean drinking water</td>
<td>71</td>
<td>1970</td>
<td>1,220 million</td>
</tr>
<tr>
<td></td>
<td>57</td>
<td>1980</td>
<td>1,320 million</td>
</tr>
<tr>
<td>No. of primary aged children not in school</td>
<td>39</td>
<td>1960</td>
<td>110 million</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>1980</td>
<td>115 million</td>
</tr>
<tr>
<td>No. of illiterates</td>
<td>59</td>
<td>1960</td>
<td>700 million</td>
</tr>
<tr>
<td></td>
<td>41</td>
<td>1980</td>
<td>795 million</td>
</tr>
</tbody>
</table>
* The ratio in developed countries increased from 143:100,000 to 171:100,000. (Harrison, Paul. in People, Volume II, Number 2, 1964:5).

Figure 2 shows the rate of growth of population in poorer countries, indicating that the conditions of World Poverty may be expected to persist and even become worse, if urgent measures are not taken.

**Figure 2**

Image redacted due to third party rights or other legal issues

The debate as to whether the imbalances in the quality of life between rich and poor countries, arise from scarcity or maldistribution of resources, is inconclusive. Either way, the problem is the resultant maldistribution of power. In Nyerere's words, "the reality and depth of the problem arises because the man who is rich has power over the lives of those who are poor, and the rich nation has power of the policies over
those who are not rich". (q. in Tames, 1981:26).

Nyerere is one among very few leaders who not only criticises the world order but also the national system, for he sees that existing systems often perpetuate and increase the gap between the rich and the poor. "Even more important is the fact that our social and economic system, nationally and internationally, supports these divisions and constantly increases them, so that the rich get richer and more powerful, while the poor get relatively poorer and less able to control their own future". (Tames, 1981:26-7). At present, the question of distribution of wealth and power is at the heart of analyses of the international crisis; the crisis is not purely economic, but a structural and spiritual one (cf. Lazlo, 1964:22; Nasr, 1966).

The Brandt Commission finds that "the kind of unco-ordinated policies which industrialised countries were following, were not only harming the Third World, but could lead the whole world into a depression comparable only to the crisis of half a century ago". (Brandt, 1983:5). Tinbergen in his RIO report to the Club of Rome (1976) shows that both centrally-planned economies and Western economies as well as the Third World nations are affected by the present crisis, which is, in the final analysis, a crisis of human civilisation. The Brandt Commission report also expressed its concern over the crisis of power that might lead to the destruction of humanity, "Never before was the survival of mankind itself at stake, and never before was mankind capable of destroying itself, not only as the possible outcome of a worldwide arms race, but as a result of uncontrolled exploitation and destruction of global resources as well". (Brandt, 1983:9). The major sources of such dangers stem from the assumptions on which modern Western civilisation is based; competition, consumption and the
profit motive; with no reflection on the purpose of these activities. "In
the process of evolution, man in his struggle for survival, and to eke out
what he regards as a 'meaningful' existence, created the so-called 'modern
civilisation', which is basically materialistic and characterised by an
assemblage of gadgetries and other artefacts of scientific and
technological invention". (Akinpelu, 1983:1). The result is that "man is
overwhelmed by the inventions of his own hand, is displaced from the
centre, and has become de-humanised and enslaved in his own world".
(Ibid). The problem is a Northern as well as Southern one, for most of
these dangers that threaten the globe have their sources in the north,
which enjoys wealth, power and world leadership.

Nuclear power and the production of advanced weaponry is one of the
products of the technology of the North, and while some awareness of the
urgency of the responsibilities attached to this capacity is developing in
the Northern conscience, the administrative structures on which societies,
in both 'modern' and 'traditional' countries, are based, rely on power
relationships. Recent approaches to the problem of development show an
awareness and a deeper understanding of the structures of power on which
society is based, and of the need to reform or transform these structures
at the most fundamental levels, that is, at the conceptual and moral
levels, as well as at the functional level.\(^{(12)}\)

Towards anthropocentric global collectivism

The techno-industrial 'modernisation' approach to development faltered on
the question of the distribution of the benefits of modernisation,
especially power. Rejection of this model has resulted in attempts to
explore alternative forms of development which can remedy the ills and
bridge the gaps that have resulted during the last three decades, and which
are relevant to present needs and issues. The new development paradigm is emerging from the work of many groups and individuals following different specialisations, most of whose work is with international agencies, in particular, the United Nations and its sub-systems and the Club of Rome. This paradigm is humanistic in essence, collective in orientation, and global and transnational in scope.

The urgency of the need for a new global concept of development has been recorded in many international reports. The Dag Hammarskjold Foundation report of 1975, indicates that another development is required in all societies, be it in the North or in the South, in centrally-planned or market dominated economies, it is need orientated, endogenous, self-reliant, ecologically sound and based on the transformation of social structure. (op cit:7). Tinbergen speaks of "the need for new development strategies, national and international, defined and designed, not merely to meet the criterion of private or state profitability, but rather to give priority to the expression and satisfaction of fundamental human values. Society as a whole must accept the responsibility for guaranteeing a minimum level of welfare for all its citizens and aim at equality in human relations". (Tinbergen, 1976:63).

In this perspective there is no universal formula to copy from, and the process of development is "not to catch up, but to ensure the quality of life for all". (The Concoyoc Meeting, 1974). The Brandt Commission expresses the agreement of its members on the following points:

- focus on people rather than on machines or institutions;
- the prime objective of development is to lead to self-fulfilment and creative partnership in the use of a nation's productive forces and it full human potential; (1980:23).
- development is relative:
- "There is no uniform approach; there are different and appropriate answers depending on history and cultural heritage, religious traditions, human and economic resources, climatic and geographic conditions, and political patterns of nations". (Ibid:24).

Development then is very much a question of values and perceptions. It is economic as well as social "there is only one socio-economic reality. There is a body of facts about how people use limited resources to satisfy their needs, about the relations between people or groups of people (classes or nations) arising out of that usage, and about the position in which they find themselves as a result". (Drewnowski, 1974: 94-5).

Loubser provides a definition which seems to encompass all the above perceptions: "development refers to the development of human capacity to meet human needs and to realize full human potential within a framework of universal human values, the context of specific situations and environmental limits". (Loubser, 1982:153).

Tinbergen classifies the philosophy that underlies this egalitarian perspective of development as 'Humanistic Socialism'. It is concerned very strongly with human development and human issues in the full sense of the term 'human'. It is global, surmounting issues of local or national interest; it is collective, encouraging the evolution of co-operative and interdependent value-systems. This implies that man is placed at the centre of the development process, with all strategies of development aimed at the development of the life of mankind. This view of development may be seen as a form of anthropocentric collectivism, which implies that the solution to human problems requires collective action in
which the individual or nation may choose to play an active role. The concept includes a number of features and dimensions which are outlined in the following section.

The main features and dimensions of development

The literature on the emerging concept of development is characterised by a number of aspects, some of which may appear to be contradictory and conflicting, for instance, endogeneity and self-reliance vis-a-vis globality and interdependence. In reality they are compatible and interrelated, in a wider interpretation of development than has hitherto prevailed. These aspects are:

1 The holistic approach

The new perspective of development is essentially holistic in approach, in the sense that it takes the whole phenomenon as a system which consists of smaller systems which are the components of the whole. It takes man as a whole, his body, his rationality, his vision or dream and his spirit; the social context, family, locality and the wider affiliations to humanity and human society at the transnational level; the ecological system, both the immediate and the global. It considers every sector in the economy, be it agriculture, trade, industry or labour, as an indispensable integral part of the whole process of development. Thus no aspect of human experience is minimized, nor is any group of people excluded; neither a capitalist elite, a modern technocracy, nor an enlightened proletariat is seen as the only agent of change; nor can economic growth be the only purpose of development. It is within a human, cultural and natural context that man makes his free, but responsible choice; free in the sense that he is free both from hunger and ignorance, from oppression and threat; responsible in the sense that his choice of action must harm, threaten or exploit neither
other human beings nor nature. Figure 3 presents a holistic view of the various dimensions of the new concept of development; all of these characteristics may be regarded as essential for any meaningful progress.

Figure 3

Human needs as the central goal of development
Most of the literature on development now accepts the satisfaction of human needs as a central aim of development. The concept of human needs has replaced the 'basic needs' perspective which prevailed in the early 70's, the main contents of which were food and nutrition, water and sanitation, shelter and basic education. Now the concept includes all human needs; physiological, physical, emotional, spiritual and intellectual, and they are to be determined and satisfied by the individual person or group through their own efforts and co-operation with others. Development which takes the well-being of humankind as its ultimate aim
has to be geared to "the satisfaction of needs, beginning with the basic needs of the poor who constitute the world's majority; [it] must ensure the humanisation of man by the satisfaction of his needs for expression, creativity, conviviality and for deciding his own destiny". (Dag Hammarskjold Foundation Report, 1975:7).

It is clear that the basic needs of the poor are considered as the starting point for development strategies to attack poverty, but their satisfaction is not in itself the final goal; rather it is only the essential point of departure for a better quality of life for humankind as a whole. Development cannot be assessed in such material terms as the satisfaction of basic physiological needs, argues Goulet (1968), asserting that it can "properly be assessed only in terms of the total human needs, values and standards of the good life and the good society perceived by the very society undergoing change. Although development implies economic, political and cultural transformations, these are not ends in themselves but indispensible means for enriching the quality of human life". (in Smith, 1977:207). Since man does not live on bread alone but has other needs of similar or greater importance, development based only on the minimum satisfaction of material needs is dehumanising in the limitations it places on human potential. Satisfaction of human needs should not be seen as an obstacle to economic growth, nor vice versa; economic growth is essential for needs satisfaction and the latter is fundamental for the progress of the economy.

3 The concept of endogeneity
Endogenous development implies the rejection of alien models that have been designed in and for other contexts with completely different values and modes of life. It implies a pluralistic view of development with
different cultures shaping their own versions of their own destinies.
Alechina, (1962:19) points out that "when a country is developing
endogenously, its way of life should be based on respect for its traditional
values, for the authenticity of its culture and for the creative aptitudes of
its people". This by no means implies insulation or dogmatism. Conditions
in the modern world are conducive to the evolution of the open society,
however threatening that may be to the power elites in existing political
structures; in this age of direct mass communication, it becomes
impossible to isolate people or censor what they know of the world.
Planning for endogenous development implies that interactions between
cultures is imperative but that it must no longer be conducted on an
imperialistic or colonialistic basis.

4 Self-Reliance
For a country to free itself from dependency and subservience to putative
superiors, a self-reliant economy is an urgent necessity if people and
leaders are ready to face the hardships of their lives and to overcome
their 'fear of freedom'. Self-reliance is not only self-sufficiency in
food and the necessities of physical survival. It includes another aspect
which is of equal importance; the development of man's faith in his own
abilities and personality, which means "building up a combination of
material and mental reserves that enable one to choose one's own course
of evolution, uninhibited by what others desire". (Development Dialogue,
1977, No:2:17). The idea of self-reliant development therefore, has
connotations of self-respect and self-reliance as "a doctrine... located
more in the field of psycho-politics than in that of economics". (Galtung et
al., 1980:21). Such a doctrine must find its inspiration centred in the
endogenous cultural values and in indigenous resources, both human and
technological, and must aim at creating what Freire describes as a
'being-for-itself' society, one which is self-sufficient and free from external manipulation. (Freire, 1972:26).

5 Transnational interdependence
Whatever one says about the importance and value of self-reliance, there is no such thing as complete self-sufficiency, for even the two political giants, USA and USSR, with all their resources, cannot be described as completely self-sufficient. To resolve the conflict between 'dependency' and 'self-reliance' a new concept must be introduced here, that of 'interdependence'. This concept is gaining ground in current trends in development thinking and international relations, and it is compatible with self-reliance, though it is taken in some circles to be only another expression of the exploitation/dependency relationship. The concept is new and political but the practice goes back to an earlier stage of human social organization. Within the family, the group and small communities, every individual is both dependent on, and a supporter of other members of the group; in wider less personal forms of organization, economic criteria are used for identifying the dependent roles. The 'informal structures' or the 'shadow economies' on which the social structure depends, consist of the contributions of women, children and non-waged workers classified as 'dependent'. The contribution of those supposedly in 'supportive' roles is not admitted, nor that of the so-called 'dependents' recognised, despite the dependence of the formal economy on such contributions. Applied on the macro-scale, the concept of interdependence implies a voluntary identification on the part of the rich and powerful, with the humanity and rights of the deprived. The roots of interdependence lie in the human need for love, belonging, support and acceptance from others as well as for material survival.
This concept as a necessary aspect of human interaction is frequently recognized in recent literature on human development. Tinbergen calls for "a new understanding and awareness, based upon interdependence and mutual interest in working and living together". (Tinbergen, 1976: 51). The UNESCO Medium-term Plan for 1984-1989, describing the urgent need of all nations for interdependency, states that "Their interdependence was apparent not only in the 'global challenges' constituted by worldwide problems..., but also in the indivisible nature of respect for human rights, the fact that any local conflict was a threat to world peace, and the realisation that development was a process concerning all societies..., a process which should be seen as a part of a complex network of interactions on a world scale". (UNESCO, 1981:239).

6 Participation
If man is to develop himself, to satisfy his needs and relate to his society and the human community, he has to take part in this process, for needs-oriented, endogenous and self-reliant development will not materialise without the active, conscious participation of all those who are affected by and involved in the process of transformation. Without this active participation the individual would not belong organically to the collective, and the collective itself would not, to that extent, be a reality. A society whose basic institutions, relations and structures do not permit the use of the available material and intellectual resources for the optimal development and satisfaction of individual needs, has been described as a 'sick society'. (Marcuse, 1968:251). In this perspective democratic participation no longer merely means the formal election of leaders, or as Development Dialogue (1977:17) puts it, "It is not merely government of the people and for the people but also, and more
fundamentally, by the people". The peoples’ participation can never bear real fruit if it is imposed by coercive measures; it must arise from the conscious spirit of voluntary co-operation among the masses of the people. Loubser sees genuine participation to be "spontaneous, autonomous and informal, animated but not manipulated". (Loubser, 1982:150). UNESCO (1981:240) points out that "the aims which individuals and peoples set for themselves should be the determining factor in development centred on man", and the people, as Paul Harrison (1980:36-7) argues, "should not only participate in determining the aims, but also in planning, implementation and in enjoying or bearing the results". Such responsible and authentic participation requires a high degree of freedom, self-confidence and self-direction, for "when people lack confidence in their ability to deal with the economic and social issues that confront them, they are easily tempted to turn over even more of their rights and responsibilities to authoritarian political movements and elites who promise quick solutions to complex issues". (Stokes, 1981:18).

7 Community focus
Development that is oriented toward the development of peoples’ capacity to meet their own needs, enjoy their rights and realize their own potential on the basis of co-operation and direct participation, must start at the local level which represents the focal point through which people relate to wider entities and larger human organizations. Endogenous, self-reliant development should be based on local community values and initiatives, and should concentrate on meeting the needs of people in the community and directing their efforts and resources towards creating a sustainable community, as part of a sustainable national economy within a sustainable human system. It is now generally agreed that many human problems have local and community solutions, as it is also true that global
human problems affect every human being at the local level; people therefore have to 'act locally but to think globally'. Stokes in his book 'Helping Ourselves: Local Solutions to Global Problems', provides forceful arguments that the most present global problems such as those of food, health, housing, energy depletion, population, peace, industrial productivity and quality of work life, cannot be solved by top-down plans; their solution will be found at the local level. "These global problems will often best be dealt with by people doing more to help themselves at the local level. For it is at the personal and community level that the consequences of problems are most obvious, the motivation to solve them is most direct, and the benefits from action are most immediate. People can create local solutions to global problems by taking charge of the process of problem-solving and by changing their values and behaviour in response to today's economic and social conditions". (Stokes, 1981:14).

8 Human Rights and Development

Usually human rights are implied in the emphasis on the promotion of human dignity which most writers include in their treatment of human needs. Streeten (1981); Forti and Bisogno (1981), have included chapters on human rights as an aspect of basic needs, in an attempt to clear the confusion over the concept of basic needs. In a report of the Commission on Human Rights in 1979, human rights were considered as fundamental to the development process. The International Commission of Jurists, convened in the Hague in 1981, brought to light many issues about the importance of analysis of the concept and process of human rights as part of development strategy; the Commission emphasizes that people not only have the right to survive, but to survive with dignity compatible with the human condition, and to take part in every aspect of development. Ramphal states, "statistical measurements of growth exclude the crucial
elements of social welfare, of individual rights, of values not measurable by money. Development is more than the passing from poor to rich, from a traditional rural economy to a sophisticated urban one. It carries with it not only the idea of economic betterment, but also of greater human dignity, security, justice and equity" (International Commission of Jurists, 1981:13).

It is now generally accepted, at least at the official level, that people have the right to development, both as individuals and as groups. Individual rights have been spelled out in the Declaration of Philadelphia in 1944: "All human beings, irrespective of race, creed or sex, have the right to pursue both their material wellbeing and their spiritual freedom and dignity, in conditions of economic security and equal opportunity." (q.op. cit:100). As nations have a right to self-determination, so people, poor and rich, have the same right, "The poor have no less right to the enjoyment of their civil and political rights than the rich". The right to development and equal opportunity implies "equal access to the means of personal and collective advancement and fulfillment in a climate of respect for the values of civilisations and culture, both national and worldwide". (101).

A strong emphasis is placed by the members of this commission on peoples' awareness of their needs, rights and the socio-political laws and conditions at the local, national and transnational levels. They have the right to identify their own needs and problems, the problems of the maintenance of social and international peace and development that affect or will affect their lives. Development as a human right should be seen "in relation to the other human rights based on international co-operation, including the right to peace, taking into account the requirements of the
new international economic order and the fundamental human needs". (102).

9 Ecological Soundness

The depredation of the environment caused by the pursuit of economic growth is at last being taken seriously as part of a gathering global crisis. It is increasingly recognised that global resources have frequently been exploited irresponsibly, with little concern for the preservation of ecosystems, either in the exploitation of raw materials, especially those that are not renewable, or in the disposal of waste where air, water and soil have been polluted and exhausted. The problem of waste and pollution, though a global one, concerns to a great extent industrialised countries, whose reliance on technology and high energy consumption have already endangered the natural environment to an extent that bodes ill for the survival of mankind, since one of the most important aspects of that interdependency already mentioned is to preserve the natural balance based on the mutual interdependence of all species and the environment. A major component of a modern education for development must be a grounding in ecology, including a sense of responsibility for the natural environment which is after all the source of life.

10 Future and Global Responsibility

Related to the last feature is a sense of responsibility towards future generations, not only of a particular society but also of the whole of humanity. In a situation of unprecedentedly rapid change and of direct mass communication, responsibility for future global development is a function of civilisation. This responsibility involves careful use of resources, conservation of the environment, and the curbing of the over-consumption and exploitation of human and natural resources that
arise from greed and a pathological inability to identify with the humanity of others. Marcuse suggests that the surplus-repression found in the 'sick society', "is necessitated not by the growth and preservation of civilisation but by the vested interest in maintaining an established society". (Marcuse, 1968:251).

Such a holistic approach to development which takes man as a whole and the universe in its totality, and which is past-based, present-directed and future-oriented, has far-reaching implications for education and places greater responsibilities on those concerned with education as a means of creating a better life and a better future.

B - Education and Development: the role of education

In this section an attempt will be made to examine the relationship between education and development and the assumptions that underlie claims about this relationship and how these claims have influenced the development of education itself.

As far as the relationship itself is concerned, there is a close link between education and the perception of development held by society. Throughout history one finds that in all the ancient social philosophies, through all the religious traditions to modern political philosophies, right wing to radical socialist, education is an essential part of these programmes for Utopia. Primitive societies and traditional communities also developed learning systems which were intended to preserve their traditions and help people to survive.

The problem of the relationship between education and the development of society has become a major issue since the advent of centralized planning,
even more so since education became officially accepted as the right of all members of the population of every human community. The question of the relevance of education both to the socio-economic development of nations and to the lives of the people who go through the system, however diverse the backgrounds they come from, has become far more complex than it was previously. The issue has been further aggravated by the unprecedented rapidity of progress in science and technology which has led to rapid changes in knowledge and skills, and changes in values and attitudes resulting from mass communication through the media.

Until the end of the Second World War, education was still seen in the West in economic terms, as a form of public consumption, or at best of indirect economic return. The focus of the debate on the function of education was mainly whether it should be seen as an instrument for change or for stability.

With the rise of UNESCO in 1946, more universal views of education and its function began to develop, as education was seen as an agent of social change in the direction of peace, security and prosperity in a world committed to social justice and human co-operation. Holmes points out that at meetings in 1946, it was stressed that schools were vital to the promotion of world peace and prosperity: "educationalists held, even before the war, that expansion and universalization of provision would raise standards of living and promote a just society". (Ryba and Holmes, 1973: XVII). One item in the UNESCO Constitution reflects such views and expectations of education "Since wars begin in the minds of men, it is in the minds of men that defences of peace must be constructed". (q. Hummel, 1971: 125). Later pronouncements on the function of education stressed education's role as a central agent of change for a
new world order based on justice, understanding, recognition of cultural diversity and respect for human dignity. Expressing this philosophy, the UN Declaration of Human Rights in 1948, Article 26, declares that:

1. “Everyone has the right to education. Education shall be free, at least in the elementary and fundamental stages. Elementary education shall be compulsory; technical and professional education shall be made generally available and higher education shall be equally accessible to all on the basis of merit”.

2. “Education shall be directed to the full development of the human personality, and to the strengthening of respect for human rights and fundamental freedom. It shall promote understanding, tolerance and friendship among all nations, radical or religious groups and shall further the activities of the United Nations for the maintenance of peace.” (q. Unesco, 1980:214).

This declaration has become the cornerstone for almost all educational policies in both developed and developing countries, though each region has its own interpretation of the principles and its own areas of priorities. No country has, however, fully achieved these noble objectives, especially those implicit in Section 2 above: it is only in the 1980’s that educational planners have begun to consider seriously such humanist goals and to put due emphasis on the development of human personality and on the issues that concern human survival in the full sense of the term. The advent of the idea of the economic function of education may have been one of the factors that delayed the achievement of other educational goals.

One of the problems with the formulation of educational policies is that education is influenced by different groups specializing in particular
fields, and that it is an area where an exceptionally high level of
dissension prevails among the experts and various interest groups trying
to influence policy. Very often, educational policy has been heavily
influenced by the self-interest of dominant groups or alternatively by
genuine attempts at improvement based on a too narrow interpretation of
the situation from a single dominant specialist perspective.

In the 1950's and 1960's educational policy was essentially dominated by
economists and by considerations of economic growth, an approach that
prevailed in development circles. Economists and advocates of the
function of education in economic development provided cogent and
appealing arguments in favour of the economic function of education.
Statistical evidence was drawn from the educational experience of
industrialized nations, on the basis of which educational theories were
constructed and policy proposals formulated. Education became an
'investment in human capital' to which high productivity was attributed.
(Schultz, 1961). Correlations were established between education in
terms of the number of qualified personnel, doctors, engineers, scientists,
teachers and schools enrolment ratios, and the economic growth in terms
of the rise in the GNP. (Harbison and Myers, 1964). Denison attributed the
phenomena of economic growth and technological progress in the USA,
USSR and Japan, to the progress of education in these countries, claiming
that more than three-fifths of the actual income is due to the effect of
rising educational standards on increasing the capacity of production.
(Denison, 1967). Anderson and Bowman (1965) who are mainly concerned
with literacy and economic development in rural areas, found that a 40% 
literacy rate can be regarded as the threshold level for economic
development.
Such claims stressed the economic function of education which resulted from the concept and objectives of development that prevailed in the 1960's. However, this orthodoxy was later questioned; evidence was accumulated to prove that education had achieved neither its humanistic nor its economic aims. A mere set of statistics indicating high school enrolment is no longer seen as an indicator of excellence; the quality of what is learnt in school is now regarded as more important than the mere numbers of those learning.

Education in Developing Countries: issues of quality and relevance

In the 1960's two central objectives preoccupied educational policies in the developing world, universal primary education and the production of sufficient manpower for creating the nucleus of modernity in those countries. Both goals were justified on the grounds that most of these countries were just beginning to establish indigenous control over their political and economic affairs. The majority of their children were still deprived of any proper formal schooling and it was therefore thought necessary to get as many children as possible into the school system and prepare the manpower required for the modernization of their economies.

In the last two decades, developing countries, as far as basic numbers are concerned, have achieved what Beeby (1976:2) describes as 'near miracles'. Husen (1982:47) observes that "many developing countries have in a way jumped over the period of slow and steady growth that was characteristic of many of the industrial countries in the northern hemisphere over a period of almost a century". These quantitative developments however, appear to have been in many respects, at the expense of quality. More recently, the debate has become centred upon what kind of education is being provided.
Developing countries inherited, and some borrowed, models of education, Western in structure and content, and in some cases, in the medium of instruction. The philosophy which underlies the Western industrial models, which were carried over into the educational systems, is based on individualism, competitiveness and elitism, which are often alien to the traditional cultures in many developing countries and are often in direct opposition to the official aims of these societies (cf. Nyerere, 1968:269; and Gunnar Myrdal, 1971:ch.24). Indeed, this value-system is currently under strong criticism in many Western nations, and a move towards a more global and human model is taking shape. Most of the arguments against the conventional model centre on the concept of quality and relevance.

Educational systems, in particular formal education, with all the claims made for their human and economic functions in the early 1960's, were exhibiting symptoms of crisis by the end of that decade. At the outset, it appeared that the problem was exclusive to the developing countries, but events revealed that the problem was a global one, not only educational, but rather a moral and human problem. As early as 1963, Adam Curle criticised educational policies in developing countries for their underlying assumptions that economic growth was the crucial, if not the only indicator of development: "Are there not perhaps other indices, social rather than economic, human rather than material, by which to gauge the conditions of nations? Should we not widen our concept of poverty to include that poverty of mind through which effort is still-born, and widen our idea of wealth to include the creative spirit, without which, there is no development?" (Curle, 1963:3).
Towards the end of the 1960's the educational crisis began to be felt more acutely. The Williamsburg conference, convened in 1967, had as its central theme, 'the World Educational Crisis'. From this conference emerged Phillip Coombs' major critical work bearing the same title, which was published in 1968. The main problems detected by Coombs were the high rate of wastage and the high cost of education partly aggravated by wastage, the imbalance between supply and demand and the lack of relevance in the content of education. About the same time a symposium was organized by the IIEP in 1968, to examine the quality of education. The report, 'Qualitative Aspects of Educational Planning', edited by Beeby and published in 1969, contains a number of interesting documents that were discussed in the meeting and some discussion reports. Coombs, in the introduction to this report, refers to many of the same problems dealt with in his own earlier work, namely, the gap between educational demand and supply; costs, the misfit between education and jobs, and the misfit between content and methods. A new emphasis on the content of education emerged in this report, which was particularly concerned with:

- obsolescence of the knowledge and skills acquired at school, and of jobs available in the employment market;
- irrelevancy of the curriculum, mainly the result of alienating content inherited or borrowed from a Western metropolitan context which is completely remote from the realities of developing countries;
- inappropriateness of the structure of the systems and the examination standards designed for the ruling elite, which have been appropriated without adaptation to provide for mass education (Beeby, 1969:19).

The educational crisis seems to be still flourishing, despite the efforts being made to change the situation. In his latest work 'The World Crisis in Education: the view from the eighties', Coombs observes that the crisis
has become a continuous one, intensified by "growth maladjustments between education systems and the rapidly changing world", asserting that new dimensions of the crisis have developed in the 1970's and early 1980's. "Of these new dimensions, the most significant is that there is now a crisis of confidence in education itself". (Coombs, 1985:9).

Concern for the improvement of the quality of education and its relevance along these lines gave rise to a number of alternatives which emerged in the 1970's such as 'basic education', 'community education', and 'non-formal education', together with increased stress on vocational education and pre-vocational skills. Lists of basic learning skills with high emphasis on 'functional' components were constructed by Kenneth King, Manzoor Ahmed, Coombs, the World Bank and UNESCO. Some of these were intended for a specific context either for rural learners or for people in developing countries and consequently they were limited both in form and content. At the same time more attention began to be given to curriculum development on a global scale with quality and relevance as the central themes.

While these remedial alternatives were being suggested, the growth paradigm was further undermined by radical reformers and left-wing theorists who reinforced the claim for the centrality of education to the whole process of development in a completely new perspective. They called for restructuring of the whole socio-economic system both at the national and international level. Some of the representatives of this line of criticism are Bowles and Gintis, Carnoy, Galtung and Freire, and in a different way Nyerere. For the first five critics, traditional Western education is a reproduction of capitalist socio-economic structures and value-systems which are essentially designed to benefit only the ruling
elites. It is a means of the conscious exploitation and domestication of
the underprivileged, either in groups within a nation, or as less developed
nations at the international level. Bowles (1980:207) states that "the
educational system, as an important influence on political life, ideology
and the development of labour power as an input into the production
process, is one of the main instruments of the state. The output of the
school is the reproduction of social relations". In Freire's terms, formal
education at present is a form of 'massification', an instrument for
creating a 'culture of silence', which serves as a control mechanism
preserving the power relations between the privileged and the
disadvantaged groups in society during the process of economic growth.

Carnoy expands the idea of alienation and exploitation to larger sytems:
"...in the non-industrialized countries, the school is an institution that not
only keeps the individual from self-definition but keeps the entire society
from defining itself. The schools are an extension of the metropole
structure, just as are the economy, polity and social structure".
(Carnoy,1974:72). Carnoy goes on to say "As long as the national
bourgeoisie in its colonial role dominates the domestic pyramidal
structure, we can expect that the school will prevent liberation on two
levels, liberation from the definition of culture and development by
high-income imperial nations, and liberation from the domestic pyramidal
structure". (Ibid).

Alien values and attitudes are adopted and supported by the national elite
who often become the rulers who decide the fate of the country. In such a
situation it is the alienated groups who shape the national system; hence
alienation becomes institutionalised and the majority becomes doubly
alienated: firstly from their own culture, and secondly from the authentic
foreign culture.

As Husen (1982:54) observes, the status of the masses as the victims of maldistribution of power is further intensified by schooling. He argues that many metropolitan schools attended by children from different classes can never be instruments for equalization since they contain what he calls an "educational underclass", by which he means that the children of the poor lag behind from the beginning, because what the schools offer is not essentially designed to suit their needs and abilities. Indeed, society in general is not planned and organized to suit their interests.

The conditions of alienation and dependency have often been attributed to outside forces, while the national forces also responsible for the creation of these conditions are ignored. However, some enlightened leaders in developing countries have also analysed the problem from within, observing how indiscriminate borrowing or the acceptance of aid have resulted in the 'diploma disease' and irrelevancy of the content. Nyerere frankly describes the situation as one of the blind leading the blind: "Although over some time there have been various criticisms about the details of curricula provided by schools, we have not until now questioned the basic system of education which we took over at the time of independence... Individually and collectively we have in practice thought of education as a training for the skills required to earn high salaries in the modern sector of our economy". (Nyerere, 1968:267). The implication here is that the political and educational leaders in the developing world should not take the easy way out by casting all the blame on the colonial legacy, or more frequently today, on foreign experts, often regarded as agents of neo-colonialism. National leaders should rather accept their responsibility and look for solutions that take into account the conditions
that prevail in their own countries; as, for example, Tanzania opted for its own model of ‘education for self-reliance’ despite the hardships involved in such a policy. Although this model has not proven entirely successful, it is still considered a worthwhile experiment from which there is much to be learnt.

The same problems plague the Arab World. An Arab educationalist, Ahmed Ubeid, describes the situation thus, "The Arab masses were virtually isolated from the educational system, knowing neither on what basis it had been established nor what objective it pursued. Even the educated elite seldom displays any interest in understanding the educational system or in helping to make it understood". (Ubeid, 1975:399). According to Ubeid, as far as the learners are concerned, the education system only serves them to obtain diplomas for posts in the modern sector: "What matters is the level of the diploma or degree rather than the level of competence of its holder". Generally students seek to obtain degrees in highly professional fields regardless of their relevance either to the needs of the society or the learners' aptitudes and interests. The president of Jordan University states, "... unfortunately it is the fashion that people are geared to degrees as qualifications rather than anything else. Some students in medicine go into the subject because it is the fashion, not because they really want to study medicine.." (The Middle East, May 1982:34-5).

The craving for degrees, the rise and spread of 'the diploma disease', which seems to have become an endemic plague, is encouraged by the social and economic structures within which educational systems operate. The drive to obtain a diploma in certain areas of study which are often irrelevant to the society or to the interests of the learner, stems from the fact that these areas often enjoy a prestige value in the society which may
outweigh any lack of financial reward that is attached to them. Education, or more precisely, the possession of a diploma, is increasingly conceived as a career-determining factor, since "educated talent is modern society's substitute for distinction by family name and inherited wealth". (Husen, 1982:46). This meritocratic tendency becomes even greater because of the value given to educational credentials in the employment market: "the main criteria used by most employers when hiring recruits at the bottom of the occupational ladder, are the level and type of education. As a part of this process, eligibility for employment is often codified in terms of the minimum levels of formal education and training required. A characteristic of the wage and salary structure of most countries is that persons with more education tend to receive higher remuneration than those with less whether in the same occupation or not". (Colclough, 1982:171).

This means that in order to secure a reasonable place in the line of career-seekers, one has to acquire as many educational qualifications as possible, although other factors may still wield considerable influence, and as the value-level of certificates goes down, the demands for higher qualifications increase. This paradox has been observed by Dore (1976:4). "The worse the educated unemployment situation gets, the more useless educational certificates become, the stronger grows the pressure for an expansion of educational facilities". The poor are thus perfectly justified in their participation in the scramble for qualifications, since these might be the only means of survival in a world where credentials have become the passport not only to employment and prosperity, but also to social status. It is not surprising that some of the alternatives that appeared in the seventies to make education more relevant, such as basic education, vocational training and community education, have not been
successful, for such a dual system is often seen by the would-be recipients as only another means of perpetuating existing disparities, because such alternatives were essentially designed for the poor and provide education which is perceived as having low status, a perception that is merely the reflection of prevailing social attitudes to these pursuits, even if they are of high social relevance and use. Therefore the victims must not be blamed, as they frequently are, for lack of understanding of their own needs and for failing to realize what is in their own interests. In fact, the problem lies in the nature of the social and educational system in which they are caught.

Towards a holistic perspective of education
Present world conditions indicate that a widespread interest in education, expressed in a prolific literature, is no guarantee of any universal improvement in the conditions of life. The most threatening of today's problems are caused by some of those who have received the best kind of modern education in existence, which, despite its alleged superiority, does not seem necessarily to promote to any extent the development of human responsibility, or the material conditions of the majority. John Simmons states that "the experience of the past thirty years indicates that most education strategies have failed to promote development, if development is conceived primarily as a process for improving the lives of the deprived majority of the world's population". (Simmon, 1979:1005). This failure results from the lack of relevant and effective education that would generate change: "Education may be the key to change but it sometimes appears to be locked on the other side of the development door". (Ibid). Beeby, who first believed that education in developing countries would evolve through certain stages as it had in the West, states twelve years later that "education has been a blunt and clumsy instrument for bringing
about changes", not because it is naturally so, but because we make it so. Thus, if we want to bring about real changes, Beeby advises that we have to "make a more determined attempt to sharpen the instrument and learn how to use it more effectively". (Beeby, 1976:1).

Education therefore, can and should be the vehicle for change and development, but only if the right education is provided. At present, the role expected of education in the process of development is even more demanding than before. "The process of development itself is education..." says Carnoy (1982:171). The World Bank Sector Paper (1980:14) perceives education not as a sector of development, "but as a pervasive element that must be integrated - horizontally and vertically - into all development efforts". The new concept of development which seems to have acquired international acceptance, requires radical changes in education. Fragmented concepts and policies such as basic education, vocational, rural education, education for peace, human rights and international understanding, environmental education and development education, are no longer viable. What is now required is a holistic concept that will integrate all these aspects in one educational programme which must be flexible enough to suit everyone's needs and aspirations, and wide enough to cover local, national and international, human and natural issues crucial to mankind's survival and progress in a dramatically changing world. Beeby (1969:16) proposed "a broader and more dynamic conception of the qualitative aspects of educational development, one which views education as a living, moving thing whose goodness resides not only in its excellence relative to certain standards, but in its relevance and fitness to the changing needs of the particular student and society it is intended to serve". In view of recent developments in education: the democratization of educational provision; a new interest in such issues as
the links between education and development, education and work; an emerging emphasis on the humanist content of education - the development of the individual personality, on national and cultural identity, on global and ecological issues and on thinking for the future - the need for a holistic approach to educational planning becomes apparent.

The recent movement in development planning towards basic human needs and concern for human survival implies a major role for education, in particular at the general level, in bringing about the changes, both material and attitudinal, required for such forms of development. Colclough (1962:46-9) found that in addition to the economic return to primary schooling, "it reduces fertility, improves health and nutrition, and promotes other behavioural and attitudinal changes which are helpful to economic development." Sheehan and Hopkins, in the world-wide study, 'Basic Needs Performance', found that education is a key input in basic needs. For example, they found that in terms of life expectancy and infant mortality, large parts of the variances are explained by education rather than by the GNP. (Sheehan and Hopkins, 1979:101).

Other studies indicate that findings in the educational field corroborate the validity of the move towards endogenous forms of development and of the move away from the traditional manpower-planning approach. A new emphasis on the earlier stages of education and the importance of general rather than specific vocational education, and on concern for the dignity of human beings, human rights, for human and ecological issues, implies the desirability of educational policy, in the developing countries as well as in the developed world, concentrating on general content which may be applied in a variety of contexts; and more importantly, on the development of human moral values that enable people to cope with technological
changes and to identify with human value-systems based on respect for all, recognition of one's rights and obligations, the rights of others and of nature. In other words, education for relevance is no longer concerned with material and technological change, rather it should move towards dealing with psychological and cultural change and adaptability to the rapidly changing world.

Education and the Changing of Attitudes

A philosophy of development is based on peoples' active and direct participation, on their confidence in their own potential and in their capability to identify and satisfy their needs and aspirations, on their ability to identify with others; to co-operate with others at the local, national and transnational levels, and to develop a concern for nature and the future, implies major changes in attitude. These changes are necessary for the would-be rulers, administrators, specialists and teachers as well as those ordinary citizens who are the receivers and users in the system. Education, if it is to assume the responsibility for change, obviously has a great deal to offer in the area of attitude promotion, although its potential in this area is as yet virtually unexplored as a result of the general preoccupation with using the techniques of attitude change in persuading people to acquire material goods and technology.

The importance of attitude change as a function of education is critical in a world which technologically anticipates the twenty first century, but frequently wants to retain obsolete value systems. Major problems arise from conflicting attitudes and values, which support the earlier contention that the failure of many educational and indeed, other socio-economic programmes resulted from conflict of values and ideas.
between and among, users and experts. (cf. Havelock and Huberman, 1975).

A very important aspect of the education of attitudes is to enable people to 'de-centre': to see the world from other peoples' points of view, to function with empathy and open-mindedness and to act with conscience and ethical direction rather than as a mere response to impulse. Changing attitudes, which includes the modification and adaptation of beliefs and values, involves a dialectical relationship between the individual as an autonomous person and other human beings and the world, a relationship which must be reflected not only in the content of education but also in the relationship between school and community, and students and teachers in the classroom.

Peoples' attitudes towards themselves are crucial: how a person should see himself, his identity and potential, his life and its meaning, and his attitudes towards people around him, all acquire a new importance when viewed from the perspective of the education of attitudes. This implies an appreciation of the existence of a transpersonal a global interdependency which has far-reaching implications for relevance in education and the development of human beings. In its first report, the Brandt Commission asserts that "It is imperative that ordinary citizens understand the implications for themselves of global interdependence and identify with international organizations that are meant to manage it". (Brandt Commission, 1980:259). This point is strongly stressed in the second report of 1983. "If societies do not educate their citizens for the interdependent world they have inherited, their governments will find it difficult to take the decisions that an interdependent world economy demands". (1983:144).

If a new world is to be created in which man can identify and realize his
needs and potentialities and find peace and prosperity on the basis of co-operation rather than competition, love rather than power, dialogue rather than coercion; on the basis of careful use of natural resources rather than the exploitation and destruction of nature, "early changes in attitude are most vital. For it is attitude change based on knowledge and self-confidence that knowledge brings, that lifelong education must seek to achieve". (Hawes, 1963:1). The concept of education as a lifelong learning process involves all forms of learning, formal, non-formal and informal approaches, but we consider formal general education as the most vital sector through which the majority of children pass, boys and girls, poor and rich, some of whom carry on studying at higher levels in more specialized fields and who later bear public and intellectual responsibilities; others of whom seek employment and make a life for themselves. Therefore, this sector is of fundamental importance for a new direction in education. Moreover, most of the changes that are expected to be brought about by education, are too acute, delicate and fundamental to be acquired by chance, or in any institution less highly structured and organized than schools. If the kind of education offered in the early stages of children's lives is not relevant to their needs and aspirations, to the possible needs, problems and values of the kind of world they will be living in, there is no alternative institution other than the school that can offer such a wide range of learning experiences, many of which on the surface may appear threatening to the status quo and to the form of the traditional institutions. "In a humanistic/ecological society characterized by simplicity of life-style, ecological respect, interdependent relations, sense of community, emphasis on the quality of life, expanded awareness of 'appropriate' technology, general education should be "based on new values of balance, respect for diversity, stress on responsibility to the community, self-realization, quality of work and new
holistic modes of thinking". (Henchey, 1981).

In the light of the ideas currently prevailing in development and educational policies, and the growing awareness and acceptance of the necessity of making education more relevant to these issues, in particular to those which concern human survival in the broadest sense of the term, basic human needs as the central approach to development is a logical and practical starting point for the determination of a more relevant educational content. This may be modified and adapted according to certain contexts both for different societies and cultures, and for different localities within each society, while maintaining the same humanistic, authentic and global spirit and orientation. The issue of 'Basic Human Needs' as a basis for relevance in education will be the subject of the next chapter.

Summary and Conclusions
The new concept of development provides a real challenge to human thinking about evolution, at its present stage. Mankind is facing a choice - whether human evolution is to take place through class struggle, oppression and bloodshed, or through understanding, dialogue, co-operation and mutual respect between individuals and nations. From the information available about natural resources, about current technological capacity, about the present intellectual climate, about human moral values, about the growing awareness of the dangers and problems that threaten humanity and the gaps and flaws that prevail in human civilization, it seems possible for mankind to prove his humanity and his moral and mental superiority over other creatures.

The earth's natural resources, under conditions of efficient economic
production, are more than enough to feed every person on earth. Scientific and technological capacity are higher than ever, if used properly for development and for the creation of new possibilities for growth and survival, rather than for war and destruction. The problems seem to lie in the area of free will, rationality and wisdom, and morality. The so-called “natural” limits to growth are not inevitable. It has become apparent that it is within human capability to control the deployment of resources. As Francois Perroux (1963:197) observes, there is a growing appreciation of two phenomena: the first is the awareness that “the real limits to growth are political, social and administrative rather than technological”. The second is, “the rediscovery of ‘morality and ethics’, after the eclipse they suffered under the influence of the shortsighted scientism and blind trust in ‘neutral’ market forces”. This view of human awareness of the need for a new human order not only economic, but also social, political, cultural and ethical, is strongly featured throughout recent literature on development.

Most of these humanistic ideas, however well-developed at the conceptual level, are still administratively in the embryonic stage, and in most cases exist in the academic sphere only. Very little of this humanism has entered the sphere of policy and even less has been translated into practice. One of the problems that arise when technology outstrips morality, is embodied in the two-edged phenomenon of the highly sophisticated communications system which has made it possible for these ideas to reach most parts of the world, but which has often resulted in a facile and superficial slogan-mongering which depletes the ideas of their substance, while institutionalizing the payment of lip-service.

The question of the dissemination of information has particular relevance
for education, since if the world of these humanist aspirations is to emerge, it is of equal importance to raise consciousness about value formation in the rich as well as in the poor, in those who rule and participate in policy-making, as well as in the powerless. It is true that immediate and local problems and values affect the content of development and shape its direction, but it is also true that there are certain qualities, attitudes and values that are universal and that provide common criteria for improvement.

This perception of development has far-reaching implication for education, both in terms of policy and content. As has been noted in the section on education and development, educational policy and content have always reflected current concepts and strategies of development step by step, from laissez faire systems to those based on planning for economic growth; from the basic minimum needs approach of the early 70's, to a more human and universal perspective. New ideas have now emerged, calling for education for human needs. Educational policies now include aims for promoting self-realization, peace and international understanding, education for development, for interdependence and human rights. That is to say, education is always part and parcel of development. It is always made, or at least, intended to be made relevant to the prevailing development paradigm which is often a reflection of the intellectual paradigm that characterizes the period.

The present changes in the intellectual climate, in the scientific paradigm and consequently in the concept and strategy of development, call for urgent action to change education and make it more relevant to the emerging model of human development. The present concept is multi-dimensional, covering many issues, which makes it very difficult to
define. There is a need to determine a focus for the whole purpose of development that would encompass all other issues connected with the development syndrome. Since development is now interpreted as the development of man and his capacity to meet human needs and realize human potential, it seems logical to take the concept of 'Basic Human Needs' as the focal point for ensuring relevance in education in the light of our understanding of the nature of man, his needs and potentials, and his capacities and values. Therefore, the concept and theory of human needs will be the subject of the next chapter which will provide a theoretical basis for making educational content relevant.
Footnotes

1. Raymond Williams, in "Keywords, a vocabulary of culture and society", (1976) outlines some of the fluctuations in definitions in English of the idea of "progress", from the 15th Century to the present time, with some reference to the social, political and scientific movements that influenced such definitions.

2. The chapter on "The Concept of Liberal Education", in Schofield (1972), outlines some of the implications of the Renaissance for education, particularly in the area of secular vis-a-vis religious influences on social organization.

3. The fact that recent trends towards more humanitarian concerns in development planning, such as the use of what may be called 'welfare indicators' of progress, rather than those that record national or sectoral productivity, have so far enjoyed little acceptance or success (as witness the minimal influence of the attempt to establish a New International Economic Order, and the lukewarm reception of the two reports of the Brandt Commission, 1980 and 1983) is in part attributable to the difficulty of quantifying such welfare indicators and to the threat they constitute to established economic and political institutions.

4. The terms Rostow actually used were "traditional" societies; societies which had reached a stage of "preconditions for take-off"; "take-off" (into industrial productivity) stage; followed by "the drive towards maturity" (in Rostow's version maturity is equated with the economic complex surrounding industrialization); and "the age of higher
mass-consumption". In this hierarchy, all societies that do not manifest symptoms of industrialization are regarded as "pre-industrial", or underdeveloped.

5. World Bank statistics, e.g. in the annual World Development Reports, indicate disparities between apparent progress in aggregate terms and such welfare-based indicators as literacy rates, life expectancy, access to clean drinking water and others. In "Common Security: Programme for Disarmament" (1982), the figure for total military expenditure for 1982 is quoted as "over $650,000 million" or "more than the entire income of 1,500 million people living in the poorest countries". The report goes on to say: "The price of a single modern fighter plane would be sufficient to inoculate three million children against major childhood diseases. The price of one nuclear submarine with its missiles would provide a hundred thousand working years of nursing care for old people".


7. The World Bank has also made a major contribution, especially under the presidency of Robert McNamara, to world recognition of the problem of mass-poverty. cf. McNamara, 1979:19 and 1980:19ff.


9. cf. Andre Gunder Frank, "The Development of Underdevelopment", 1969 and Samir Amin, "Crisis, Nationalism and Socialism" in "Dynamics of
Global Crisis" 1982:190-91.

10. Worsley (1984:184,185 and 202-209), points out the anomalous connotations of the concept of marginality and the conscious, if not deliberate, nature of the process of the institutionalization of dominant-class interests that brings about this phenomenon.


12. The drive of all Paulo Freire's work is towards the changing of institutional structures through changing the perceptions of the 'clients' of those structures; in the political context of his work, these are the "oppressed". cf. Freire, 1965, ch.7: Cultural Action and Conscientization.

13. Erich Fromm (1942:4-5) suggests that the personal responsibility implied by the idea of freedom is a burden to many and that individuals sometimes whole societies opt for totalitarian or mass acceptance of unjust social systems from a fear of the choices that would be imposed on them by a political system based on freedom.

14. Ivan Illich uses the term 'Shadow economy' to refer to "those aspects of commodity-intensive society that economists tend to relegate to the 'informal' sector... The common characteristics of these shadow-transactions I began to call the 'shadow economy'". (Illich,1981:129). Also: "increasingly the unpaid self-discipline of shadow work becomes more important than wage labour for further economic growth". (Ibid:100).
In Chapter Two we have indicated the growth of concern for the survival and welfare of mankind, not merely physical survival, but survival with dignity and humanity. As an aspect of this trend, there is considerable emphasis on the humanization of science and technology, and of the socio-political and cultural processes and institutions which should have as their goal, the development of the quality of the individual life.

In this perspective the idea of basic human needs has become accepted as the central goal of development which has been defined as the 'development of man' and whose aim is to 'develop human capacities to meet human needs and to promote human potential.' (cf. ch 2). Starting from concern for human development and survival it becomes logical to adopt the concept of basic human needs as the focal starting point for development, with education acting as a major catalyst.

The concept of 'need'
Despite the widespread use of the concept of 'needs' both in psychology and sociology, particularly in literature on development and education, the concept is still vague and imprecise. The subtlety of the concept makes it correspondingly difficult to settle on a general definition. This uncertainty arises from the fact that different philosophers and psychologists hold different views of the nature of man, of his needs and motivation, and consequently those who are concerned with development and education vary in their views of needs and the priorities accorded to them. Nevertheless, it may be helpful to have a brief outline of some of
the more influential views of the concept of needs.

Some consider needs in terms of deficiency; as a gap between a condition or state of affairs regarded as desirable by the individual and the actual state of the present condition of that individual. What is regarded as desirable and the degree of what constitutes deficiency is essentially determined by the cultural norms and the economic conditions of the society in which the individual lives.

Another view is that which regards needs as motivations which direct human behaviour; a need is a drive that motivates the individual to act in a certain way to seek satisfaction. Archambault distinguishes between two kinds of motivational needs, 'real or genuine needs' and 'felt needs'. The former are those objects or conditions necessary for the organism to maintain a "satisfactory state of internal equilibrium or normal bodily function, without a corresponding recognition on the part of the organism that this exists" (Archambault, 1957:41). The latter, on the other hand, are seen as mere desires and cravings, which can motivate one's behaviour to seek satisfaction, which does not necessarily gratify a genuine need; in some cases the sought satisfaction may be more harmful than its absence. Still another view would make no distinction between needs, wants and demands, taking wants and demands as the overt expression of the genuine needs. Smith (1977:27), argues that "being human requires the satisfaction of needs and wants". Armstrong (1982:293), holds that "a 'want' represents that version of 'need' most often talked about in terms of a psychological 'desire'". Dearden (1966:7) sees needs as articulate 'wants', but for him, a 'need' is a normative concept which is determined and influenced by the context within which needs are being examined. The major problem with the unconditional acceptance of the so-called 'felt
needs' or wants, is that they may include elements which are harmful and destructive either to oneself or to others. One line of argument holds that needs, in the sense of an overt desire, can be created. Ali Ashraf (1982:3) points out that "the industrial society awakens false needs through advertisements, stimulates the appetites of consumers and ultimately the drive of the society is towards greater and greater affluence." Galbraith, (1975: 174) claims that "as affluence increases, goods become increasingly dispensible or frivolous". Illich (1969:362) rightly argues that dangers arise when these needs are reified, i.e. when satisfaction of a particular need becomes geared to a particular manufactured product.

Need as motivation, is best defined by Gates: "A need exists as a state of tension in a person which serves to direct his behaviour toward certain goals...need is used as an inclusive term to embrace drives, impulses, goal sets, urges, motives, cravings, desires, wants and wishes." (Gates, 1948:617). The content of these needs and the means by which they are satisfied is no doubt subject to certain sets of human values and modified by the condition of societies. As for the concept of basic human needs, an interesting definition is suggested by Carlos Mallmann who sees needs in term of 'satisfiers'. "We call needs the common characteristics of those elements, satisfiers, without which human beings are in one way or another impaired or become ill; e.g. their functioning falls below potentially attainable levels in relation to optimum average performance observed in other human beings" (in Forti and Bisogno, 1981:6). To this view of needs we shall add Galtung's definition in which a basic human need is "something human beings cannot do without, in their own judgement, without suffering basic degradation as human beings". (Galtung, 1980:6).
**Basic Needs in Development**

Within the literature on development a classical list of basic needs would include the need for:
- food and nutrition;
- water and sanitation;
- health, hygiene and contraceptive services;
- shelter and clothing;
- basic education and training;
- employment situation and work conditions;
- social security and certain human rights.

Such a list is to be found in most reports and studies, particularly in the World Bank literature, a list of core needs for the poorest. However, these concern merely the physical survival of the individual. Since the early 1970's the concept of needs and its components has undergone a process of extensive revision which has resulted in an expansion of the concept to cover other needs than the purely physical. The Declaration of Concodec in 1974 states that "Development should not be limited to the satisfaction of basic needs (food, shelter, clothing, health, education). There are other needs, other goals and other values. Development includes freedom of expression and impression, the right to give and receive ideas and stimulus. There is a deep social need to participate in shaping the basis of one's existence and to make a contribution to the fashioning of the world's future." (quoted in Ghai, 1977:6). Needs have been classified in different ways such as 'life-sustaining needs', 'life-supporting needs', 'life-enhancing needs' and 'life-enriching wants'. (Vittachi, 1976). The commonest classification used is that of 'material' needs and 'non-material' needs with more emphasis recently placed on the latter.
Hopkins and Hoeven (1983:8) who use this last classification of needs, point out that the concept must be expanded and although they suggest that development efforts should concentrate on meeting core basic needs, i.e. the material needs of the poorest, they assert that “it should be kept in mind that meeting the core needs is the first step in meeting the human needs of people”. In their own view the 'non-material' needs involve “participation of the people in decisions which affect them in order to bring about social justice and self-reliance”. The same view is held by Streeten who identifies a number of non-material needs but sees their function as both means and end. In his view 'non-material' needs include “the need for self-determination, self-reliance and security; for the participation of workers and citizens in the decision-making that affect them; for national cultural identity; and for a sense of purpose in life and work,” which are important “not only because they are valued in their own right, but also because they are important conditions for meeting material needs” (Streeten, 1981:34).

Galtung as one of the European exponents of the basic human needs paradigm, reverts to the argument that man lives not on bread alone; he distinguishes between 'material needs' which include welfare and security needs, and 'non-material needs' which involve in his view identity and freedom, the most important components of which are, the need for expression and creativity; for being active and in control of one's environment; for challenge and new experience; for a sense of belonging; for partnership with nature, including aesthetic experience; and for a sense of purpose and meaning in life. (Galtung, 1980:8).

From an Islamic point of view, Khan (1981:8) in an analysis of the basic human needs paradigm and how it is treated in the Muslim World, states
that "Islamic beliefs and values concerning human dignity and worth, dictate that the foremost purpose of a government should be to better the quality of life of its individual citizens". In his elaboration of the components of basic human needs he asserts that the "obvious assumption is that material well-being is a necessary but not a sufficient condition of the psychological well-being of the individual citizens". Their well-being, he adds, "involves various dimensions of self-realization and self-fulfilment through achieving such states or conditions as ... (in summary) health, meaningful activity, freedom, security, novelty, status, sociality, consumption and a positive view of the future". (Ibid).

**Maslow's theory and basic human needs.**

In the light of present trends both in development and education which emphasize the development of the whole person, of his understanding of his own needs and potential and of his ability to participate in meeting them, of concern for human rights, human problems at both personal and human levels, there is a great need for a holistic view of the nature of man: a view of human potential which may be compatible with the present views of human needs and values and which may be capable of encompassing the non-material needs as well as the material needs, in the personal and local as well as the transpersonal and global dimensions. Humanistic psychology, in particular the ideas of Abraham Maslow, provides the most reliable and comprehensive framework for such views of human needs and global concerns.

The humanistic approach in psychology was developed mainly by humanist psychologists and existentialist psychiatrists in the United States in the 1960's, and began to influence thinking in the field of development in the late 1970's. This approach, now known as the 'Third Force Psychology'.
took shape as a rejection of the earlier dominance in psychology of the Freudian and the behaviourist theories; as an attempt at a synthesis of classical and new ideas. Maslow is the spiritual father of the movement, and therefore I will rely essentially on his views, in particular on his theory of basic human needs. Humanistic psychology rejects not only the views of the previous psychology but also the scientific paradigm which prevailed in all intellectual fields, including the social sciences. Maslow rejects the Freudian view of humanity for over-emphasizing the lower instincts and for its failure to deal adequately with the higher nature of man, and because the Freudian theories were essentially derived from the study of neurotic and psychotic individuals. Maslow finds that conclusions based on observing the worst in human beings are bound to result in a distorted view of human nature. Yet he acknowledges that "Freud supplied to us the sick half of psychology and we must now fill it out with the healthy half". (Maslow, 1962:5).

Behaviourism, which Maslow regards as the 'classical academic psychology' is criticized for its view of human beings simply as complex machines responding blindly to environmental stimuli; and because behaviourist conclusions were based only on the observation of animals in laboratories, which may be useful in studying the lower characteristics of man, but which are of limited value when applied to a human context. In Maslow's view, "Classical academic psychology has no systematic place for higher-order elements of the personality such as altruism and dignity, or the search for truth and beauty. You simply do not ask questions about ultimate human values if you are working in an animal lab". (Maslow, 1968:686).

In his reference to those who reject the conception of science as being
value-free defined in terms of objectivity and detachment, Maslow describes their stance as "a real revolution" and asserts that "the Third Force psychology totally rejects this view of science as merely instrumental and unable to help mankind to discover its ultimate ends and values". (Ibid:687). The American humanistic psychologists, including Maslow, view the biological nature of man as the basis, by way of his membership in a common species, for the existence of absolute values. (Ibid:688).

Maslow's form of humanistic psychology takes into consideration man's biological, psychological, emotional, social, intellectual and spiritual needs, focusing on the healthy aspects of human nature and emphasizing human values and experience, holding that feelings, needs and desires, aspirations and hopes are all equally as important in a comprehensive theory of human behaviour as external influences. It sees man as a whole, as an autonomous person who is capable of, and energized by, growth and self-actualisation; it recognises the potential inherited in all human beings regardless of culture and environmental constraints. Maslow, despite his hierarchical order of needs, argues that "in good theory there is no such entity as a need of the stomach or mouth, or a genital need. There is only a need of the individual. Satisfaction comes to the whole". (Maslow, 1970:135).

The central idea in this theory is that human beings are motivated by higher needs and goals as they are motivated by basic material needs. The latter may best be considered as mere means, whereas the former are ends in themselves. This view was expressed by Goldstein, nearly half a century ago, who found that "the drive which sets the organism going is nothing but the forces which arise from its tendency to actualize itself as
fully as possible in terms of its potentiality". (Goldstein, 1940:172). Carl Rogers (1960:123) reiterates this theory, arguing that "there is one central source of energy in the human organism. This source is a trustworthy function of the whole system rather than of some portion of it; it is a tendency toward fulfillment, toward actualization involving not only the maintenance but also the enhancement of the organism". Maslow sees man as continuously striving for self-actualization and growth, "once the homoeostatic balance of the basic physiological and psychological needs is restored, humans do not ordinarily become quiescent"; rather they search for new ways to exercise their talents or to achieve happiness. (Massey, 1981:335). Furthermore, in the process of becoming "what one can be", one is fulfilling one's needs which provide ultimate satisfaction. When humans are free to do so, they frequently pursue ideals, beauty, wisdom, spontaneity, goodness, creativity, the wholeness of truth and fulfilment. (Ibid).

Basic Human Needs in Maslow's hierarchy

Having argued that basic human needs are only components of one integrated whole and that they are always functioning, it becomes clear that in Maslow's theory, it is only when one need becomes a preoccupation of the person that other needs become of less concern. At this stage, it is only for convenience of analysis that needs be dealt with in their hierarchical order.

1) Physiological needs:
This category includes the most essential needs for physical growth and biological survival, such as food, water, air, activity, sleep, sex, protection from extremes of temperature (shelter) and sensory stimulation. If the living organism is to survive and the species is to
develop, all its potential must be developed; in the case of the human organism, this implies that a minimal level of satisfaction is required; if the lower needs remain unsatisfied, the individual remains preoccupied by them and his ability to be motivated by higher needs is thwarted.

2) The safety needs:
The central motive of safety needs is to a great extent, related to the survival needs but they are of a more psychological nature. The organism needs to ensure a reasonable degree of certainty, order and predictability in the environment. People need to have some control over their lives. After childhood, employment, study and the complexity of life and technology may become areas of insecurity and anxiety. Religion, myths and a life-philosophy may supply a great deal of security; "science and philosophy in general, may be listed as partially motivated by the safety needs". (Maslow, in Vroom and Deci, 1970:30). Lack of control over one's environment often leads to extreme fanaticism and conservatism, for the neurotic always cling to the familiar and fears what he cannot understand. The neurotic's safety needs "often find specific expression in a search for a protector or a stronger person on whom he may depend, perhaps a Fuehrer". (Maslow, 1970:42).

3) Love and belonging needs:
Needs in this category are of a more social and emotional nature; they arise from a desire for friendship, mature love, togetherness and a sense of rootedness and identity. If these needs are not met, the individual will feel lonely, socially ostracised, friendless and rejected in the absence of friends, relatives and family and a reference group. Alienation from the wider social system often leads to creating a new system. To Maslow, rebellious youth groups and other organized movements at present, are
motivated partially by the profound need for belonging, for intimate contact, for real togetherness "in the face of a common enemy, any enemy that can serve to form an amity group by simply posing an external threat". (Ibid:44). Maslow, in the American context, points out that the phenomenal popularity of 'encounter groups' and other forms of personal growth group, is "motivated by this unsatisfied hunger for contact, for intimacy, for belongingness, and by the need to overcome the widespread feelings of alienation, aloneness, strangeness and loneliness which have been worsened by our mobility, by the breakdown of traditional groupings, the scattering of families and the generation gap" (Maslow, 1970:44).

Love is a basic prerequisite for mature and healthy growth of the human organism: "we can say that the organism is so designed that it needs love, in the same way that automobiles are so designed that they need gas and oil". (Maslow, 1970:176). Love in this context is seen as "union with somebody or something outside oneself, under the condition of retaining the separateness and integrity of one's own self. It is an experience of sharing, of communion, which permits the full unfolding of one's own inner activity". (Fromm, 1956:31). This kind of love is termed by Fromm as 'productive love' which implies "a syndrome of attitudes; that is, care, responsibility, respect and knowledge". (Ibid:33).

4) Self-esteem needs:
Self-esteem needs form the node between the deficiency needs and the growth needs in Maslow's model; this may be considered as the focal point where the values and attitudes based on the concepts of 'having' and 'being' become more apparent. Self-esteem is divided into:
a) self-respect which includes the desire for strength, competence, confidence, adequacy, achievement, independence and freedom, all of
which, to be valid, should arise from within;
b) esteem from others which includes the desire for prestige, recognition, acceptance, attention, status, reputation and appreciation.

In the former case the individual needs to feel self-confident and know that he is a worthwhile person, capable of mastering tasks and encountering challenges in life. In the latter case, one needs to be appreciated and accepted, either for what one is or what one can do, i.e. one needs recognition from others. The satisfaction of the need for self-esteem, generates feelings and attitudes of self-confidence, self-respect, self-reliance and capability and a sense of being a useful, necessary and active person in the world. Thwarting these needs results in feelings of inferiority, of weakness, of worthlessness and dependence. Such feelings give rise either to discouragement and more dependence on others, or to compensatory or neurotic trends such as seeking confidence by identifying with manifestations of power, often power based on wealth and authority regardless of its moral stance. (cf. Maslow, in Vroom and Deci, 1970:32).

Referring to Erich Fromm and Carl Rogers, Maslow (1970:45-6), states that "we have been learning more and more of the dangers of basing self-esteem on the opinions of others rather than on real capacity, competence and adequacy to the task", which become the source of inner appreciation and self-worth. Maslow asserts that the healthiest esteem from others is that which is based on 'deserved' respect rather than "on external fame or celebrity and unwarranted adulation". Thwarting the need for self-esteem is not only morally unacceptable but it may also arouse opposing attitudes. Massey (1981:337) points out that "any system that denies individual dignity and thwarts full human development, whether it..."
be slavery, sex-role stereotyping or class exploitation, generates among
the subordinates the potential for rebellion".

5) Self-actualization needs:
Needs for self-actualization arise from a desire for self-fulfilment in the
full sense of the term at the level at which man can achieve his full
humanity. Self-actualization is apparently synonymous with being
congruent with one's unique self. "A musician must make music, an artist
must paint, and a poet must write if he is to be ultimately at peace with
himself. What a man can be, he must be. He must be true to his own
nature". (Maslow, 1970:46). Rod Farmer (1962:59) points out that
"although each individual's collection of capacities is unique the need for
self-actualization is universal among the human species".

From his studies, Maslow found that human beings need and seek inner
self-fulfilment, and that the impulse to realize one's potentialities is
both natural and necessary, although very few people can achieve it, since
human circumstances often hinder the development of such a quality of
life that would lead to self-fulfilment. Self-actualization, in the sense of
becoming what one can be, is not to be achieved only through high
intellectual or creative artistic endeavour; rather a parent, an athlete, a
student or teacher, a labourer or farmer, may be self-actualizing and
creative in his or her own craft, profession and lifestyle. A major quality
of self-actualizers is that they have 'clear impulse voices about matters
of ethics and values' and they "have to a large extent transcended the
values of their culture. They are not so much merely Americans as they
are world citizens, members of the human species first and foremost".
(Maslow, 1977:163). These qualities are very relevant to modern life;
self-actualization is therefore not a form of selfishness, but rather a way
of being self-conscious, true to oneself as an individual person but at the same time a true member of the species, whose quality of life, whose dignity and humanity is part and parcel of the quality of life, dignity and humanity of the species.

6) Metaneeds: the need for knowledge, understanding and creativity. The components of this category, which represent the highest needs in Maslow's hierarchy, are often dealt with as part of the self-actualization needs. As the range of 'growth' needs have been expanded to include higher values related to the concept of 'being', these high values are now treated as a category in their own right. Maslow points out that he has discovered that although all self-actualized people had gratified their basic and self-actualizing needs, some of them had transcended their egos and become motivated by higher needs; needs for cross-cultural values, which he calls 'Being values', which include the need for a holistic sense of understanding, purpose, justice, beauty, aliveness, uniqueness and meaningfulness of life. Knowing and understanding, which are basic prerequisites for satisfying both the deficiency and self-actualizing needs, are also basic cognitive needs in their own right. People have 'impulses to satisfy curiosity, to know, to explain and to understand', and if these impulses are not satisfied, the person in whom these impulses have developed becomes sick. Pathology, in some cases, is "produced in intelligent people leading stupid lives in stupid jobs". (Maslow, 1970:49).

There are also aesthetic and creative needs: "in some individuals there is a truly basic aesthetic need. They get sick from ugliness, and are cured by beautiful surroundings; they crave actively, and their craving can be satisfied only by beauty". (Maslow, 1970:51). Aesthetic needs can be found in all cultures and in all times, (even cavemen felt the drive to decorate
the walls of their caves), though they may vary in style and content. In his analysis of 'peak experiences', Maslow considers those with a high degree of cognitive intelligence less likely to achieve peak experiences, than those engaged in creative pursuits, but he considered both groups to be self-actualizers. The former tend to be practical and live effectively and do well; the latter live in the realm of Being, of poetry, aesthetics, symbols, transcendence, 'religions of the mystical, personal, noninstitutional sort; and of end-experience. Among the former, are the social world improvers, the politicians and the workers in society, and among the latter are those who write poetry, music, philosophy and religions. (cf. Maslow, 1970:165).

Preconditions for needs satisfaction
Maslow, who asserts the existence of these needs and potentials in every human being, believes that there are certain conditions which will allow the growth of healthy self-actualizing people, and he attributes the failure of self-actualization and the existence of pathologies of creativity in many cases to the lack of the conditions and education that would facilitate such development. According to Maslow, the major preconditions for the full development of a human being, are freedom, knowledge and a stimulating environment.

Universal freedom is essential for people to become fully human and to participate in the satisfaction of their needs and those of their fellow human beings. A number of elements are included in the concept of freedom, "such conditions as the freedom to speak, freedom to do what one wishes so long as no harm is done to others, freedom to express oneself, freedom to investigate and seek information, freedom to defend oneself, justice, fairness, honesty and orderliness in the group, are examples of
such preconditions for basic needs satisfaction". (Maslow, 1970:47).
Knowing and understanding are also preconditions for basic needs satisfaction. As mentioned earlier, the need for knowledge and understanding is a basic human need, and here it is considered a precondition for growth. Maslow states that "acquiring knowledge and systematizing the universe have been considered as, in part, techniques for the achievement of basic safety in the world, or for intelligent man, expressions of self-actualization". (Maslow, 1970:48). Learning and inquiry in this area are mainly of a utilitarian nature, oriented towards meeting other needs.

A conducive society; the satisfaction of basic human needs and the development of human potential requires a conducive environment, in which every person can find the freedom and means to satisfy his needs and actualize himself and participate in facilitating the conditions for others to do likewise. For Maslow and the majority of humanists, each person has essentially all those needs and potentials which are characteristic of the human species, and the society and culture can either help each individual to discover and develop his talents to the fullest, or impede such development and produce neurosis. "Man is ultimately not moulded or shaped into humanness or taught to be human. The role of the environment is ultimately to permit him or help him to actualize his own potential, not its potential. The environment does not give him potential or capacities; he has them in inchoate or embryonic form, just as exactly as he has embryonic arms and legs". (Maslow, 1962:160). Maslow opts for a utopian society which he calls 'Eupsychia' as his vision of a healthy society; he prefers a society moving towards interpersonal relations that nurture growth, intimacy, self-disclosure and sensitive awareness of the self. He believes that social change must occur holistically, although it
occurs slowly; knowledge, conscious control and planning make it most productive. In his view, a holistic society needs spontaneity and structure, change and stability, inspiration and order, freedom and responsibility, and the good society is ever striving for an ideal of one species and one world.

Maslow uses the concept of 'synergy' for the human capacity to "transcend the dichotomy between selfishness and unselfishness", to be self-conscious and conscious of being with others. (Massey, 1981:348). The kind of society that is required, is one in which there is no dichotomy between oneself and others who have the same needs and rights. Vandenburg argues that each person ought to find personal significance in life, and to be free, but "because this being oneself happens with others who also ought to be themselves, action that then occurs is authentic corporate action", to which "conformism and individualism are both irrelevant. (Vandenburg, 1971:184). In this synergistic, human, interdependent society an enlightened growth-fostering management is essential to facilitate the process of democratic participation, and to generate a deeper religious spirit profoundly concerned with human problems and ethics.

Leaders in this society are rewarded not entirely by money but also by admiration and respect. The ultimate goal of the economy is to enable people to satisfy their needs and at the same time to aid them in the better fulfilment of their social roles. The law here reflects not a conflict between competing interests, but justice and truth, and concern for the well-being of all.

In interpreting the ultimate goal of development as the need for the person to achieve full humanity, Maslow finds at least five factors that impede
the achievement of this goal. These can be summarized as follows:

1. Lack of awareness and understanding of human needs and potential; lack of understanding on the part of the individual of what he wants, what he is capable of, what humans in general are capable of, and how to manage these capacities;

2. Lack of a sufficient level of satisfaction of the physiological and psychological needs, as a result of which the majority of human beings become trapped and preoccupied with their satisfaction.

3. Fear of freedom and the responsibilities it requires on the part of the individual; some people like to be protected, and led.

4. Affluence and over-satisfaction of some material needs, which have their own problems concerning health and human activity; they also distract people from their humaneness and confuse the values of having with those of being and becoming.

5. Socio-political and cultural values and taboos which draw the individual away from self-fulfilment.

The order of human needs and their relationships

One of the major problems with Maslow's theory of needs is the hierarchical system in which he orders needs, which poses some difficulty and is often misunderstood. Maslow in fact, recognizes two levels of needs, deficiency and growth needs, and emphasizes the importance of the satisfaction of 'lower' needs; but he by no means suggests that this is sufficient for human survival, nor does he suggest that needs are isolated from one another. He asserts that "human life will never be understood unless its highest aspirations are taken into account. Growth, self-actualization, the striving toward health, the quest for identity and autonomy, and the yearning for excellence, must now be accepted beyond question as a widespread and perhaps universal tendency". (Maslow, 1970:
Such an assertion implies that every human being has the same needs and potentials, which must be looked at in a holistic fashion even though certain factors may result in different arrangements of priority.

As for the hierarchical order of needs, Maslow states that "the basic needs arrange themselves in a fairly definitive hierarchy on the basis of the principle of relative potency. Thus the safety need is stronger than the love need, because it dominates the organism in various demonstrable ways when both needs are frustrated". (1970:97-8). On the basis of this principle, Maslow holds that each level of need is stronger than the one that comes next, which seems logical in conditions of extreme frustration. He adds that the needs "are arranged in an integrated hierarchy rather than dichotomously". When a fair satisfaction of a lower need takes place, the individual becomes motivated by a higher need. Yet, he may continue to be aware of lesser needs though they no longer preoccupy his thinking and activities. They may, however, become once more the focus of one's motivation if frustration occurs. "The process of [reversion] to the lower needs, remains always as a possibility, and in this context must be seen not only as pathological or sick, but as absolutely necessary to the integrity of the whole organism, and as prerequisite to the existence and functioning of the higher needs, healthy regressive value-choices must be considered as 'normal', natural and instinctoid as the so-called higher values. It is clear also that they stand in a dialectical or dynamic relation to each other". (Maslow,1962:172-3). This view of the relationship between needs and their working, shows that it is feasible to discuss the holistic co-existence of all human needs and potentials, and their interlocking, reciprocal integration, which represents the need of the whole person in all his dimensions; the physical as well as the psychological, the intellectual as well as the spiritual.
In addition to this recognition of the dynamic relationship between human needs, one should realize that this relationship is a two-way connection. It is not only that lower needs function as prerequisites for the higher ones, but also higher needs can well be essential means for the healthy satisfaction of the lower basic needs, a view that has been widely emphasized in the literature on basic needs and development. Maslow's own emphasis on the preconditions for basic needs, suggests a strong reciprocal connection between lower needs and higher needs. He also asserts that satisfaction of higher needs, i.e. the need for self-actualization and metaneeds, has both survival and growth value, "living at the higher need level means greater biological efficiency, greater longevity, less disease, better sleep and appetite. Anxiety, fear, lack of love and domination, etc, tend to encourage undesirable physical and psychological results". (Maslow, 1970:98).

On the basis of such a perspective of basic human needs one may be justified in perceiving them as an interrelated, integrated and interdependent whole. They can be best presented in figure 4.
The heavily outlined arrows represent Maslow's view of the hierarchical interconnections between levels of needs; the lighter ones suggest dynamic and reciprocal interconnections between all needs. The preconditions for needs satisfaction, freedom, knowledge and a conducive environment, are placed in the centre, indicating the pervasive influence of these conditions on the satisfaction of needs.
Dimensions of basic human needs

A) The individual dimension:

Let us now accept that every human being is essentially 'good', basically motivated by a tendency toward self-actualization, self-fulfilment and self-realization. To achieve this human goal man needs food, water, air and shelter, to ensure his physical survival; he needs some understanding of his environment, security and protection against violence, oppression and manipulation, natural calamities and problems, and against anxiety over earning a living and achieving psychological survival; he needs love and friendship and a sense of identity for his emotional survival; he needs self-confidence and a sense of self-worth as well as recognition and acceptance from others for his human dignity, personal and social survival; he needs knowledge and understanding, a sense of meaning in life and a chance for creativity, spontaneity and spirituality, for his intellectual and spiritual survival.

This may be defined as 'the individual dimension' in which every individual should be assisted to understand such views of the nature of man and of his needs and potentials and to be aware of the deep interrelation and interdependence of all phenomena; physical, biological, psychological, social and cultural. To achieve the goal of development, that is 'human development', and to encounter alienation, oppression and threat to human survival, every individual must be aware of his needs and potential and his place within the human race and society. In Maslow's view one should discover or recover one's idiosyncrasy, "the way in which you are different from everybody else in the world, then to discover one's specieshood and humaness. Discovering oneself creates specieshood, awareness and understanding". (1968:690). As one becomes more aware of his own nature, needs, potential, style, pace and tastes, how different one is from
others, the more he understands "what it means to be a human animal like other human animals, ie. how you are similar to others". (Maslow, 1968:691)

In his discussion of the idea of a world community, Schwarts emphasizes the promotion of human co-operation, understanding and global spirit, asserting that "in order that man achieves a true global spirit, he must first of all achieve a more enlightened self-image"; and to achieve this "he must reflect upon his own nature and his existential needs, his true inner wants. Such perennial values as happiness, freedom, justice, love and truth should be allowed to assume a fresh significance, and the ways in which man strives to realize those values in his own life should be critically examined". (Schwarts, 1977, 315-6). He seems to agree with Maslow that self-realization is an individual issue and that global human harmony comes as a result of personal inner harmony, "complete self-realization is complete happiness, and responsibility for getting into a path of self-realization rests on the individual. It is up to each individual to loosen his hold on self-images that lead his thoughts and actions into pathways that conflict with his desire for freedom. Thus people need to become more aware of their inner nature and their various forms of attachment". (Ibid:319).

B) The socio-cultural dimension
Basic human needs are not only biological and psychological, they also have a social and cultural dimension. Some of the needs are essentially socio-cultural and almost all needs satisfaction depends on collective and co-operative action at a variety of levels; family, local, national and transnational. "Human beings evolved as social animals and cannot keep well, physically or mentally, unless they remain in contact with other
human beings. Humankind emerged through the very process of creating culture, and needs this culture for its survival and further evolution". (Capra, 1962:324). It is true that every human being needs food, water, shelter and control over his environment, and it is also true that he as an individual can take an active part in meeting his material needs, but it is equally true that he cannot meet even the material needs on his own, especially in our present complicated technological society, in which the satisfaction of even the most basic of man's needs (food, water, shelter, etc) has become a process involving many individuals and socio-economic institutions at the local and global levels. Besides, the ways such needs are satisfied are to a great extent determined by the socio-cultural resources and values. Needs above the material levels such as the need for inner security, love and belonging, identity, self-esteem and actualization, are essentially shaped and satisfied by other persons and by the cultural environment. Fromm (1942:9) points out that "man's nature, his passions and anxieties are a cultural product, as a matter of fact, man himself is the most important creation and achievement of the continuous human effort, the record of which we call history".

Awareness of such interdependence is crucial if one is to avoid both individualism and dogmatic conformism and realize that collective co-operation and conscious interdependence are the authentic means of human actualization. There is no individual self-actualization without the self-actualization of others, and no social actualization without individual self-actualization. Goldstein, in his analysis of "compliance and encroachment" in human behaviour concluded that "Normal, ordered life asks for a balanced relation between compliant and encroaching behaviour. Only then can the individual realize himself and assist others in their self-realization. Furthermore, the highest forms of human relationship,
such as love and friendship, are dependent on the individual's ability and opportunity to realize both these aspects of human behaviour". (1940:207).

The raising of consciousness about the social dimension of human needs should be aimed at developing a sense of the oneness of mankind, which would result in the practice of values of self-restriction under conditions of limited resources and of identification with issues affecting the welfare of others, values which are encouraged in the formulated version of the ethical systems promoted by most religious and legal systems. Relevant to this is the question of the roles of others, their needs and rights at the family level, at the local community, national and human levels. Human rights and major problems currently threatening the quality of human life, such as alienation, oppression, violence and the threat of war, and issues of economic and social development such as education, poverty and population, can be dealt with within this socio-cultural dimension of human needs.

C) The Ecological dimension
The third dimension is that of natural phenomena; the world of nature, as distinct from the world of culture. Human existence and survival cannot be imagined or understood without being placed in, or related to the universe and the natural world. Man should be aware of this truth and be prepared to establish a balanced and interdependent relationship with nature, "in a balanced ecosystem animals and plants live together in a combination of competition and mutual dependency. When this is disturbed, the balance of the whole system will be threatened". (Capra, 1982:301). This issue of the ecological system has become of major importance in the age of technology and over-consumption, and has become also a basic element in development as we noted in the last chapter. One
important fact that should be remembered is that man is not at war with nature; the misapplication of the idea that 'knowledge is power' that resulted in a power-based and exploitative technology; the misinterpretation of the Darwinian principle of evolution as competition and struggle with nature and other human beings, these errors have changed the balance of the relationship between man and nature, a relationship that shares the characteristics of other biological relationships. Most relationships between living organisms (animals, man and plants) are essentially *co-operative ones, characterised by co-existence, interdependence and symbiotic* in various degrees". (Ibid 302; my italics). The fact that all human needs ultimately arise from, and are satisfied by the environment, testifies to the paramount importance of this dimension. Within this dimension, such issues arise as the conservation and deployment of natural resources, the rational development and application of technology and the mutual interdependence of the relationship between man and nature.

Table 2, presents a breakdown of Maslow's categories of needs into their major components at the individual, social and environmental levels.
<table>
<thead>
<tr>
<th>Category of needs</th>
<th>Simplified needs: based on Maslow</th>
<th>Individual dimension</th>
<th>Socio-cultural dimension</th>
<th>Ecological dimension</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYSIOLOGICAL NEEDS</td>
<td>food \nwater \nair \nsex \nsafety</td>
<td>Physical development and psycho-motor abilities; Awareness and understanding of the nature of these needs and their place in one's growth and survival; of the means and methods of their satisfaction; of ideas and habits that are inimical to healthy physical development and how to counter them; Development of positive attitudes, relevant habits and skills for needs satisfaction.</td>
<td>Awareness, appreciation and acceptance of the needs of others; Understanding of the importance of collective and co-operative action for human needs satisfaction; Development of a sense of interdependence and mutual respect, regardless of role, status, sex or colour; Development of interpersonal social and economic skills abilities and attitudes relevant to the satisfaction of the needs of society.</td>
<td>Awareness and understanding that: - the environment is the source of needs satisfaction; - nature has limitations and a balance exists within the workings of nature; technology and human institutions are means of liaison between man and nature but they may become means of exploiting both man and nature; Development of positive attitudes, knowledge and skills for dealing with nature, benefiting from, and promoting human institutions and technology.</td>
</tr>
<tr>
<td>Category of needs</td>
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<td>Individual dimension</td>
<td>Socio-cultural dimension</td>
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<tr>
<td>SECURITY/SAFETY NEEDS</td>
<td>Freedom from fear, violence, threat and anxiety.</td>
<td>Development of a balanced personality; body, emotion, spirit and mind; Awareness of the natural and socio-economic milieu and the acquisition of relevant skills for creating conditions for security and reducing sources of fear and threat to the person, the society and humanity in general.</td>
<td>Awareness of the interrelatedness of peoples' safety and security; of the sources of security and insecurity in the society and how to promote the former and reduce the latter; Development of positive concern for the security of others based on human understanding, sensibility, empathy and respect for men's dignity.</td>
<td>Awareness of the natural environment and its sources related to security, of the human institutions and organizations concerning security; Ability and skills to protect nature against waste of resources and their misuse for anti-human enterprises; arms, luxury production and exploitation; Ability and attitudes for change, future adaptation and survival.</td>
</tr>
<tr>
<td>BELONGING AND LOVE NEEDS</td>
<td>Friendship, love, identity and a sense of rootedness.</td>
<td>Emotional and spiritual development and self-identity; Development of a sense of mature love, of identity, of a harmonious personality and expectation of reasonable happiness; Understanding of the drive for love and to belong, of the ways in which feeling and affection can be expressed, and identity can be realized.</td>
<td>Awareness of the social entities related to one's identity; Cultivation of feeling of family and community; of shared purpose; of the art of loving and belonging to the family, group, school, nation and the human community, with the goal of creating conditions for a better life for all. The identity that goes with culture and/or ideology; local, national and human dimensions.</td>
<td>Development of love and sense of identity with place; home, fatherland and nature in its global dimension.</td>
</tr>
<tr>
<td>Category of needs</td>
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<td>Individual dimension</td>
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<tr>
<td><strong>SELF-ESTEEM NEEDS</strong></td>
<td>Self-respect, competence, confidence, achievement, attention and recognition.</td>
<td>Development of self-respect, confidence, positive self-image, self-reliance. Abilities and skills for self-esteem; Awareness of the nature and conditions of self-esteem needs, and the conditions necessary for their satisfaction; emphasis on self-esteem based on human achievement and earned respect from others.</td>
<td>Awareness of the reciprocal nature of self-esteem; Respect for the self-esteem of others, appreciation of their roles, opinions and achievements; Discouragement of self-esteem based on prestige, arrogance and status that derives from possessions and power.</td>
<td>Pride in human achievements, in their relation to nature and in all their aspects aimed at the promotion of the quality of life and human survival; Awareness of the nature of arrogance, selfishness and sense of superiority and its affect on man and nature.</td>
</tr>
<tr>
<td><strong>SELF-ACTUALIZATION AND METANEEDS</strong></td>
<td>The need to develop innate talents and potential, knowing and understanding, truth, beauty, justice and goodness.</td>
<td>Development of man's high qualities; intellect, spirit, creativity and inventiveness, imagination and the ability to promote common human well-being; Development of love for truth, beauty, justice and work for their intrinsic worth; respect for individual uniqueness, variety and spontaneity.</td>
<td>Awareness of how human talents and capabilities vary but complement each other; Development of: -respect and appreciation of others' talents and achievements in any area of human concern; -ability to identify with those whose concern is human well-being; -ability and skills in human development at any level.</td>
<td>Awareness and appreciation of the source and stimulus which the physical and natural world provide for meeting these needs; of the human institutions which encourage such development; Ability and willingness to identify obstacles to self-actualization and human growth, to defend man's rights and nature's resources and to participate in creating a more peaceful and productive future.</td>
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Basic Human Needs and Education

The last chapter established the development of man, in terms of the quality of the individual life, as the ultimate aim of development planning. Planning for the improvement of the life conditions of large numbers of people, in both developing and industrialized countries, should start from a consideration of the needs of the people who will be living with the results of such development and the means of satisfaction of these needs. Needs and their satisfaction are therefore a central component of meaningful human development.

This trend in recent development policy has had its effect on education. Education as the development of the individual, is now coming to be seen as a major source of the improvement of collective social life, in its local, national and wider human dimensions. Since the satisfaction of human needs provides a synthesizing concept informing development planning, it follows that education, in order to be relevant to such development, must concern itself with the nature of human needs and what is required for their satisfaction.

Education for Basic Human Needs is centred on the development of the individual; its effectiveness, however, is contingent upon the interpretation of the role of the individual in society. If individuals learn to identify with others through recognizing that they share the same human needs that are universal of the human condition. The collective result should be a society predisposed to co-operative styles of administration and development. Thus, the clarification and analysis of needs, starting from the individual perspective, provides a base for the study of such global issues as Peace Education, Human Rights Education, Development Education, and Education for the Management of Technology and the Environment. Education for global understanding incorporates such
concepts as self-awareness, empathy, self-reliance and appreciation of
the interdependent nature of needs and the process of their satisfaction.

In terms of curriculum, the presentation of these multidimensional
concepts requires their breakdown and organization according to suitable
educational principles.

It is apparent from the last chapter also, that education is a complex
process which encompasses the assimilation of knowledge, the acquisition
and mastery of skills, and the development of certain attitudes that
facilitate the balance between the personal and the social dimensions of
needs that would result in individual and political harmony. These three
aspects of education may be applied to the breakdown of human needs into
educational content: thus learning needs are presented in Table 3 in the
three categories of knowledge, skills and attitudes.
<table>
<thead>
<tr>
<th>Category of Simplified Needs</th>
<th>Area of Knowledge</th>
<th>Area of Skills (psycho-motor) + intellectual and interpersonal skills</th>
<th>Area of Attitudes</th>
</tr>
</thead>
</table>
| FOOD, WATER, AIR, HEALTH, LEARNING AND SHELTER | Knowledge of:  
- the human body and its needs for food, water, air and protection from extreme temperature;  
- nutrition, health care and hygiene;  
- the resources of needs satisfaction: natural and human at the family and national levels;  
- the roles played by oneself and others, both as persons and in institutional relationships, at the family, community, national and international levels;  
- the modes of production and relevant technologies and techniques;  
- the ways of protecting and renewing resources and of new possibilities for the future; (ecology)  
- the dangers of lack or over satisfaction of needs to the person, the society and humanity  
- the natural balance between elements in the environment. | Literacy, numeracy and communication skills (computer and electronic literacy if relevant)  
Skills in food preparation and storage, water supply and purification, health care, child care, family raising and management;  
Skills in the use and maintenance of relevant technology, in the household, work and job;  
Skills for protecting nature and resources: soil, crops, wildlife and air;  
Basic administrative skills for managing personal, family, communal and co-operative enterprises;  
Vocational skills for earning a living;  
Intellectual skills: observing, analysing, criticising and judging; | Self-help, initiative and self-reliance;  
Identification with and respect for the needs of others;  
Positive attitudes to nutrition, hygiene, sanitation and scientific interpretations of phenomena;  
Respect for the roles of others:  
Co-operation over farming, resource sharing and a sense of interdependence at the family, community and international level;  
Respect for one’s own rights and the rights of others: a sense of collective responsibility and concern for others in the family, community and work;  
Respect for the natural environment and concern for its protection from exploitation, pollution and exhaustion. |
### TABLE 3 (cont.) BASIC HUMAN NEEDS AND EDUCATION

<table>
<thead>
<tr>
<th>Category of Simplified Needs</th>
<th>Area of Knowledge</th>
<th>Area of Skills (psycho-motor) + intellectual and interpersonal skills</th>
<th>Area of Attitudes</th>
</tr>
</thead>
<tbody>
<tr>
<td>SECURITY NEEDS</td>
<td>Knowledge of:</td>
<td>As well as the skills required by the last category of needs:</td>
<td>Confidence in oneself and in the world: inner security based on readiness and awareness rather than ignorance; dogmatism; Appreciation of the security of others and willingness to cooperate in creating the conditions for security; Open-mindedness to possible threatening aspects and changes, acceptance of other modes of human protection; Respect for nature and human dignity and willingness to defend them and to promote their well-being and survival.</td>
</tr>
<tr>
<td></td>
<td>-the immediate physical and socio-economic environments with a view to anticipating changes affecting rights and duties, social and human norms, employment prospects; -the sources of insecurity and threat to personal, national, human and natural survival in the present and in the future; -means of self, societal and human protection; institutions aimed at serving the individual and community and protecting nature.</td>
<td>Physical fitness and self-defence skills; skills relevant to employment, professional and emotional security; Skills in identifying and handling conflict: dialogue and logical discussion; Observation, prediction, problem-solving and solving, critical assessment for possible sources of danger in the human and natural dimensions. Skills of analytic rationality in the reception and recognition of the manipulation of language.</td>
<td></td>
</tr>
</tbody>
</table>
## TABLE 3 (cont.) BASIC HUMAN NEEDS AND EDUCATION

<table>
<thead>
<tr>
<th>Category of Simplified Needs</th>
<th>Area of Knowledge</th>
<th>Area of Skills (psycho-motor) + intellectual and interpersonal skills</th>
<th>Area of Attitudes</th>
</tr>
</thead>
<tbody>
<tr>
<td>BELONGING AND LOVE NEEDS</td>
<td>Knowledge of:</td>
<td>- Interactive skills for communication and self-expression;</td>
<td>- Respect and recognition of emotional expression and creative experience;</td>
</tr>
<tr>
<td></td>
<td>- the nature and importance of love and belonging for human development and survival;</td>
<td>- Skills of a social facilitative nature: family making, group organization;</td>
<td>- Acceptance and appreciation of the rights and humanity of others;</td>
</tr>
<tr>
<td></td>
<td>- the role of human relations based on love, understanding and human identity in promoting human civilisation;</td>
<td>- Skills for cultural experience; poetry, music, folklore and dance;</td>
<td>- Love of and respect for one's own culture and country, with empathy and respect for others;</td>
</tr>
<tr>
<td></td>
<td>- local, national and human cultures, norms and institutions with which the individual ought to identify;</td>
<td>- Analytical thinking, reflecting, evaluating and judging.</td>
<td>- Tolerance towards differences in identities and cultures, in interpretations and responses to various aspects of life based on the realization of human interdependence rather than on dogmatism;</td>
</tr>
<tr>
<td></td>
<td>- different interpretations and levels of love and identity;</td>
<td>- Skills for the conveyance of 'unconditional positive regard' and 'empathy' (Rogers).</td>
<td>- Optimistic outlook in interpreting experience and future expectations;</td>
</tr>
<tr>
<td></td>
<td>- the negative effects of the denial or neglect of love in the person's perception on the society and the race.</td>
<td></td>
<td>- Preference for human experiences, arts, works and behaviour that enhance life.</td>
</tr>
<tr>
<td>Category of Simplified Needs</td>
<td>Area of Knowledge</td>
<td>Area of Skills (psycho-motor) + intellectual and interpersonal skills</td>
<td>Area of Attitudes</td>
</tr>
<tr>
<td>------------------------------</td>
<td>-------------------</td>
<td>-------------------------------------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>SELF ESTEEM NEEDS</td>
<td>Knowledge of:</td>
<td>- social skills in direct communication</td>
<td>- legitimate self-confidence in personal ability to survive, participate and achieve;</td>
</tr>
<tr>
<td></td>
<td>-the socio-cultural and economic milieu and the roles of the individual;</td>
<td>participation in decision making, planning and management;</td>
<td>- sense of adequacy, autonomy and self-reliance;</td>
</tr>
<tr>
<td></td>
<td>-different alternatives for the gratification of the need for self-esteem, with a view to identifying and promoting positive means for the satisfaction of this need;</td>
<td>-vocational, professional and creative skills;</td>
<td>- sense of the oneness of mankind of man and nature, of responsibility to oneself, others and the world;</td>
</tr>
<tr>
<td></td>
<td>-the ideas of democracy, co-operation, collective responsibility and dominance;</td>
<td>-efficiency in a variety of social and human roles and in the expression of dissent from the prevailing norms;</td>
<td>- respect for others, the dignity of man and the self-esteem of others;</td>
</tr>
<tr>
<td></td>
<td>-one's rights, duties and roles at each level of human groupings;</td>
<td>-educational skills in finding out, learning from a variety of sources, comparison;</td>
<td>- pride in the socio-cultural values and the human norms;</td>
</tr>
<tr>
<td></td>
<td>-laws, rules and organizations in society and the human community, regarded as institutions created for the protection of the rights of all people equally;</td>
<td>-skills in how to adapt and deal with change.</td>
<td>- rejection of power, domination, exploitation and fanaticism;</td>
</tr>
<tr>
<td></td>
<td>-different ways in which the needs for self-esteem may be met.</td>
<td></td>
<td>- attitude of respect for habits of self-restriction and altruism.</td>
</tr>
<tr>
<td>Category of Simplified Needs</td>
<td>Area of Knowledge</td>
<td>Area of Skills (psycho-motor) + intellectual and interpersonal skills</td>
<td>Area of Attitudes</td>
</tr>
<tr>
<td>------------------------------</td>
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<td>---------------------------------------------------------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>SELF-ACTUALIZATION AND METANEEDS</td>
<td>Knowledge of: - the nature of human potential and one's own potential; - the drive for and values of self-fulfilment, healthy effects of self-actualization on the person, society and humanity; - the nature and sources of frustration; fear of freedom, oppression, alienation, dogmatism, over-affluence and lack of challenge; - relevant aspects of national and human cultures; the evolution of human civilization, human achievements, the record of the search for truth and the various techniques used in this search; - a base for moral and aesthetic appreciation; examples of works of genius that bear witness to human potential.</td>
<td>- skills for personal development; self-creative expression, artistic and literary skills; - skills in exploration, experimentation and organization; - reflection, speculation and analysis of data from different sources; - manipulation of concepts and abstractions and discrimination between different values and moral stances and identifying with the most universal; - work and study orientated skills.</td>
<td>- self, other and world awareness and a capacity for spiritual response; communion with nature and the totality of human experience; - appreciation and internalization of love, beauty, justice, truth and potential for happiness; - predilection towards the development of a concept of creative duty; - a drive to self-fulfilment and a capacity to seek enlightenment in the advancement of humanity; - courage and commitment to promote peace and universal understanding and to eliminate or reduce negative aspects of human cultures and social norms.</td>
</tr>
</tbody>
</table>
Footnotes

1. cf. see Ghai et al 1977; in particular Aziz Ghan, list of needs, p.80.

2. The concept of human needs in the Maslovian sense, began to appear in the development literature.
CHAPTER FOUR
The Concept of the Curriculum and Curriculum Planning

In the previous chapters we have noted that considerable changes have occurred in concepts and strategies of education, development and human needs, which have major implications for the content of education, i.e. the curriculum. In this chapter we will analyse the concept of the curriculum and the process of its planning which have undergone similar radical changes, and we will try to outline the basic elements and principles whereby the formal curriculum can be made relevant to new ideas.

The Concept of "Curriculum"

Originally, the term 'curriculum', taken from Latin, means the course or circuit on which a race is to be run, implying, for educational purposes, the path or track to be followed: the course of study to be undertaken. Traditionally, it meant specifically the content of the subject-matter, selected by the teacher, for transmission to the learner. Elizabeth Maccia, for example, saw the curriculum as "the presented instructional content". (Maccia, 1965). When the curriculum is so defined, it should not present insurmountable problems for its planners.

But the concept has been greatly expanded and reoriented. Hass sees the curriculum as "all of the experiences that individual learners have in a programme of education whose purpose it is to achieve broad goals and related objectives, which is planned in terms of a framework of theory and research or past and present professional practice". (Hass, 1960:4-5). In Saylor's view the curriculum is "the sum total of the school efforts to influence learning, whether in the classroom, on the playground or out of school". (Saylor, 1966:5). Douglas Barnes, who defines the curriculum as
"the shaping of understanding, beliefs and values which go under the aegis of a school...", argues that the curriculum should incorporate the objectives, values and experience of both the teacher and the learner. He states that "teachers' objectives and their choices of the content and methods, are important, but they do not by any means constitute the whole. The pupils too have objectives, beliefs and values which must influence the effective curriculum just as do the teacher's planned objectives," it also should include "communication from pupil to teacher as well as vice versa". (Barnes, 1976: 187-6). Many aspects which were traditionally considered part of the so-called "hidden curriculum"; (1) are becoming essential elements of the planned curriculum. The DES (1985:7) asserts that the curriculum "includes not only the formal programme of lessons, but also the 'informal' programme of the so-called extracurricular activities as well as those features which produce the school's 'ethos', such as the quality of relationships, the concern for equality of opportunity, the values exemplified in the way the school sets about its task and the way in which it is organized and managed. Teaching and learning styles strongly influence the curriculum and in practice they cannot be separated from it".

These definitions may all be incorporated into a more practical definition offered by Dave, who sees the curriculum as "all goal-directed activities that are generated by the school, whether they take place in the institution or outside it". (Hawes and Dave, 1962). Dave also identifies five basic components of the curriculum:
- Aims and objectives;
- The curriculum plan;
- Teaching methods and learning activities;
- Learning materials;
Curriculum Planning and Development

The concept of curriculum planning has also widened. Earlier interpretations focus on the process of selecting appropriate content and transmitting it to learners. A well-known model is the 'objectives model' suggested by Tyler (1949), modified and adapted by other curriculum theorists such as Wheeler (1966), Taba (1962) and others. More recently curriculum development has been the focus of great concern and in many cases it is equated with curriculum planning.

A wider view adopted by Skilbeck and by Hawes and Dave, is that based on 'situational analysis', or in Lawton's version, 'Cultural Analysis'. In this model, curriculum planning, as defined by Hawes, is "the whole process of choosing what children learn and translating that choice into action, from the first attempt to make a selection and justify it, to the final adoption of the new materials which have emerged within the school system". (Hawes and Dave, 1982:7). In such a perception of curriculum planning many concepts and processes such as curriculum development, implementation, dissemination, adoption, institutionalization and evaluation are integral components. What is more significant about this model is that the process is a dynamic one, each of whose components not only lead to what follows, but also feed back into the previous components.
From a rational point of view, the process originally works in a clockwise direction starting with the situational analysis, followed by aims and goals formulation and ending with monitoring and evaluation. Hawes,
1979; Hawes and Dave, 1982, and Skilbeck, 1976, emphasize the fact that all components are not only integral parts of one whole, but are also interconnected and each one relates to all other components at the same time. This view is very difficult to present in a diagram, yet it is important to add two elements to the original diagram. The first is that the wheel may move in an anti-clockwise direction when clarification or feedback is required; some points concerning the process of trial and development for example, may require the planner to check back on the previous component or even all previous components. The second is that the modified version of Hawes’ diagram used here, places the components of the curriculum itself as suggested by Dave, at the centre of the wheel to indicate and emphasize that those involved in the process of planning must at all steps keep in mind the whole concept of the curriculum and examine each component in relation to all the others. For example, at the stage of situational analysis, one must examine the existing curriculum, its aims and objectives, plan, teaching and learning strategies and activities, its materials and evaluation methods and techniques, a new or modified programme will be tried and developed covering all components. The same procedures must be followed at the stage of implementation and evaluation where every component of the curriculum is to be implemented and evaluated. Such a perspective is essential for any effective educational programme, but even more so for a curriculum that seeks to secure relevance in a rapidly changing society.

Such a comprehensive definition of the curriculum and the processes of its planning highlights the difficulties of the task and clearly indicates the necessity for the involvement of many people from various fields, as well as those for whom the curriculum is planned. The curriculum in fact, concerns people whose needs and values vary; it concerns societies whose
needs, resources and cultures vary. The curriculum, whatever interpretation is taken, may best be seen as "a selection from the culture" and this selection involves choices to be made, a choice made by people for other people. The people who make the choice vary in their goals and their perceptions of needs, in their degree of influence on the system and the level at which that influence may make itself felt; they vary in their awareness of the nature of education, in their knowledge and expertise in the field. Often these people include politicians, social and religious leaders, philosophers and sociologists, subject specialists and psychologists, educational policy-makers and curriculum planners and evaluators, school heads, inspectors and teachers; ideally the process involves parents and learners. These peoples' choices and influences are manifest in a variety of ways:  
- in determining and specifying the aims and objectives of the curriculum;  
- in the selection and organization of the content of the curriculum;  
- in the approaches and strategies of learning/teaching including the school organization, management and the timetable;  
- in the evaluation system: its standards, methods and techniques to be used;  
- through a number of educational agencies which, at the same time, reinforce or fail to reinforce each other.

The recipients of the selection from the culture, in this case the children for whom the curriculum is intended, also vary in their needs, aspirations and in their expectations of the school. They vary in their socio-economic and cultural backgrounds and their pre-school experience; in their abilities, aptitudes and modes of thinking or in intelligence. Even when we assume that children will be grouped according to age, they vary in the roles they will assume in the family and in society, in employment and
career chances and above all, they will live in a society whose problems and rate of change will be different from ours and probably even different from those now predicted for them.

This high level of variation in the influences on the curriculum implies that the curriculum process must be seen as a co-operative endeavour, requiring flexible and efficient machinery, that would allow for meaningful participation at all levels, and would provide a communication link between the central authority in the national system, and the local level.

Selection and Organization of the Curriculum
Lawton's cultural analysis model of how curriculum content is selected and organized, seems pertinent to the pluralistic framework outlined in the preceding section, incorporating as it does universal, socio-cultural and psychological dimensions. Some modification of the model is necessary here, however. A point about which Lawton appears to be uncertain, is the place of what he terms as "the psychological questions", in the curriculum process. The psychological questions to which he refers are those concerning child development and theories of learning. In his early model (Lawton, 1973), these are linked to stage three of the process, "the selection from culture", and in his later work (Lawton, 1983), they were linked to the fifth stage, "curriculum organization". From the point of view of needs, this psychological dimension implies more than the theories of child development and the learning theories: it also involves issues concerned with the needs of the individual and the nature of mind. Thus it seems necessary to place the psychological dimension before the selection from the culture which implies that it is a third determinant of the selection from the culture along with its role in organizing the
Figure 6:

Model for the Selection and Organization of the Curriculum

STAGE 1
Cultural Invariants

STAGE 2
Cultural Variables

STAGE 3
Psychological questions and theories: human needs; nature of intelligence; child development and learning theories.

STAGE 4
Selection from culture(s)

STAGE 5
Curriculum organized in stages, sequence etc.

STAGE 6
Practical issues: Staff, Teachers, School buildings, Equipment, Organization and 'Out of School' resources.

STAGE 7
Timetabling
In this chapter, I will attempt to outline the major aspects in each of these stages from a common human perspective; that is to say to identify the most universal elements and characteristics which may be applied to different settings. These variables will later be related to the Yemeni context which is the subject of the next part. Five elements will be outlined in the following sections:

- the nature of mind and intelligence;
- models of content selection;
- child development theories: cognitive and moral development;
- learning/instruction theories;
- applications to basic human needs.

**The Nature of Mind and the Curriculum**

Arguments for the development of the mind as a crucial function of education still top the list of curriculum priorities. However, traditional views of the mind and intelligence have changed. Traditionally, the mind was seen as a 'tabula rasa', an empty slate to be filled with knowledge, or as a tool. According to this interpretation, in Whitehead's words: "The mind is an instrument: you first sharpen it, and then use it; the acquisition of the power of solving a quadratic equation is part of the process of sharpening the mind". (Whitehead, 1932:9). He denounced this interpretation as, "one of the most fatal, erroneous and dangerous conceptions ever introduced into the theory of education", asserting that "the mind is never passive, it is a perpetual activity, delicate, receptive and responsive to stimulus". (Ibid). Current psychological theory supports the latter view of the mind and also provides invaluable knowledge of the nature and dimensions of the mind and human intelligence, which must be considered when dealing with the curriculum, in particular when the goal is the development of the whole person.
As was noted in the previous chapter, since human beings have a variety of needs and potentials and since they also vary in their capabilities, it has become acceptable to talk about different modes of thinking and perception, different faculties of the brain and different forms of intelligence.

Howard Gardner defines intelligence as the human intellectual competence which must entail (a) "a set of skills of problem-solving, enabling the individual to resolve genuine problems," and (b) the potential for finding or creating problems. (Gardner, 1983:60-61). He points out that many forms of intelligence can be identified. He argues that "there is persuasive evidence for the existence of several relatively autonomous human intellectual competences". (Ibid:6). Of these intellectual competences, he identifies six forms of intelligence:
- the linguistic;
- the musical;
- the logico mathematical;
- the spatial;
- the bodily kinesthetic;
- the personal.

Gardner raises two important points about intelligence:
(1) the recognition of, and the emphasis given to certain forms of intelligence vary "sometimes even radically, across human cultures", a point which also applies to the question of the aims and orientations of education, and of the most worthwhile knowledge in a culture;
(2) intelligence is often assumed to be intrinsically good: high intelligence is supposed to indicate a high level of moral development. Gardner argues that "there is no reason to think intelligence must
necessarily be put to good purpose. In fact, one can use one's logico
mathematical, linguistic, or personal intelligence for highly nefarious
purposes". (Gardner, 1983:68).

A relevant point is raised by Erich Fromm, who distinguishes between
intelligence and reason, defining the former as "the ability to manipulate
concepts for the purpose of achieving some practical ends...thought in the
service of biological survival"; whereas the latter is seen as a thorough
understanding which "tries to find out what is behind the surface, to
organize the kernel, the essence of the reality which surrounds us", and
whose function "is not to further physical as much as mental and spiritual
existence". (Fromm, 1956:169). People who lack reason are described as
alienated, they can manipulate reality but cannot penetrate it: "In
observing the quality of thinking in alienated man, it is striking to see
how his intelligence has developed and how his reason has deteriorated".
(Ibid:171). Many issues in the areas of development and human needs bear
witness to the high level of the development of human intelligence but
with little improvement in reason, wisdom and moral values, a case in
point is the application on a massive scale, of scientific and technological
progress for militaristic purposes, while the overwhelming welfare needs
in both developing and industrial countries seem to fall into greater
neglect.

In the light of the 'human needs' perspective, the above views of the human
mind and forms of intelligence, a relevant curriculum may be regarded as a
process aimed at developing the whole person and enabling him to meet his
needs and to participate in meeting the human dilemmas of the present
time. Such a process must provide for the development of all aspects of
intelligence and promote all intellectual faculties and modes of thinking.
It should promote competence adaptive as well as creative,\(^{(2)}\) in the manipulation of concepts and problem solving, as well as rational reasoning, creativity, wisdom, conscience and morality.

**The Content of the Curriculum: which aspects of the culture?**

In the area of the content of education there are many models for curriculum organization and selection from the culture with a variety of interpretations as to which aspects are most worthwhile. These interpretations are essentially based on certain assumptions about the nature of the human mind, the nature and structure of knowledge and of society. Different models emphasize various aspects of the curriculum, depending on which assumptions inform the creation of the model: for example, some models invest greater importance in abstract knowledge, some in practical consideration such as the acquisition of instrumental skills, and some in the psychological processes by which these are acquired.

In the light of our understanding of human needs and the nature of the human mind and intelligence, it seems essential to incorporate the relevant aspects of each model into the curriculum. Hirst's 'Forms of Knowledge' model is advocated by many English philosophers and educators such as Peters, Barrow, (Pring and Lawton to some extent), and is of great importance despite the many criticisms that have been levelled at it, provided it is not seen as a grand comprehensive model. Hirst's central concern is with the development of rationality as a central quality of a human being. Referring to the objectives of education, he states that "it would seem that these are above all, the development of a person and primarily developments of the characteristics of a rational mind".
(Hirst, 1974:22). He points out that the emphasis on intellectual development does not automatically imply neglect of emotional and physical development, but that the correct deployment of the latter is also a function of rationality.

Hirst argues that rational development occurs through the acquisition of knowledge which is itself a development of mind. He finds that human knowledge can logically be organized in "some seven or eight distinguishable cognitive structures": mathematics, physical sciences, knowledge of persons, literature and the fine arts, morality, religion, philosophy and probably history. (Hirst, 1974:25).

In Hirst's view, all children must be introduced to all forms of knowledge, for none of them would compensate for the loss of any other. For Hirst, as well as "the mastery of a group of concepts and of those aspects of validity associated with those concepts", the acquisition of knowledge also implies a mastery of more general criteria of reasoning common to all areas of knowledge. (Ibid:25).

Richard Peters also advocates education as the development of rationality. He identifies three aspects of educationally worthwhile activity:

(1) knowing facts and mastering a body of knowledge;

(2) understanding principles and theories which provide backing for (1), and being able to interpret experience in the light of these;

(3) familiarity with, and a degree of mastery over the procedures by means of which (1) and (2) have been acquired and can be assessed, criticised and developed. To be considered educated, one must have reached at least (2) and must have some familiarity with (3). (Peters, in Beeby, 1969:25).
Phenix takes a somewhat similar view in his description of "realms of meaning" (1964), which also emphasizes the central structures of ideas. In his later work, however, he places more emphasis on skill knowledge or "knowing how", and on personal development. "A person might be a knowledgeable fool, filled with information but unable to use it appropriately... the model person would be one who knows how to live well". (Phenix, 1982:301, his italics). In his view, "a person acts as a whole, with his entire being. Knowing how to live well is a manifestation of what one is, as integral reality comprised of body, sensations, emotions, intentions, habitual tendencies and thought. Skill knowledge is the kind most truly worthy of being called knowledge, and conceptual knowledge is derivative from it and answerable to it... the knowledge a person has in being able to live well is direct, immediate and certain. It is not knowledge-about, but knowledge-in-existence... an expression of reality in personal existence". (1982:305).

This perspective brings to mind Maslow's and Roger's positions with regard to knowledge. Maslow argues that "inductive knowledge can never bring certainty", and that in the real sense, "experiential knowledge can be certain and perhaps even is the only certainty". (Maslow, 1966:196). Rogers (1980:268), describes the kind of knowledge in which the person is not involved as "knowledge without feeling", an idea reminiscent of Michael Polanyi's concepts of "intellectual commitment" and "intellectual passion". (cf. Polanyi, 1958:64, 65 & 200-202). These views make more sense in terms of current ideas prevailing in the fields of psychology and the sociology of knowledge which hold that knowledge is in fact constructed. (3)

The need for orienting education towards people's needs and real-life
issues, which has now become a major focus of educational discourse, was also an important idea of Whitehead's. He saw education as "the acquisition of the art of the utilization of knowledge... relating it to that stream, compounded of senses, perceptions, feelings, hopes, desires and of mental activities adjusting thought to thought which forms our lives". (Whitehead, 1932:4). He calls for the eradication of the inertia and fatal disconnection of subjects that kill the vitality of the curriculum by relating it to life in all its manifestations, as life is the only subject-matter for education. (cf. Ibid:10). Whitehead also argued that "the antithesis between a technical and liberal education is fallacious. There can be no adequate technical education which is not liberal, and no liberal which is not technical". (Ibid:74).

The same view has been expressed more recently by the Faure Commission, with reference to present developments, when it stresses that education "should help achieve optimum mobility in employment and facilitate conversion from one profession to another... the fact remains that schools have a task of a general nature... they have to cultivate the mental faculties and stimulate a creative state of mind, develop some understanding of scientific principles and a degree of ability to apply them technically, help develop general skills and encourage positive attitudes towards work and the morale of work". (Faure et al, 1972:196-7).

In the English context we note that Lawton's list of the sub-systems of a culture includes such systems as social structure, economic system and technological system, and the DES list of 'areas of learning and experience' includes human and social, physical and technological areas. The inclusion of such issues in lists of educational priorities indicates that it has become necessary to make them explicit, whereas previous lists regarded
them as implicit in other areas of knowledge and curriculum studies. Many of the ideas underlying this attempt to validate what has up to now been regarded as 'informal' aspects of education or, indeed, of life, stress 'knowing' or 'learning' as a personal response to the world, an area that until recently, has been seriously neglected, if not rejected, in educational thought. One of the main reasons for this neglect is the difficulty of embodying these ideas in a curriculum appropriate to the needs of children at different stages.

The Common Core Curriculum

In any educational system, and with any curriculum model, there is a need to determine a core curriculum which covers those learning experiences which are known in the international literature as the 'basic learning needs'. These should be provided for all children in any society regardless of later vocation or professions. The HMI document 'Curriculum 11-16, 1977, sees the common curriculum "as a body of skills, concepts, attitudes and knowledge, to be pursued to a depth appropriate to [children's] ability". (Gordon, 1961: 46-7). The document proposed a list of areas of learning experience which includes the first eight items of the following list suggested by the DES (1965) in 'The Curriculum from 5 to 16'. It states that "the curriculum of all schools should involve pupils in each of the following areas of learning and experience:
- aesthetic and creative;
- human and social;
- linguistic and literary;
- mathematical;
- moral;
- physical;
- scientific;
- spiritual;

This list is compatible with the basic ideas held by Hirst, Phenix and Lawton, and it is also similar to curriculum plans in many societies. Nevertheless, the emphasis and orientation given to these areas, or to topics within these areas, may vary from one society to another, as these societies vary in their conception of what kind of educated person they want and as to what area of study is of most importance; mathematics and science, literary and religious culture, or the social and political domain. They also vary in their emphasis on the conceptual, the practical and the experiential aspects. We should opt for a combination of all of these. The development of rationality and the various domains of human intelligence and modes of thinking in the sense advocated by, among others, Peters, Hirst and Fromm, is currently more important than ever before, bearing in mind the accelerating rate of change and the virtual absence of those qualities required for survival in the society of the future. This however, should not mean that the practical aspects, the 'know how' or 'skill knowledge', which has been referred to by Phenix and Whitehead, is to be excluded or even considered as of secondary importance; rather it implies a more empirical approach to the interpretation of the concept of rationality.

The major trend in current thought in curriculum development is to make a link between the fallacious dichotomies of theoretical and practical, of intellectual and emotional, and objective and personal knowledge. Simmons argues that one should be concerned with the development of capabilities rather than subjects: "history, literature and physics can be conveyed in the process of developing certain capabilities". (Simmons,
Bruner wrote as early as 1971, that if he had the choice to suggest a curriculum project for the seventies, he would declare "something of a de-emphasis on matters that have to do with the structure of history, the structure of physics, the nature of mathematical consistency, and deal with it rather in the context of the problems that face us... we might put vocation and intention back into the process of education much more firmly than we had it there before". (Bruner, 1971:21).

The shift of emphasis from the subject per se to what it may contribute to human life has been most obvious in the area of science, which has recently been directed towards many real social and human problems. A Nigerian educator argues that the basic sciences become relevant, "only when they enable us to survive in the struggle for existence and contribute to our technological quest for food, housing, health, transport, communication, fuel, energy, trade, manufacture, computation, defence, management, rural development, entertainment and social welfare". (Unesco, 1983a:43).

The move towards linking the curriculum, in particular science, with real-life needs and problems has been a major trend in educational planning in the South-East Asian region, where science is seen as a preparation of children to deal with real problems, in particular those related to technology and its impact on the physical and socio-economic environment. (APEID, 1975:6-10). This trend was validated in later sources which point out that science education in the region is moving from factual learning towards processes and methodology of science and its link with the environment: "physical, natural, social and real life problems", such as nutrition, health and family planning, food production and conservation of
Two major themes for curriculum development today must be:

(1) Concern for development of the whole person, with making the school curriculum more relevant to such a holistic perspective and to real life needs and problems, at the personal, local, national and global levels, such as development and basic needs, ecological issues, peace, disarmament, human rights, cross-cultural understanding and socio-political awareness.

(2) An awareness of the quantity of knowledge and information in existence, which is beyond our capacity to cope with, and which is subject to a rapid pace of change that makes knowledge, skills and to some extent, certain values, prone to obsolescence.
Figure 7: Different Claims for the Components of Knowledge, Intelligence and Learning Needs.
(considerations for the scope of the curriculum).

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Linguistic</td>
<td>Communication</td>
<td>Literature and Fine Arts</td>
<td>Symbolics</td>
<td>Linguistic and Literary</td>
</tr>
<tr>
<td>Musical</td>
<td>Aesthetic</td>
<td>Sciences Mathematics</td>
<td>Aesthetics</td>
<td>Aesthetic and Creative</td>
</tr>
<tr>
<td>Logico-Mathematical</td>
<td>Rationality</td>
<td>Knowledge of People</td>
<td>Impirics</td>
<td>Mathematical and Scientific</td>
</tr>
<tr>
<td>Spatial</td>
<td>Social and Economic</td>
<td>Morals</td>
<td>Synoetics</td>
<td>Human and Social</td>
</tr>
<tr>
<td>Personal</td>
<td>Morality</td>
<td>Religion</td>
<td>Ethics</td>
<td>Moral</td>
</tr>
<tr>
<td>Bodily-Kinesthetic</td>
<td>Belief</td>
<td>Philosophy and History</td>
<td>Synoptics</td>
<td>Spiritual</td>
</tr>
<tr>
<td></td>
<td>Technology</td>
<td></td>
<td></td>
<td>Physical Technology</td>
</tr>
</tbody>
</table>
The Process of Human Development

The increasing awareness and understanding of the early stages of human development, some of which fall within the years of attendance at school, have brought to light issues of which educationalists were unaware, and can serve as important criteria for making the learning experience more relevant to the learners at their respective stages. Despite the growing concern for the holistic development of the individual as a complete human being whose personality consists of body, emotion, soul and intellect, most of the current literature is still concentrated on the cognitive dimension. One of the common features attributed to human development is that of a kind of ‘hierarchical progression’ through which all children pass in their cognitive, moral and personal development. (cf. Figure 8). Bearing in mind that cultural and individual differences should be recognized and identified, an understanding of the main trends in recent theories is crucial for organizing and sequencing the curriculum; for making it relevant to the approximate stage of development of the learners. In this section I will attempt briefly, to outline three major dimensions of human development which are indispensable for the curriculum planner and the classroom teacher, especially if relevance in the curriculum is regarded as a major issue: these are moral, personal and cognitive development.

Moral Development: Kohlberg

In the foregoing analysis of the concepts and strategies of development, education and basic human needs, it is clear that the development of morality and the inculcation of certain values are among the most essential components of the curriculum in any part of the world. We are concerned here with the question of the development of the qualities of personal morality; of how children can understand moral values and make
positive moral judgements.

Kohlberg may be the best authority for this purpose. He describes each society as having its package of moral values which he calls a 'bag of virtues', by which he means "a set of personality traits generally considered to be positive". One of Kohlberg's basic views is that every individual within a society has his own values, and that children of a given society or culture should learn "to be more aware of their own values and how they relate to their decisions; to make their values consistent and to order them in hierarchies for decisions; to be more aware of the divergencies between their value hierarchies and those of others and to learn to tolerate these divergencies". (Kohlberg, 1981:9-10).

These moral values and aspects of understanding and their application may be developed at certain levels of the child's moral development. From his studies of moral reasoning and moral judgement based on wide-ranging cross-cultural data, Kohlberg identifies the following stages of moral development: (Kohlberg, 1981:17-20).
Table 4: Stages of Moral Development

<table>
<thead>
<tr>
<th>Stage</th>
<th>Motive for moral behaviour</th>
<th>The value of human life is:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>to avoid punishment;</td>
<td>- based on social status or physical attributes of the possessor;</td>
</tr>
<tr>
<td>2</td>
<td>to obtain rewards and have favours returns;</td>
<td>- seen as instrumental to the satisfaction of the needs of its possessor or of other people;</td>
</tr>
<tr>
<td>3</td>
<td>to avoid disapproval and dislike by others;</td>
<td>- based on the empathy and affection of family members and others;</td>
</tr>
<tr>
<td>4</td>
<td>to avoid censure by legitimate authorities and the resultant guilt;</td>
<td>- conceived as sacred in terms of its place in a categorical moral or religious order of rights and duties;</td>
</tr>
<tr>
<td>5</td>
<td>to maintain the respect of the impartial spectator judging in terms of community welfare;</td>
<td>- valued in terms of its relation to community welfare and of being a universal human right;</td>
</tr>
<tr>
<td>6</td>
<td>to avoid self-condemnation;</td>
<td>- sacred: a universal human value for respect for the individual.</td>
</tr>
</tbody>
</table>

Development of an autonomous personality and such qualities as self-realization, self-reliance and self-confidence are major aspects of today's interpretations of development, with major implications for views of basic human needs and lifelong education. If these and other related qualities are to be developed, the ego of the individual should become a major concern of education. In his discussion of the development of personhood and the sense of being a person, Pring states that "the developing person is more than a collection of specific lines of development of intellect, of the ability to see others' point of view, of moral reasoning and so on. The 'self' which is the subject of all these does itself seem to be an object in need of development", in the absence of which, "there may be a lack of self-respect or self-esteem". (Pring, 1984:47).

With regard to personality development, Loevinger (1976) presents a framework for the maturing of the ego, based, like Kohlberg's theory of
moral growth, on the idea of stages of development. Figure 8 outlines possible correspondences between the theories of Kohlberg and Loevinger; Maslow's theory of the hierarchical nature of needs, and some of Bruner's and Piaget's ideas on stages of cognitive development.

Cognitive Development: Piaget and Bruner

Concern for cognitive development is still the most crucial factor in curriculum planning, one which has been influencing the field for many years. Cognitive development is not only important for the development of the intellectual manipulation of concepts and scientific reasoning, but also for the development of many other aspects such as morality and human relations. In this section I will outline the main points of Piaget's and Bruner's theories; the first for his influence on education and on many other aspects of the curriculum to which his ideas have been found particularly applicable; the second for the more direct application of his theories to education and curriculum planning, which is of great relevance to the kind of curriculum we are attempting to determine.

Piaget was essentially interested in epistemology and the structure of human thought and how it develops. For him the origin of thought is action performed physically by the individual; action then is internalized into the child's thought as, in Piaget's terms, 'schemata', upon which new schemata are built and then higher forms or operations, of thinking occur. From such a standpoint, knowledge is neither a priori nor an external objective reality; rather it is constructed through active interaction of the individual with his environment.
Figure 8: Correspondences between Needs and Human Development
(Considerations for the sequence of the curriculum).

<table>
<thead>
<tr>
<th>Categories of needs as motivation (Maslow)</th>
<th>Cognitive Development (Bruner and Piaget)</th>
<th>Moral Development (Kohlberg)</th>
<th>Ego Development (Levinger)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physiological Needs</td>
<td>Sensori-motor (Enactive mode)</td>
<td>Punishment</td>
<td>Pre-Social</td>
</tr>
<tr>
<td>Security Needs</td>
<td></td>
<td>Instrumental</td>
<td>Impulsive</td>
</tr>
<tr>
<td>Love and Belonging Needs</td>
<td>Pre-operational (Iconic mode)</td>
<td>Mutual Expectation</td>
<td>Self-Protective</td>
</tr>
<tr>
<td>Self-esteem Needs</td>
<td>Concrete thinking</td>
<td>Social Respect</td>
<td>Conformist</td>
</tr>
<tr>
<td>Self-actualization</td>
<td>Formal Operations (Symbolic mode)</td>
<td>Individual Rights</td>
<td>Conscientious</td>
</tr>
<tr>
<td>Metaneeds</td>
<td>Conscious reasoning (Wisdom)</td>
<td>Universal Justice</td>
<td>Autonomous</td>
</tr>
</tbody>
</table>
Mental growth is determined by maturation, and by physical and social experience; a process of equilibration determines the interaction between these factors. Intelligence itself is defined by Piaget as "a form of equilibration or forms of equilibrations towards which all cognitive functions lead". (Piaget, 1984:31).

In Piaget's view intellectual development is conceived of as an active, continuous process following a set of stages in a hierarchical order which characterizes all children's development. Yet children do not progress from one stage to another at the same speed or at the same age, therefore the ages that characterise each stage must be approximate.

Piaget's four stages of cognitive development, sensori-motor; pre-operational; concrete operations; formal operations, are now regarded in educational thought as a flexible framework for the study of children's development. When Piaget's ideas are applied to curriculum development, two points should be kept in mind:

(1) that children vary in their progress from stage to stage and that the attainment of a higher stage does not necessarily mean the abandonment of earlier stages. (cf. Young, J.Z. 1971:278, and Vygotsky, 1962:75).

(2) that different dimensions of conservation are acquired at different levels. Brainerd (1964:42-3) points out that the available data about conservation show that this phenomenon does not appear in most children's thinking until about the age of six, and the first concept to appear is that of number, followed by length, quantity and weight in that order. The concepts of density, volume, area and time, develop in most children at about 12-14 years.
Together with Piaget, the work of Jerome Bruner has had considerable impact on education, particularly in the field of curriculum planning. His views on the three modes of representation, enactive, iconic and symbolic, and his concept of the spiral curriculum based on the structures of knowledge, that is, on certain themes and principles which are central to any existing body of knowledge, provide guidelines for relevant curriculum choice. Both Piaget and Bruner regard 'learning by discovery' as an educational end, rather than as a means of engaging children's interest in a subject.

The Process of Learning and Instruction
Awareness and understanding of the process of learning and of the conditions within which effective learning takes place is essential for curriculum workers, in particular in centralized systems where the content and methods of learning and teaching are centrally prescribed for the classroom teacher. This stage is another crucial step in making the curriculum relevant: relevance to the culture, to the socio-economic needs and reality and to the stages of moral and cognitive development and styles may remain mere intention unless it is translated into learning experiences to be encountered at the classroom level.

Theories of learning and instruction, like those concerning other areas of the curriculum, vary according to the assumptions they hold about the nature of the child, of knowledge and of the purpose of the curriculum. In the light of present trends towards a holistic approach to learning, it is essential to realize that these assumptions are not necessarily dichotomous alternatives; rather they are complementary. Carl Rogers' ideas are concerned with the holistic approach to learning that is currently gaining validity in educational literature. Rogers, like
Maslow and other humanists, emphasizes the intrinsic motivation of the learner, who is assumed to be curious about the world, engaged in a continuous search for self-fulfilment; he is also concerned with the emotional aspects of the learner and the human context within which learning occurs, in which the teacher is a facilitator of learning rather than an authority. Rogers emphasizes these aspects of the learning process: the natural curiosity of the learner; relevance of the learning material to the learner's life; learning is facilitated by the reduction of the threat to the self-image of the learner presented by new matter to learn; the superiority of experience-based learning; participation by the learner in the organization of his own learning; self-initiated learning that involves the whole person; the importance of self-criticism and self-evaluation and of continuing openness to experience and to change. (cf. Rogers, 1969).

Bruner's views on the process of learning and instruction are connected with his theories of child development, of the nature of knowledge and of the curriculum. In Bruner's view, a theory of instruction should: specify experiences which will promote in the learner the predisposition to learn; specify how knowledge can be structured for easy assimilation by the learner; specify the most effective sequence for the body of knowledge to be learnt; specify the nature and pacing of rewards and punishments to be used in the learning process. One of Bruner's main preoccupations is with problem-solving, which he interprets as "the exploration of alternatives". (Bruner, 1966:43). He describes the teacher's role in the process of exploration as three-fold, involving functions of activation, maintenance and direction; he emphasizes the authority of the learner and the necessity for the latter to develop independence of judgement through self-correction. Another important concept in Bruner's thought is that of
'competence motivation': the idea that people are motivated by success, and that therefore all successes should be reinforced, rather than failures punished. Robert Gagne's work is mainly concerned with information processing: he perceives the brain of the learner as functioning like a computer in the receiving and coding of stimuli and the transfer of information into a storage system to be built upon or used when required. He breaks down the act of learning into the following categories:

### Table 5: Processes of Learning and the Influence of External Events

<table>
<thead>
<tr>
<th>Learning Phase</th>
<th>Process</th>
<th>Influencing External Events</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motivation</td>
<td>Expectancy</td>
<td>1. Communicating the goal to be achieved; or 2. Prior confirmation of expectancy through successful experience</td>
</tr>
<tr>
<td>Apprehending</td>
<td>Attention; Selective Perception</td>
<td>1. Change in stimulation to activate attention; 2. Prior perceptual learning, or 3. Added differential cues for perception</td>
</tr>
<tr>
<td>Acquisition;</td>
<td>Coding; Storage Entry</td>
<td>Suggested schemes for coding</td>
</tr>
<tr>
<td>Retention</td>
<td>Storage</td>
<td>Not known</td>
</tr>
<tr>
<td>Recall</td>
<td>Retrieval</td>
<td>1. Suggested schemes for retrieval; 2. Cues for retrieval</td>
</tr>
<tr>
<td>Generalization</td>
<td>Transfer</td>
<td>Variety of contexts for retrieval cueing</td>
</tr>
<tr>
<td>Performance</td>
<td>Responding</td>
<td>Instances of the performance (&quot;examples&quot;)</td>
</tr>
<tr>
<td>Feedback</td>
<td>Reinforcement</td>
<td>Informational feedback providing verification or comparison with a standard</td>
</tr>
</tbody>
</table>

(Gagne, 1975:45).

Gagne classifies the outcomes of learning as falling into five domains: motor skills, verbal information, intellectual skills, cognitive strategies and attitudes. These domains are in practice interlocking and any one of them cannot be dealt within isolation, for example, a motor skill cannot be
acquired without some reference to intellectual skills and/or attitudes. However, it is important for curriculum planners and teachers to grasp the differences between the domains, so that verbal information will not be taken for intellectual skills, or both for cognitive strategies, as often happens. Verbal information and intellectual skills and to some extent motor skills, have long been regarded as the essential material of the curriculum and they are generally seen as easily assessed. Recent thought in education, however, gives increasing emphasis to the development of cognitive strategies and to attitude formation and change.

Ausubel and the Concept of Meaningful Learning

Ausubel's theory of learning seems to combine those of Bruner and Gagne, with apparent emphasis on the cognitive elements. Ausubel, in his description of meaningful learning, points out that any meaningful learning depends on two basic factors: the cognitive structure of the learner, the quantity, clarity and organization of his present knowledge, including facts, concepts, propositions, theories and raw perceptual data and the nature of the material to be learned, i.e. the logical meaningfulness; the material must be substantive and nonarbitrary. Therefore meaningful learning requires three central conditions:

(1) The material itself must be relatable to some hypothetical cognitive structure in a nonarbitrary and substantive manner;

(2) The learner must possess relevant ideas to which to relate the material;

(3) The learner must possess the intent to relate these ideas to cognitive structure in a nonarbitrary and substantive fashion. (Ausubel and Robinson, 1969:53).

Ausubel asserts that meaningful learning and rote-learning are not mutually exclusive, implying that rote-learning in the sense of
memorization of certain elements which are relevant, may be meaningful.
He makes it clear that it is the presence of all three conditions that makes
the learning meaningful and creates meaning, and that the absence of any
of them results in rote learning, i.e. meaningless learning. Ausubel
identifies eight essential aspects of the organizational and presentation
of the instructional material which affect the level of its logical
meaningfulness. These aspects are:

- adequacy of definition and dictionary terms must be precise, consistent
  and unambiguous; defined prior to use; expressed in simple, less
  technical language that is yet compatible with conveying precise
  meaning;
- use of concrete empirical props and relevant analogies;
- stimulation of an active, critical, reflective and analytic approach on
  the part of the learner: to formulate ideas in his own language, from
  his own experience, using his own structures;
- explicit conformity with the distinctive logic and philosophy of each
discipline and the strategies of learning how to learn the particular
subject matter;
- selection and organization of the subject-matter content around
  principles that have the widest general explanatory and integrative
  power;
- systematic sequential organization of material with careful attention
to gradation of difficulty level;
- consistency with the principles of progressive differentiation and
  integrative reconciliation;
- the use of appropriate organizers - relevant and inclusive introductory
  material whose principal function is to bridge the gap between what
  the learner already knows and what he needs to know before he can
  successfully learn the task at hand. (Ausubel, in Entwistle and
Conclusions and Applications

Although the usual function of the theories of child development and of the process of learning is to provide criteria for the structure and sequence of the content of the curriculum and how it may be presented, they also provide criteria for the scope of the content and its relevance. If the curriculum is to be relevant to the development of the whole person it should provide for all his needs, for his mental and personal faculties, rational thought as well as imagination and intuitive thinking, for feeling and creative activities; it should engage his senses: physical sensation, observing, doing, talking, listening, tasting and imagining.

As far as moral, personal and cognitive development are concerned, the first task of the curriculum planner and also of the classroom teacher is to be aware of and be able to identify the "approximate" stage of child development (Kohlberg and Piaget), or the mode of thinking (Bruner) which predominates at the level of education concerned. The second task is to determine the personal qualities, values, ideas and concepts to be acquired when the child is ready (Piaget), or to be presented in the relevant mode of representation (Bruner). According to the stages model certain personality traits, moral values and concepts develop at different stages in a systematic progressive sequence; therefore they have to be introduced at the relevant stage in that sequence, although according to Bruner, they may be introduced at any level of development as long as they are presented in the most relevant mode. As we have noted above, these theories and their critics agree on the sequence of development through stages, but without rigid adherence to any system of stages; they also allow for cultural and individual differences. This requires that at the
early stages of schooling the curriculum must be more relevant to immediate phenomena and needs, and must be based on real activities and situations in which the child is physically and emotionally engaged, for many qualities, values, concepts and modes of conduct are acquired through action, involvement in situations, through playing with other children, handling tools and materials. Children are curious and eager to find out things by themselves, so they must be provided with materials and situations that encourage them to discover ideas or concepts by themselves; concepts must be presented through the enactive mode. Many children are also of a romantic and imaginative disposition, so the material can be presented in the form of tales and stories, plays and activities.

As the child grows and moves up the ladder of developmental stages, relevant traits, moral values and behaviour, concepts and ideas should be introduced, and higher modes of representation may be utilized. The material should widen the child's outlook and mental abilities, it should introduce him to a wider range of social and moral issues concerning the community and other people, and challenge his curiosity and logical reasoning; yet it should include concrete evidence, learning aids and real situations, from which the child can find evidence and support for his reasoning. Children should be encouraged to raise questions and to find answers to them from the available material or through their engagement in experiments and direct observation of natural phenomena and human situations; maps, charts, pictures, diagrams and new films, are a very important part of the content at this level. They should also be encouraged and taught to work both independently and co-operatively.

At a later stage (around 11 plus) the sequence of curriculum material may
move towards the introduction of higher levels of personality traits and
morality, and towards challenging assumptions, towards abstract thinking
and symbolic reasoning and identification with wider human issues and
problems. The material should present children with social and human
problems and intellectual questions and encourage them to pose problems,
to make their own hypotheses and test them, mainly through logical
thinking and moral reasoning, and the use of the symbolic mode of
representation. The promotion of the ability of learning to learn and the
use of enquiry and discovery methods of learning are crucial aspects of the
relevant curriculum.

From a practical point of view, with respect to cultural and individual
differences, since the curriculum is always designed for large numbers of
children, a class, school or nation, who vary not only in ability and
aptitudes, but also in terms of socio-economic and cultural background and
in the facilities available to them in school, the material as well as
learning/teaching strategies must allow for fast developers as well as
average and slow developers, for the formal as well as the intuitive
thinkers; it should be made flexible so that the talented can find
stimulation and the slower learners or those with different talents can
find what is relevant to them. A variety of materials and methods
throughout the process of development is essential for relevance to
practical, vocational and other concerns connected with real life, as well
as creative and 'body kinesthetic' concerns. Even when the material is
provided for those assumed to have reached the stage of formal operations
and the symbolic manipulation of ideas and concepts, it should involve
activities, concrete examples and situations for the development of motor
skills, for facilitating the acquisition of certain concepts and certain
practical competences, and for allowing intuition and creativity to
Organization and Presentation of Courses

Having identified the stage of child development and the many aspects that may influence his growth and learning, it is also necessary to have some understanding of what the learner already knows: past experience including moral values and codes of conduct (Bruner), or what Ausubel calls the 'cognitive structure'. Then the curriculum planner and the teacher, with help from others, should command the organization of the structure of the discipline and of the problems to be solved, which must be put in a logical, meaningful sequence whereby each learning stage relies on earlier ideas and leads to new and wider understanding. To avoid waste of time and effort, to counter obsolescence, and to create an authentic and long-lasting learning experience, the material should be selected from the most powerful, generative elements: from basic principles and methods of learning which have a wider application, rather than mere facts and information. (Bruner and Ausubel).

When the topic is to be introduced, children have to be motivated for learning, for not all children can be interested in the same topic and many may have their natural curiosity engaged in other issues. Motivation may be raised through material and learning experiences relevant to children's needs (Rogers); Maslow's hierarchy of human needs may serve as a focus of motivation; conveying objectives to children (Gagne) and providing information about the results of achievement (Bruner, Ausubel) are other aspects of motivation. The learning experience therefore must be relevant to the perceived needs of the learner as well as to the objectives of the teacher which should be conveyed to him, because without the 'intent' of the learner to relate new ideas and grasp them, learning will be
meaningless, even if the material is logically and cognitively relevant (Ausubel), and even if it is also considered relevant by those in charge of the curriculum.

When dealing with conceptual knowledge the basic principles and concepts should be selected. This is true even when building topics around certain life problems and human issues such as health and nutrition, development, human survival, peace and co-operation, where the material relevant to these issues may be drawn from certain disciplines. These concepts and related ideas can be determined by using Ausubel’s eight conditions. The teaching, in particular where well-trained and well-prepared teachers are lacking, should follow Gagne’s phases of the learning act, bearing in mind that the ideas and values presented to children should not be threatening to the learner’s ego and values (Rogers), either because they are too difficult, or because they are perceived as a direct attack on his values and sense of identity.

In the process of learning, learners must be allowed to participate in decision-making concerned with their own learning; to learn by themselves and to evaluate their own results (Rogers and Bruner); the teacher, whose role should be to facilitate the process of learning, should encourage self-learning, self-evaluation and judgement, for the development of a strong self-concept, self-reliance and independence.

According to Gagne’s domains of learning the curriculum should consider each domain and provide the learning experience and the activities relevant to its development; for example, practical activities, repetition, meaningful context, and a sufficient number of human models and involvement in human issues for attitude development. This has to be
linked to the adoption of relevant methods and techniques for the assessment of each domain within a built-in and comprehensive overall strategy of assessment and curriculum evaluation.

A number of approaches to educational evaluation exist: some quantitative in technique, some descriptive and interpretive. In Dave's model the system of evaluation chosen, is built into the curriculum plan: it operates at each stage of the plan, and should be directed at evaluating the processes, as well as short and long-term outcomes. Ideally, the evaluation method chosen, should be based on what is familiar to the users of the system (cf. Holt, 1981:20), and on the nature of the educational programme to be evaluated. Furthermore, it should be capable of development into a system of self-evaluation.

Needs and the Curriculum

The last chapter established the three categories of learning needs as the knowledge, skills and attitudes required for the development of competence in the satisfaction of needs. The consideration of theories of education in the preceding sections of this chapter, indicates the abstract and the concrete dimensions of the needs for which the curriculum aims to provide. The abstract dimension implies those aspects of needs which are a function of the development of mind, such as rationality and attitude formation; the concrete dimension implies those aspects which involve the management of the external world.

The content of a curriculum relevant to needs, therefore, must contain elements that relate to both dimensions of needs; the content, moreover, must be organized according to the dictates of what is currently known about psychological development; and also as much as is compatible with
the application of the knowledge of human needs, according to the
structures of the body of knowledge to be learnt.
In terms of the curriculum, the educational content may be organized and
presented on three levels: the curriculum plan or syllabus; the methods of
teaching and the learning activities by which the syllabus is to be taught
and learnt; and the level of attitude formation, by which is meant these
informal aspects of education - indeed, of all human interaction - which
are not usually clarified or brought into the realm of the rational.

The content of a curriculum relevant to human needs, based on the relevant
learning needs given in Table 3, might be organized in a three-fold
learning/teaching programme, as outlined in Table 6.
Table 6: Human Needs and the 5/6 to 15/16 Curriculum

<table>
<thead>
<tr>
<th>NEEDS</th>
<th>CURRICULUM PLAN</th>
<th>METHODS AND ACTIVITIES</th>
<th>ATTITUDE FORMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Needs:</td>
<td>Science: physiology, basic biology and chemistry;</td>
<td>Experiments of life cycle, on the effects of food, water and air on animals and plants;</td>
<td>Formation of the right attitudes towards the healthy use and distribution of resources and the rights of others and of nature through direct involvement in real-life problems; drama, stories, group games, religious and social norms; Engaging school in community and vice versa: learning from parents, craftsmen, farmers and likewise, teaching them through children. Critical use of media to encourage formation of values in children about themselves, others in the community and other parts of the world; Development of a questioning mind: why use X, what effect it may have, what are the alternatives.</td>
</tr>
<tr>
<td>Food, Water, Air, Health and Hygiene, Shelter, Family and Community.</td>
<td>Health Care: nutrition, preventive and curative methods; Illnesses resulting from poor food, unclean environment and from too much food; The Natural Environment: nature as the source of needs satisfaction; food, water, air, energy and minerals; Interdependence of living things: the physical world and man; Social Studies: people and institutions engaged in the process of needs satisfaction; Development: resources and distribution, alternative resources esp. in energy; Agricultural science: growth, soil, irrigation, technology, and protection of soil, crops, animals and relevant technology; Conservation of nature and its balance; Home economics and family organization and management.</td>
<td>Observation of the immediate environment to see how nature has a balance which if disrupted, may affect human life; School farm, class garden, work on the farm; Practice cooking, food preparation and conservation, hygiene, first aid; Visits: food processing, farms, local markets; Study of shop bought goods, imports; Where from, cost &amp; methods of transport and people engaged in it; Managing the school farm, shop and engagement in group and family or community projects;</td>
<td></td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>NEEDS</th>
<th>CURRICULUM PLAN</th>
<th>METHODS AND ACTIVITIES</th>
<th>ATTITUDE FORMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Security</td>
<td>Health care; physical protection eg. shelter; Vocational studies for earning a living; Science: understanding of natural and physical phenomena and their processes and effects: basic social and natural sciences; Social and environmental studies: the local physical and social environments, their features, changes and their consequences, structure of family, groups, wider social structures and institutions, public services, laws and regulations, rights and duties; ways of handling conflict, personal or political, peace and disarmament and international agencies: Studies in history, religion, sociology and geography; basic technical knowledge of the nature and use of nuclear power; Awareness of the phenomenon of power and its deployment on the interpersonal, local, national and international levels.</td>
<td>P.E.; A variety of creative coping activities; Visits, exploring the environment e.g. orienteering, camping, observation of weather, animal and human behaviour exercises in production; Family, friends and community-based projects; Visits to court hearing and local dispute settles, the work of the police and army, talks with representatives of local interest groups, religious and co-operative. Films and videos on national and international issues: discussion of personal meanings of such issues; use of public media.</td>
<td>Stories, drama, role play, religious education, folklore, music, games aimed at developing a liberal, rational outlook, confidence and curiosity, motivation to explore and welcome life: aimed at using self-harmony and self-confidence to promote social harmony and at developing a preference for the peaceful resolution of conflict between man and man, man and nature. An outlook for the future, acceptance and ability to adapt to change.</td>
</tr>
<tr>
<td>NEEDS</td>
<td>CURRICULUM PLAN</td>
<td>METHODS AND ACTIVITIES</td>
<td>ATTITUDE FORMATION</td>
</tr>
<tr>
<td>-------</td>
<td>----------------</td>
<td>------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>Love and Belonging</td>
<td>Programme of pastoral studies aimed at the development of positive and harmonious social relations, on the interpersonal, communal and human levels; Study of the humanities, literature, history, geography and religion: indigenous and comparative; Study of aesthetic and expressive arts aimed at the development of imagination and emotional maturity; Study of comparative cultures with a view to the perception of universals, of meanings that indicate the basic similarity of human preoccupations; Study of how relations between man, God and nature, be based on love and reverence rather than fear and power; the struggle for peace, understanding and co-operation, as the ultimate objective of the human condition.</td>
<td>Classroom organization based on co-operative values; Explicit value-systems that emphasize love, sharing and rewarded responsibility; Integrating work and topics chosen to emphasize the above: drama, role-playing, drawing, painting, model-building; Group work on the clarification of interpersonal issues, the handling of conflict, reinforcing valid behaviour, social skills and techniques involved in developing a harmonious relationship with others: family and society; Group and individual activities aimed at contributing to the improvement of the human condition, in the family, the community and wider dimensions; Sports, organized as a means of combining the co-operative with the competitive aspects of life. Participation in family, communal and national events – celebrations and feasts.</td>
<td>Explicit pastoral guidance on specific topics; Individual and group counselling organized around specific topics and as a response to difficulties experienced by individuals; Follow-up, as far as possible, of studies and activities in the individual student's life and personality; Particular emphasis on empathy; Emphasis throughout on the creation of a supportive and facilitative atmosphere. Review exercises: what happened in the course of a particular activity.</td>
</tr>
<tr>
<td>NEEDS</td>
<td>CURRICULUM PLAN</td>
<td>METHODS AND ACTIVITIES</td>
<td>ATTITUDE FORMATION</td>
</tr>
<tr>
<td>------------</td>
<td>---------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Self-Esteem</td>
<td>Religious and cultural studies as a source of identity of the individual in society; Roles imposed by religion and culture: knowledge of the role of deployment of power in perceptions of self and others Vocational, scientific and professional competencies: Learning to learn; Research and organization of information; Knowledge of the contribution to society of the various vocations and skills; Leisure skills.</td>
<td>Role-play, games, simulations based on changing roles; on the search for identity beyond roles. Projects done in groups with provision for contributions from all members. Application of learning skills: progressive acquisition of work-skills. A sense of mastery over the environment from the application of scientific principles in experiments. Games, hobbies, interests: motivation stimulated by opportunities within the curriculum for following-up own interests.</td>
<td>Follow-up of activities: review and clarification of attitudes to students' perceptions of themselves and of others. [Provision for] observation and counselling of individual student's attitudes and changes of attitude to self and to the world. Particular attention to feedback from &quot;victims&quot; of power role-play. Participation in group/team games for those with suitable skills and inclination.</td>
</tr>
</tbody>
</table>

Emphasis throughout, on competence and the development of confidence.
<table>
<thead>
<tr>
<th>NEEDS</th>
<th>CURRICULUM PLAN</th>
<th>METHODS AND ACTIVITIES</th>
<th>ATTITUDE FORMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-Actualization and MetaNeeds</td>
<td>Study of literature as a source of greater understanding of life; Study of works of art, music and dance, produced in the culture and those of other cultures as a source of cross-cultural values. All the above studied as a means of understanding expression and communication. Introduction to psychology as the study of people - their minds and behaviour and as a non-threatening means of self-understanding. Introduction to cross-cultural communication - how do people in other cultures behave to each other, to strangers? how do they express themselves?</td>
<td>Self-expression through the arts: painting, drawing, modelling and graphics; through music: singing and instrumental; dance: traditional and modern; All of these to be practiced as a means of expression and communication. Communications work: Drama, role-play and simulation, as a means of improving communication skills.</td>
<td>Group exercises in the arts, to study and develop skills for the facilitation of the self-expression of others: to develop confidence and conviction as to the importance of self-expression as an activity and as to the rights and duties concerned with the area of creativity, both one's own and those of others. Discussion groups, activity based groups concerned with moral issues, based on stories, scenes from literature, or with greater experience, from real life - social and political issues; issues arising from the personal experience of the students. Activities engaged in for no instrumental purpose, merely to express feelings of well-being or joy; to practice keeping in touch with one's reactions; to preserve spontaneity.</td>
</tr>
</tbody>
</table>
Footnotes

1. Michael F. Petty, in an article on The Hidden Curriculum (The Forum of Education, vol.XXXVII, no.3, Sept 1978) reports that the term "Hidden Curriculum", was first used in 1966: "Jackson and others have argued that the environment the school creates to facilitate academic learning may well have as great an impact on the student as the content of academic courses." The components of this environment comprise a major theme in modern educational discourse.

2. Dave, discussing the goals of lifelong education, points out the need for "the fulfilment of adaptive and creative functions of the individual." (Dave, 1976:36). Maslow also refers to competences necessary for the satisfaction of basic needs, and also for creativity as a need in itself. (Maslow, 1970).

3. According to Piaget's psychology, knowledge is constructed from the interaction of the mind and the environment. Michael Young (1971) and Basil Bernstein (1971) have written about the social construction and the subsequent hierarchical evaluation of knowledge. Paulo Freire also emphasizes the participative nature of knowledge and the implications for the deployment of power of a static concept of knowledge. (Freire, 1985).
CHAPTER FIVE

The Socio-Economic Context: Reality and Aspirations

Yemen: Land and Population

Yemen Arab Republic is situated in the south-western corner of the Arabian Peninsula, and covers at present an area of about 200,000 square kilometers. The country is bordered by the People’s Democratic Republic of Yemen (PDRY) in the south, Saudi Arabia in the north, the great Arabian Desert - the Empty Quarter - in the east, where the borders of these three states have not as yet been defined, and the Red Sea to the west. (See Map).

Yemen receives a reasonable amount of monsoon rainfall and has the best climate to be found in Arabia. Inland, Yemen is a mountainous region; there are three distinct geographical divisions which split the country into three parallel strips running from the extreme south right into Hijaz in the north: the mountainous midland region, the western coastal plain and the eastern area which is mainly desert.

The location of the country has given it an important strategic position: in the past, Yemen dominated the trade routes between the East and the West, and at present, its importance is even greater as it still shares control of the Bab Al-Mandab, the strait linking the Red Sea to the Indian Ocean. The country also derives importance from its position as a neighbour and supplier of workers to the world oil suppliers in the region. The variety in physical structure and climate has allowed for a variety of economic activities and agricultural products. The same factors have their own influence on the shaping of the national character and on the direction and pace of socio-economic development in the country.
In the first general census carried out in 1975, the population was estimated at 6.5 million, and in 1981 another census estimated the population at 8.5 million.

Table 7: The Yemeni population in 1975 and 1981 censuses

<table>
<thead>
<tr>
<th>Category</th>
<th>1975</th>
<th>1981</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Recorded population within the country</td>
<td>4 540 230</td>
<td>6 439 363</td>
</tr>
<tr>
<td>(on the day of census)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Population of uncovered areas</td>
<td>294 500</td>
<td></td>
</tr>
<tr>
<td>3. Population not enumerated for</td>
<td>423 800</td>
<td>705 978</td>
</tr>
<tr>
<td>technical and social reasons</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Number of migrants outside the country</td>
<td>1 234 000</td>
<td>1 394 778</td>
</tr>
<tr>
<td>Total</td>
<td>6 492 530</td>
<td>8 540 119</td>
</tr>
</tbody>
</table>

One major characteristic of the population is that about half the total inhabitants belong to the 0-14 year age group. According to a demographic study in 1981, 21.7 per cent of the population falls in 0-4 year age group. (CPO, 1983:6). The annual growth rate is 2.9% and according to World Bank estimates at this rate of growth, the Yemeni population would stabilize at 40 million by the year 2040. (World Bank Development Report, 1985: Table 19).

The bulk of the population live in rural areas, in small scattered settlements mainly in the central midland regions. The urban population accounts for 11.4 per cent of the population actually enumerated in 1975; however, if only town dwellers are counted as urban, they account for 7.8 per cent of the population; if the total population is taken to include the migrants, the majority of whom come from rural areas, only about 5.9 per cent qualify as urban. (CPO, 1983). It should be noted, however, that
migration from rural areas to the towns is rapidly increasing.

Culture and Religion
Yemen seems to have enjoyed considerable prosperity and prestige in the pre-Islamic era, which, together with the influence of Islam, has contributed a great deal to the Yemeni cultural identity. Five main kingdoms have been recorded so far in Yemeni history, which dominated South Arabia between 1300 BC and 533 AD. In her description of the incense route through Arabia, Freya Stark (1935:5) wrote: “This was the great frankincense road whose faint remembrance still gives to South Arabia the name of Happy; whose existence prepared and made possible the later exploits of Islam. Along these roads the Arabian empires rose and fell - Me'ainean, Sabean, Katabonian, Hadhramaut and Himyar all became imperial and aristocratic, the builders of tall cities, they colonized Somaliland and Ethiopia and made themselves masters of African and Arabian forests.”

As well as the fame won through trade between the East and the West, Yemen also developed an advanced agricultural system for which it was praised in the Koran, the Muslim Holy Book. Stookey (1978:11) rightly observes that “it was the Sabeans who developed the engineering and administrative skills necessary to construct and maintain the renowned ‘Arim Dam’ at Marib.” These civilizations, however, underwent a long process of decline in the first half of the first millennium AD, and by the advent of Islam their power and prosperity had waned. Many reasons have been put forward to account for that decline, one of which was the collapse of the ‘Arim Dam’, the engineering miracle.

With the rise of Islam Yemenis embraced the Islamic faith of their own
free choice, and participated in most of the Arab-Islamic conquests. At present, apart from a small Jewish community and some newly settled Westerners, all Yemenis are Muslims belonging to the two main divisions of Islam: Sunni, who follow the Shafi school of Islamic faith, and Shiite, who in Yemen follow the Zaidi doctrine, and a small minority of Ismailis. Islam, however, is the religion of the nation, the source of its philosophy, laws and principles of moral conduct.

In terms of ethnic origin and language, Yemenis are Arab and claim to be the purest ethnic group of the Arab nation. All Yemenis speak one language, Arabic, which is the language of the Koran, the national and official medium of communication and of Arabic literature.

Despite this apparently high level of homogeneity, there are many cultural aspects of a local nature which should be taken into consideration. Also many new cultural divisions are appearing, such as the rural culture and the urban culture, and those influences resulting from intensive exposure to foreign influences either directly through migration and foreign personnel working in the country, or through the public and private media. Such influences and new trends will be pointed out when they arise throughout the following sections. However, before embarking on the analysis of the present socio-economic system and its development, it may be helpful to have a brief historical survey of the pre-revolutionary period.

**Socio-political and economic conditions between 1900-62**

At the turn of this century, local politics were regulated by tribal rule; at the international level two foreign powers contended for control of the region: the southern part had been under British occupation since 1838 and
the area now known as Yemen Arab Republic and Assir, were under Turkish rule.

When World War I came to an end, the Turks handed their languishing administration over to Imam Yahya (1918-48), a religious leader of the Zaidi sect who had been collaborating with them in return for political recognition as a potential national leader. The Imam was later succeeded by his son Ahmed (1948-62), then by the latter’s son whose reign did not last more than a few days. When the Imam assumed authority, he entered into a political struggle and war with the British and the Idrisi, and later with the Saudis to whom Assir was lost in 1934, and also with internal forces, consisting of those Yemenis who opposed his leadership. Within the Zaidi community on whose support the Imam’s power depended, he was no more than a central negotiator, and therefore played off the opposing tribes and factions in order to consolidate his own position, a strategy which his son also appears to have practised with consummate skill.

The Imam, however, managed to bring what was left of the country under one rule, and a modern independent state emerged in the region. Influenced by their narrow tribal outlook, and by continual struggle with foreign and internal forces, the Imams were suspicious of everyone, both outsiders and natives, and tended to concentrate power in their own hands, eliminating all opposition.

In the course of the Imamate rule, Yemen was virtually isolated from the outside world. While the world was undergoing a vast burgeoning of international interaction, conquest, domination and dependency, the Imamate was successful in keeping out the virtues as well as the vices of modern civilization. This isolation became of real significance only in the
post World War II period when life began to change rapidly and nations began to learn from each other. However, despite this policy of isolationism, wherever a relationship with a foreign government promised advantage for the Imam's personal hold on the country, he would not hesitate to establish it.\(^{(2)}\)

On the socio-economic side, there is no evidence that the Turks had left any trace of a physical, administrative or economic infrastructure, apart from the system of tax levy. During the Imamate rule, the country remained poor and dependent on subsistence agriculture and local crafts.

Deprived and poor as it was, the country was self-reliant in most of its basic living requirements until about the 1940's, except for some goods which began to flow in from Aden. During the reign of the second Imam, migration to Aden increased, agricultural and social conditions deteriorated and the country began to be drawn into the downward spiral of neglect of the agricultural sector combined with increasing reliance on imported goods that characterises the Yemen's economy today. Few statistics exist for the decade prior to the revolution.

In 1961, the GNP of the country was $300 million; exports were valued at $8.2 million, 49% of which was earned for coffee and 19% for cotton; imports totalled $17 million, 29% of which was food, 7% tobacco and 17% textiles. The deficit in the trade balance was made up by remittances from Yemeni migrants, mainly living in Aden, and by aid from the USSR and Egypt. (Halliday, 1974:90).

In the area of social services, apart from some limited educational provision which will be described in the next chapter, very little appears
to have been provided for the people, and whenever any such service did exist it was confined to the major towns. A well presented, though maybe exaggerated, picture of the situation is given by Halliday: "In 1962 there were only fifteen doctors - all foreigners. There were 600 hospital beds in the whole country. Over 50 per cent of the population had some kind of venereal disease; over 60 per cent were suffering from trachoma. No money at all was spent on education by the state and less than 5 per cent of the children attended the traditional Koranic schools... there were no modern schools, no paved roads, no railways, no factories. The average per capita income was $70 a year. There was nothing romantic about it..."(Ibid:92).

Socio-economic development between 1962-82
The first decade of the revolution turned into a phase of protracted destruction, as the country was dragged into a civil war between the newly established republican state and the royalists who were supported by Saudi Arabia and many Western countries. The conflict between major internal forces went on virtually until the early 1970's. During this period, almost all the available resources were devoted to political and military conflict. In addition to the burdens inherited from the past and from this period of conflict, Yemen was also a victim of the economic and natural disasters that so adversely affected most Third World nations in the seventies, being particularly vulnerable to the effects of the increase in oil prices and its concommitants.

Since the early 1970's, basic development institutions have been built up and successive governments have been making determined efforts to get the economy moving. There has been some continuity in the political situation since 1974, but real and lasting transformation does not as yet
Despite the fact that there has been some attempt to form a steady and continuous policy for development planning during the last ten years, development strategies and plans are vague. Birks and Sinclair (1960a:246) vividly describes the situation: "Yemen's development is, in some respects paradoxical. It is a poor country, yet receives more aid than she can spend. Her population is large, yet labour shortages compromise her development plans. Her visible trade balance is in the red, while the current account is in surplus." In fact it appears that the very sources of present development initiatives pose a threat to their success and continuity. These paradoxes and discrepancies may be understood through the analysis of efforts to plan development in the last decade.

Since 1969, the government has adopted a 'Free Market' policy, called for foreign aid, and encouraged investment in development projects from both national and foreign investors in the private sector. Since then Yemen has been receiving a substantial amount of foreign aid and loans from a variety of sources: international agencies, Eastern and Western countries, and traditional as well as radical Arab states. At present, Yemen maintains good relations with all these countries and has trade and cultural exchanges with many of the nations in the world. Yemen's technological supplies, especially arms, come from both eastern and western nations, which often makes the country's international relations very sensitive. The acceptance of aid also poses the danger of economic and social dependency.

The first attempts at planning the economy occurred in 1972, when appearances to have taken place.
arrangements were made to organize a systematic budgetary system, and for the drawing up of an overall national development plan. The Central Budgetary Office, and the Central Planning Organization (CPO) were established; in 1973 the first budget was drawn up and the CPO prepared the first national development plan: the Three Year Development Programme, 1973-75/76. This was followed by the First Five Year Plan, 1976-81, and then by the Second Five Year Plan, 1982-86. The experience of the first two plans indicates that foreign inputs have been considerable, that lack of data, organization and indigenous manpower and expertise have been major problems, and that while migrant remittances have provided a major economic boost, migration creates serious problems for development planners.

The First Five Year Plan, 1976-81, was more comprehensive and technically better prepared and planned for than the Three Year Programme. Its main aims may be summarized in the following:
- To move towards the threshold of self-reliance;
- To develop an advanced agricultural and industrial economy;
- To increase domestic participation in the generation of capital;
- To promote the quality of life for all citizens;
- To break down the isolation between different parts of the country and create a unified national market;
- To build a modern state;
- To pursue efforts towards self-sufficiency in foodstuff.

The plan called for a total investment of 18,337 million YR, of which only 63% was actually spent by the end of the plan; most of the major sectors failed to achieve their targets as the following table shows.
Table 6: Projected and achieved expenditure in the 1976-81 Plan

<table>
<thead>
<tr>
<th>Sector</th>
<th>Planned (in m YR)</th>
<th>%</th>
<th>Achieved (in m YR)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>2 644</td>
<td>14.4</td>
<td>866</td>
<td>7.5</td>
</tr>
<tr>
<td>Mining &amp; Manufacturing</td>
<td>2 250</td>
<td>12.3</td>
<td>1 040</td>
<td>9.0</td>
</tr>
<tr>
<td>Electricity &amp; Water</td>
<td>1 433</td>
<td>7.8</td>
<td>863</td>
<td>7.5</td>
</tr>
<tr>
<td>Construction</td>
<td>4 580</td>
<td>25.0</td>
<td>851</td>
<td>7.4</td>
</tr>
<tr>
<td>Transport &amp; Communications</td>
<td>2 461</td>
<td>13.4</td>
<td>3 054</td>
<td>26.4</td>
</tr>
<tr>
<td>Housing</td>
<td>1 720</td>
<td>9.4</td>
<td>3 284</td>
<td>28.4</td>
</tr>
<tr>
<td>Other Sectors</td>
<td>3 249</td>
<td>17.7</td>
<td>1 600</td>
<td>13.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>18 337</strong></td>
<td><strong>100.0</strong></td>
<td><strong>11 558</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

(Source: Second Five Year Plan, 1982, p.21-22)

73.7% of the planned investment was expected to come from the public, mixed and co-operative sectors; and 26.3% from the private sector. But during the implementation of the plan the private sector exceeded its target, whereas other sectors failed to achieve their targets: 53.5% of the plan was achieved by the private sector and only 46.5% came from others. (cf. CPO, 1982:22). As for the financial sources, migrant remittances formed the bulk of the capital with some support from foreign loans. Capital formation totalled at 20,190 million YR, during the plan; 88.4% was covered by migrant remittances and investments from Yemenis abroad; 3.2% from foreign capital transfer and 8.4% from foreign loans. (Ibid:24).

Apart from the fact that the plan was too ambitious, its failure to achieve its targets may be attributed mainly to human factors, rather than to lack of capital: shortage of technical and administrative personnel. (CPO, 1982:19). Al-Iriani, in his analysis of the plan, identifies the following shortcomings:

- the general policy about the management of the national economy and the problem of the redistribution of income was not clear;
- there was no clear vision of the implementation and evaluation of the
plan and financial sources were not all ensured in advance;
- lack of concern for systematic economic and financial policies and for
  the development of a viable taxation policy;
- lack of awareness and concern about the problem of administration
  which is the greatest obstacle to development in Yemen, a problem
  which is essentially a question of human development. (Al-Iriani,
  1982:133).

Shortage of manpower appears to have become a major problem in the
country affecting all sectors, but the need for personnel at lower levels is
urgent. For example, the 1976-81 plan required 5,161 persons with high
professional qualifications of whom 3,601 (69.6%) were made locally
available by the end of the plan; it required 9,519 persons with
middle-level training such as technicians, electricians, nurses and
primary school teachers, of whom 3,834 (40.3%) were made locally
available; and at the lowest level there was a need for 4,332 secondary
school graduates: technical, agricultural, commercial and general, of whom
only 875 (20.2%) became available. (Ibid:134). To meet such needs for
manpower the country turns to foreign labour markets, where for example
5,459 people, mostly technicians, obtained residential and work permits in

The composition of the economic base and its development.
The gross domestic product has grown from 3,777 million YR in 1972/3 to
15,821 million YR in 1982 with considerable change in the share of each
sector.
Table 9: The Composition of the GDP and the changes that have occurred between 1972 and 1982

<table>
<thead>
<tr>
<th>Sector</th>
<th>1972/73 (m. YR)</th>
<th>%</th>
<th>1979/80 (m. YR)</th>
<th>%</th>
<th>1982 (m. YR)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture, Forestry and Fishing</td>
<td>1757</td>
<td>46.5</td>
<td>2008</td>
<td>31.8</td>
<td>3854</td>
<td>24.4</td>
</tr>
<tr>
<td>Mining and Quarrying</td>
<td>29</td>
<td>0.7</td>
<td>78</td>
<td>1.2</td>
<td>163</td>
<td>1.0</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>188</td>
<td>4.9</td>
<td>416</td>
<td>6.6</td>
<td>987</td>
<td>6.2</td>
</tr>
<tr>
<td>Electricity, Gas &amp; Water</td>
<td>10</td>
<td>0.2</td>
<td>37</td>
<td>0.6</td>
<td>138</td>
<td>0.9</td>
</tr>
<tr>
<td>Construction</td>
<td>190</td>
<td>5.0</td>
<td>480</td>
<td>7.6</td>
<td>1167</td>
<td>7.4</td>
</tr>
<tr>
<td>Trade</td>
<td>570</td>
<td>15.1</td>
<td>1063</td>
<td>16.8</td>
<td>2140</td>
<td>13.5</td>
</tr>
<tr>
<td>Restaurants &amp; Hotels</td>
<td>51</td>
<td>1.3</td>
<td>81</td>
<td>1.3</td>
<td>163</td>
<td>1.0</td>
</tr>
<tr>
<td>Transport &amp; Communications</td>
<td>124</td>
<td>3.3</td>
<td>211</td>
<td>3.3</td>
<td>596</td>
<td>3.8</td>
</tr>
<tr>
<td>Financial Institutions</td>
<td>60</td>
<td>1.6</td>
<td>421</td>
<td>6.7</td>
<td>598</td>
<td>3.8</td>
</tr>
<tr>
<td>Estate &amp; Business Services</td>
<td>188</td>
<td>4.9</td>
<td>241</td>
<td>3.8</td>
<td>676</td>
<td>4.3</td>
</tr>
<tr>
<td>Social Services</td>
<td>35</td>
<td>0.9</td>
<td>61</td>
<td>1.0</td>
<td>154</td>
<td>0.9</td>
</tr>
<tr>
<td>Producers of Government</td>
<td>372</td>
<td>9.8</td>
<td>760</td>
<td>12.0</td>
<td>3577</td>
<td>22.6</td>
</tr>
<tr>
<td>Services</td>
<td>10</td>
<td>0.2</td>
<td>23</td>
<td>0.4</td>
<td>27</td>
<td>0.2</td>
</tr>
<tr>
<td>Producers of Private &amp; Non-Profit Services</td>
<td>252</td>
<td>6.6</td>
<td>843</td>
<td>13.3</td>
<td>1832</td>
<td>11.6</td>
</tr>
<tr>
<td>Total</td>
<td>3,777</td>
<td>100</td>
<td>6,318</td>
<td>100</td>
<td>15,821</td>
<td>100</td>
</tr>
</tbody>
</table>


It is notable that the increase in the value of the GDP has been matched by an increase in population at a higher rate, as well as by the rise in market prices resulting from inflation, which was estimated at 26.1 per cent per annum during the 1976-81 plan. (CPO,1962:19).

As the value of the domestic product decreases, government revenues suffer and eventually the latter come to depend on trade taxes. As the revenues are limited, government expenditure faces a deficit which has to be covered from other sources, often from foreign grants. In 1982, government revenues totalled 3,692.1 million YR, but expenditure reached 5,160.7 million YR. In the last two years there seems to have been some attempt to curb both government and private expenditure as some of the resources are beginning to dry up. (Sage, 1965:87). The following table
shows changes in government spending priorities between 1976 and 1982.

Table 10: Government current expenditure by sector

<table>
<thead>
<tr>
<th>Sector</th>
<th>1976/7 (m. YR)</th>
<th>%</th>
<th>1982 (m. YR)</th>
<th>1982 (m. YR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Administration</td>
<td>141.8</td>
<td>16.8</td>
<td>983.9</td>
<td>19.0</td>
</tr>
<tr>
<td>Security</td>
<td>93.5</td>
<td>11.1</td>
<td>541.5</td>
<td>10.5</td>
</tr>
<tr>
<td>Defence</td>
<td>430.5</td>
<td>51.2</td>
<td>2165.5</td>
<td>41.8</td>
</tr>
<tr>
<td>Education</td>
<td>63.3</td>
<td>7.5</td>
<td>1030.1</td>
<td>19.9</td>
</tr>
<tr>
<td>Health</td>
<td>29.6</td>
<td>3.6</td>
<td>162.0</td>
<td>3.1</td>
</tr>
<tr>
<td>Social Services</td>
<td>17.0</td>
<td>2.0</td>
<td>115.7</td>
<td>2.2</td>
</tr>
<tr>
<td>Economic Services</td>
<td>54.7</td>
<td>6.5</td>
<td>162.0</td>
<td>3.1</td>
</tr>
<tr>
<td>Others (Public debit int.)</td>
<td>10.6</td>
<td>1.3</td>
<td>21.0</td>
<td>0.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>841.0</strong></td>
<td><strong>100</strong></td>
<td><strong>5 180.7</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Compiled from Statistical Yearbook, 1983 & 1984, CPO

Main Sectors of the Yemeni Economy

1) Agriculture

Agriculture provided the base on which the ancient Yemeni civilizations were erected. Indeed, as a result of her fame for agricultural products Yemen became known to the Romans as ‘Arabia Felix’ and in Arab Muslim literature as the ‘Happy Land’. Today about 75% of the country’s population is still engaged in agriculture and this sector still has the potential to make Yemen self-reliant once more, if its role in national development is handled properly. According to Cohen (1981:1040), “Aside from its labour, Yemen’s major resource is its agricultural potential”. The national development policy has committed itself to the achievement of self-sufficiency in food, to be followed by the establishment of an agricultural products industry based on locally grown raw materials, all aimed at the final goal of a self-reliant Yemeni economy.

The share of agriculture in the GDP has been steadily falling, partly
because the contributions of other sectors are growing, and partly because agricultural production has actually fallen or become stagnant in many commodities, with resulting drastic cuts in the output of some basics, such as grain, coffee and cotton; for example, from 1972-1982, sorghum production dropped from 667 thousand tonnes to 580.5; barley from 109 to 53; coffee from 3.5 to 3.3 and cotton from 15 to 6.7. (CPU, 1984:84-91).

As production declines, the population is increasing, with consequent effects on the demand for food; the result has been a major increase in the amount of imported foodstuff. In 1980, the value of imports reached 8,454.3 million YR (1878.7 m$), of which food, animals and beverages accounted for 2,382.1 million YR. (CPU, 1983:166).

The Arab Economist (1981:24), commenting on the food problem in Yemen says: “Ironically, much of the food that is imported, most notably wheat and other cereals, could be grown in North Yemen itself, if only agriculture in the country could be given a boost.” The nature of the required boost is not specified. An outline of the major features and problems of this sector may help in identifying some possible directions for development.

The country has about 3.5 million hectares of arable land - 18% of the total area of the country, in addition to 1.6 million hectares of forest and pasture land. At present, only about one million hectares are under cultivation. (CPO, 1982:37). Thus a horizontal expansion is possible whereby more land can be cultivated to increase agricultural production. Yet a major boost could also come from a form of development aimed at increasing the productivity of the land, by using fertilizers, new methods and relevant technology. If this sector is to recover, new methods of farming and irrigation are essential; new crops and means of increasing
the yield must be introduced; and measures for land reform and/or restructuring relations between land owners and tenants should be considered.

Qat cultivation is one of the major problems facing agricultural development in the direction of self-sufficiency in food and raw material for industry. Qat is a shrub whose leaves are chewed for their stimulating properties; its production has begun to rival coffee and other crops since the Imamate era; at present, it seems not only to have won the battle against coffee, but to have taken over the agricultural sector of the Yemeni economy. The increase in qat production has had serious economic repercussions. The demand for it in the Yemeni market is growing as peoples' purchasing power increases, especially as a result of the recent improvement in wages at home and abroad.

Labour shortages in the agricultural sector also pose a major problem. According to the official census of 1975, 73.6% of the labour force were engaged in agriculture. In terms of percentages, agricultural labour declined from 75.4% in 1976 to 69.1% in 1981. (CPO, 1982:63). In reality, the majority of people in Yemen, in particular rural inhabitants, even children, are engaged in agriculture in one way or another, even if is not the main occupation.

Women now represent the major labour force in rural areas, but they have little knowledge and experience of many tasks which have traditionally been men's work. The inevitable result is the destruction of farms and a fall in production, and in the long run more dependence on foreign markets. As Birks and Sinclair put it, "the role of women has expanded to cover the tasks relinquished by men on their departure as migrant labourers, but this
has not compensated sufficiently for reduced inputs. As a consequence, the standard of husbandry has fallen and the infrastructure is deteriorating". (Birks and Sinclair, 1980). Since the infrastructure referred to is that of terraced mountain farms, it will be virtually impossible to rebuild it, once it is gone.

Finally, agriculture is time and energy consuming. Traditionally, all members of the household, male and female, adults and children, spent almost all their energy and time on the land and in activities related to farming. People depended completely on it as the only way of life. Nowadays, new alternatives for income are available, and the return for the input to agriculture is far less than the requirements of modern life. What can be earned in a month in terms of wages may equal a years income on the farm. Moreover, agricultural activity does not in most cases bestow high social status on those who engage in it; social status is connected with the ownership of land rather than with working on it. This point might explain why so many people, most of whom were cashcroppers, so readily abandoned agriculture in favour of migration, both abroad and to urban centres, where many of them have become petty traders, shopkeepers or artisans.

2) The Industrial Sector
This sector is still in the early stages of development. It consists mainly of small enterprises, dealing in construction materials such as cement, bricks and tiles, and stones and marble quarries. Salt extraction, textiles, food and beverages are the major industries; the latter involves the production of biscuits and confectionary, soft drinks, mineral water and ice-cream.
A new kind of small industrial enterprise is growing at the moment, where many returning migrants find employment using such skills as welding, carpentry, furniture-making, most of these small businesses are still run on a family basis. It is apparent from the above that there is as yet no major industrial plant or industry of economic significance; the first signs of oil found in Yemen hold promise of great change in the country's economy. In the area of food production, domestic industry, in particular the production of biscuits, sweets and beverages, cannot meet the demand; imported items still dominate the local market, even in remote villages.

3) Trade and Commercial Sectors

As the domestic economy is declining and peoples' demand is growing, the country has become more and more dependent on imported goods, with great demand for consumer goods. As we have noted earlier, demand was already increasing and the gap between exports and imports had begun to appear before the revolution, but it seems that the gap has increased, as this table shows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Imports (1 000 YR)</th>
<th>Exports (1 000 YR)</th>
<th>Trade Balance (1 000 YR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1971/72</td>
<td>204 428</td>
<td>24 269</td>
<td>- 180 159</td>
</tr>
<tr>
<td>1975/76</td>
<td>1 706 894</td>
<td>50 063</td>
<td>- 1 656 831</td>
</tr>
<tr>
<td>1979</td>
<td>6 806 541</td>
<td>61 681</td>
<td>- 6 744 860</td>
</tr>
<tr>
<td>1981</td>
<td>7 340 358</td>
<td>216 590</td>
<td>- 7 123 768</td>
</tr>
<tr>
<td>1982</td>
<td>6 939 792</td>
<td>113 172</td>
<td>- 6 826 620</td>
</tr>
</tbody>
</table>


This trend in consumption is a problem for the government which has begun to take measures to curb it in the course of implementing the Second Five Year Plan, 1982-86; however there is as yet no indication of
success. Harvey (1985:102) points out that “By the end of May 1963, Yemen’s total reserves had tumbled by about $1 billion in almost two years to reach $431 million. That would cover about 2.6 months’ imports of foreign goods at 1982 levels”. The ‘conspicuous consumerism’ about which Harvey is writing, has encouraged smuggling, which amounts to about 20-25 per cent of the volume of imports, according to the Minister for Economic Affairs. (Ibid:105). Other observers have written about this outbreak of consumerism in Yemen: James Buxton (1976) states that “the consumer boom in the YAR matches that of a surplus-revenue oil state”. An impressionistic account of consumerism in the Yemen is given by Raban (1979:203): “Yemen’s fertility and human ingenuity looked as if they had run riot long ago and created an Arabia which was not so much Felix as Demens.”

In conclusion, the process of development, in particular, economic growth, may be described as ‘maldevelopment’, since the changes that are taking place may generate more underdevelopment than otherwise. This problem of high consumption is a world-wide phenomenon, but it is more harmful in areas such as Yemen; apart from the fact that the obsession with consumption and property is dehumanizing and may lead humanity into severer crises, Yemen has as yet, no oil or other products to exchange for consumer goods. The expensive tastes developing there have to be paid for by migrants’ earnings and foreign aid, neither of which is a sound source on which to base long-term economic planning.

4) The Migration Dilemma: Drain or Reservoir?
In the Yemeni censuses of 1975 and 1981, the number of migrants was estimated at about 1.2 and 1.4 million respectively. A study of the Yemeni labour force carried out by Birks and associates suggests that the
number of Yemeni workers abroad is 290,100, which represents 20.3 percent of the total Yemeni labour force; 96.6% of these migrant workers are in Saudi Arabia. (Birks and Sinclair, 1980: 134).

Meyer (1965) suggests that about half a million Yemenis were working in Saudi Arabia alone in 1980. Also the number of Yemeni workers and migrants in other Arab and African countries, in Europe and USA are not included. The significance of the number of migrants becomes more crucial when one realizes that these people are essentially drawn from the economically active population, mainly males, most of whom come from agricultural rural areas. (cf. Al-Khamari, 1962: 288-92).

Consequences of Migration

In Yemen, migration poses a serious dilemma. Economically, it has immediate positive effects both on the national economy and the quality of life of the individual household, yet in the long run, it poses a serious threat to the economy. Migration is a major factor in undermining the economic structure, in particular agriculture, and in driving the country towards a state of greater dependency and underdevelopment than its previous condition. In other respects, migration appears to have become part and parcel of the Yemeni culture, but it has many psychological, socio-political and cultural effects which may hinder the process of development and lead to more social and political conflict and alienation. Migration has been sustaining the country’s economy even before the revolution, though migrants’ inputs are neither socially nor officially given due respect and recognition. Using migrants’ repatriated earnings, the government covers its deficit in the balance of payments; some years this even show a surplus. One may also be justified in arguing that a reasonable level of national income distribution has been made possible by
migrants' earning, and that migration has released many rural inhabitants from their endemic poverty and emancipated them from inherited forms of feudal oppression and exploitation, especially the landless groups and small landowners. A realistic look into the process of development and economic growth would clearly show that many of the improvements that have been brought about, especially in the rural areas, may be attributed to migration rather than to development policies.

However, the phenomenon has serious long-term disadvantages. Yemeni migrants are generally unskilled, rural inhabitants whose work abroad is in non-agricultural activities, while the Yemeni economy is mainly based on agriculture. The majority take the most menial jobs abroad which they would not usually take at home for socio-cultural reasons; others, especially those who work in Western countries, work in industries which do not exist in Yemen. Those who learn some relevant skills, in particular in the construction sector, or become successful in the world of trade and business, often settle abroad, or at best in the urban centres in the home country.

The money earned by the migrants, plus the money coming from foreign aid, has inspired Yemen to go on a spree in the international market, to acquire hardware, machinery and sophisticated technology in communication, business, medical services and in other sectors. This free-spending attitude is not suitable for the Yemeni society; indeed, it is dangerous even in rich industrial societies when people are valued in terms of wealth or position rather than for their human qualities. It is disastrous in a country whose own resources, even with careful handling, may no longer be sufficient to meet basic living requirements, after the migration party is over.
Swanson (1979) and Al-Kasir (1985) identify many aspects of the deterioration of the agricultural sector combined with the rise of wages, demands for more food and services and the increase in the population. Swanson says: "As fields are abandoned, production drops because of accumulated neglect, and as the population increases steadily, Yemen will reach a point where emigration is no longer a choice, but a necessity. When this point is reached her underdevelopment and economic dependency will be complete." (Swanson, 1979:93).

It may be argued that Yemen has already reached this point, and is now in the process of becoming culturally and economically dependent. In the light of present conditions migration has already become a necessity. The Second Five Year Plan, in which the shortage of manpower is regarded as the major hindrance to development, calls for the improvement of migrants' abilities and skills and an awareness of the importance of saving and investment, which indicates an attitude of acceptance of the inevitability of migration in the socio-economic pattern of the country. (cf. CP0,1982:39).

The release of about 30 per cent of the country's active workforce not only handicaps the implementation of national development plans, but also hinders the process of socio-political and economic transformation. Migration on this scale relieves the policy-makers from strong social pressure, which often hastens change. This leaves the country reliant on foreign personnel, thus rendering it more vulnerable to unfavourable foreign influence.

As for the psychological and socio-cultural effects of migration, cultural alienation is a possible result of living away from home and the local
environment, in particular for young people, who are the majority. This affects also adult migrants and students, who acquire new experience and form new outlooks on life which, if they are not well prepared, may become a source of shock rather than of enrichment of their own experience. When migrants return home, they often find it difficult to readjust to the home environment, which leads to psychological problems or socio-cultural conflict, and adds to the existing social problems. Absence of husbands and fathers for years not only leaves a heavy burden on women and children who have to cope with life, but also affects all parties psychologically and emotionally.

Despite these apparent negative effects, it seems that migration will go on and the dependency of the economy on migrants' remittances will continue for some years to come. There is no sign of a social, economic development policy at the moment, which would encourage the belief that the situation will change in the foreseeable future; even if the oil discovered in the country amounts to anything substantial, it will take years to exploit it.

However, even assuming that the inevitable continuation of workers' migration were desirable for the country, it is not guaranteed as a permanent source of income for individuals and of hard currency for the state. (cf. The Middle East, Feb.1983:34).

It may be assumed that the receiving countries will complete their massive construction and development programmes and turn to technological and industrial development based on more sophisticated skills and techniques. They may also develop their own workforce that would satisfy their market demand. The pace of change in all aspects of
life is growing in favour of sophisticated technology, in which the chance for Yemeni workers will be limited, since, if it does provide opportunities, it will require new skills and knowledge to avail of them.

In conclusion then, migration is a source of numerous economic, social and personal problems, but at the same time it is a resource for financial support for development and potentially for cultural enrichment if it is carefully and intelligently utilized and directed. The choice to stop or increase migration is not entirely a political one; it also concerns other motivations that cause people to migrate. To attempt to avoid some of the present and predicted problems resulting from migration and to make the best use of the phenomenon, considerable political and administrative measures may be required, together with social and educational efforts to prepare Yemeni migrants for the new experiences and work they will encounter, and for any culture-shock that may attach to such experience. With proper handling, the phenomenon of migration could become a resource for the widening of experience and the promotion of cross-cultural understanding.

Political and administrative features
As a Muslim country Yemen draws her socio-political and legal system from Islam to which also the principles of democracy, freedom, national identity and co-operation, as promulgated in the National Charter, are related. The National Charter, compiled in 1963 after a national referendum, provides the official expression of Yemeni political and social philosophy. The Charter states that "Islam was and still is the foundation of our intellectual and spiritual formation, whose ideals and ethical values form the consciousness of the nation". (The National Charter, 1983:25) The document prescriptively states that "all our concepts of
Man, the Universe and Life must be derived from the Islamic comprehensive concept... which organizes the individual’s relationships with himself, his Creator, his family and his society and the latter’s responsibility towards the individual, which also provides the rules and laws which direct and control the process of social, political, economic and cultural life.” (Ibid:27).

The relationship between the individual and the society advocated in the N.C. is one based on mutual respect and concern, though the furtherance of the interests of the social system is given priority. The Charter defines this relationship as involving “self-control; sublimation of desires to conform to the moral values which provide sound criteria for the social structure.” These criteria are spelt out as:
- the promotion of the interests of the society over those of the individual
- equality
- co-operation
- avoidance of causing harm to others. (Ibid:30).

The first duty of a citizen is love and loyalty to the country and devotion to its values and interests. Loyalty to the country involves the rejection of loyalty to, or dependence on other entities; it is also identified with “loyalty to Allah, hence love of the country is love of the faith... which must be a belief substantiated in behaviour, practice and work.” (Ibid:37).

This sense of loyalty can be manifested by:
- protecting the country’s sovereignty, independence and religion
- adherence to the aims of the 1962 Yemeni revolution
- promoting and protecting social cohesion and internal unity, leading to Yemeni unity, which is an essential step towards Arab unity and Islamic co-operation.
Such cohesion and unity require the elimination of "sectarian, familial, tribal and political fanaticism". (The Charter:39). The Charter, however, adds that "Concern for social harmony and Yemeni unity... has its Arab and Islamic dimension and the protection of the country's independence and interests does not imply isolation from scientific awareness and openmindedness to other nations' experience and to the ideas that shape human civilization at the present time. (cf. the National Charter:38,43-44).

Freedom and democracy are two major principles of the Yemeni system since the revolution which have also been strongly emphasized in the National Charter. Freedom is seen as "one of the basic necessities of life in every human community...By means of freedom every individual may become a dynamic element able to give, create and participate in the process of improving the quality of life." (Ibid:45-6). The document asserts that every individual must possess a full right to freedom, which will enable him/her to practice personal and common freedoms, the most important of which are: freedom of expression, of opinion and thought, of enjoying one's civil and political rights; freedom to participate in public activities, and to choose the work one feels competent and able to do.

To ensure this freedom, democracy is described as the guarantee for the protection of freedom and rights. Democracy is interpreted in the sense that "the government and all its institutions are the possession of the people". In practising Islamic democracy, both the dignity of the individual and the pride and well-being of the society must be simultaneously guaranteed. The concept of democracy must control all our behaviour in every aspect of life; people have the right to choose their representatives, the right to stand for election, to vote, to choose their own profession and career. All these rights belong to any Yemeni man or
These themes, together with those concerning national and Arab cultural identity, have serious implications for educational policy. However, since the administrative and bureaucratic structures in a society greatly influence the implementation of policy in education as in other areas, there follows a brief survey of the operation of these structures in Yemeni society, at national and local levels.

According to present circumstances, the political and administrative structure in Yemen can be examined at three levels: central, provincial and local. It has also two main channels of authority: the official channel flowing from the top to the base (from the centre to the periphery); the traditional system, and now the co-operative structure flowing upwards, from the periphery to the centre. The upward and downward channels overlap, and very often their navigation becomes a mere game at the hands of vested interests and inefficient personnel.

Highest authority is invested in the President, who is assisted by the following institutions:
- the High Command of the Armed Forces
- the Government
- the General Assembly and the National Conference
- the Confederation of Yemeni Development Associations (CYDA).

Each of these institutions has its own offices and representatives in each province. Some extend to the district level. At the provincial level, the country is divided into eleven Governorates (Liwa or Muhafazah). The divisions at any level do not have common criteria either in the number of...
inhabitants or in the size of the area. In many cases geographical factors seem to be the major determinant of provincial divisions, whereas in the case of smaller divisions tribal factors appear to be crucial. Each of these provinces is headed by a Governor who represents the highest authority and to whom all public officials are accountable.

**District level**

Each Governorate is divided into a number of districts, known in Yemen as 'Nahyaps'. The Nahyaps function as administrative nodes, where central policy is translated into local action through the medium of local leadership.

Ideally, local government starts with the shaikh at the subdistrict level (Uzlah), whose authority is based on semi-formal relationships, in most cases kinship ties with other petty shaikhs of smaller divisions called 'Mahallah'. Shaikhs of these small areas, (known as 'Aql') often come from the biggest group within their domain of control. The relationship between the members of the group and the shaikhs varies from place to place. If the shaikh is a landowner as is the case in many areas, he will hold powerful authority over his tenants.

Tribal ties are still strong, to the extent that tribalism is regarded as one of the major hindrances to socio-economic development and the development of a just, democratic polity and efficient administrative system. The majority of peasants, though willing to identify with a central authority, still find themselves unable to make a complete break from traditional ties; hence loyalty to the immediate authority is often stronger than loyalty to the state, which to many is a remote abstraction. This conflict of loyalties and the confusion of identification with a
national authority on the part of the masses, and with the ordinary people
on the part of the new generation of local leaders, has many implications
for education.

In the light of modern approaches to development, as discussed in Chapter
Two, which currently advocate a decentralized, locally-based system, the
Yemeni system provides an ideal framework for such a model of
development. But one should note that it is not the existence of structures
and legislative norms that make a system work; it is the people who
implement and use it. The main area to which education may contribute is
that of the attitudes of people: a central educational concern should be
how to make peasants and local and national leaders, learn to build their
relationships on trust, understanding and co-operation and realize that the
good of the individual is inseparable from that of the nation and vice
versa. This widening and modifying of peoples’ perceptions of themselves,
their place within the national context and their relationship with the
wider world, an important component of education everywhere, is a crucial
one in a country with such a high level of alienation as existed in
traditional Yemen. To be effective, socio-political institutions, local,
regional and central, have to be manned by efficient, and more importantly,
conscientious personnel; at the same time the ordinary people have to
understand such a system and be able to deal with it.

Local Development Associations: the nucleus of co-operative self-reliance

The idea of collective action and democratic decision making is believed
to have been a major feature in Yemeni history as early as the Sabean
civilization. Democracy, self-reliance and co-operative social
responsibility are also essential principles of the Islamic doctrine. The
idea of establishing local co-operatives in the area of services and
economic development began to take shape shortly before the revolution, when some farmers and fishermen attempted to organize their efforts to improve production, and some migrants to Aden and Africa began to co-ordinate local efforts to improve roads, schools and health services. These initiatives were reinforced by the revolution of 1962, one of whose aims was "to create a democratic, co-operative and just society, taking its laws and systems from the spirit of Islam". (The National Charter:14).

This moral and political spirit was matched by new administrative legislation and organization. In 1973, the Confederation of Yemeni Development Associations (CYDA), was established; the number of LDAs rose from 28 in 1973, to 184 in 1981, spreading to most parts of the country.

The LDAs are organized at the district level. The starting point is the village or group of villages (uzlah) where local people come together and elect their representatives. The representatives of each district (nahiyah) form the general assembly of the LDA of the district, which, in its first meeting elects a managing board of seven of its members to form the Local Development Board (LDB).

At the Governorate level, there is a Co-ordinating Council in each governorate whose members are elected by and from the members of the LDBs of the governorate. Its function is to co-ordinate between its LDA members, the Government offices in the Governorate and the CYDA. The Confederation of Yemeni Development Associations comes at the top of the hierarchy of the co-operative system, and it is headed by the President of the state. Its managing board and president are elected by representatives of the LDAs every three years in a general conference. Theoretically, the
managing board and its head are accountable to their electorate, the LDA representatives. The main function of the CYDA is to co-ordinate central and local efforts and policies, to observe the performance of the LDAs and provide financial and technical assistance to them through the co-ordinating Councils or directly; it also takes on major projects directed towards the improvement and enhancement of the co-operative movement, such as training and research. An idea of the roles played by the LDAs and the funding of welfare projects may be obtained from Fig.10.

The main areas of the LDAs activities have been the improvement of communication, education, health and water supplies in the rural areas, with a more recent emphasis on improving the rural economy. The Second Five Year Plan, 1962-66, included a policy for the LDAs in which they are expected to continue their activities in communications, education, health, water supply and other social service; to take part in all rural development activities; in creating equal distribution of the returns to development; in activating the national literacy campaign; in expanding the base of popular participation, particularly by encouraging women to take part in development; and in preparing the human resources required by the system. In the area of economic development, the LDAs are required to take part in improving the agricultural sector and fisheries; in encouraging the formation of agricultural co-operatives and encouraging local industries. (CPD,1982,;300).

If co-operation, as a new interpretation of Yemeni ideology, is to survive and flourish, it must be nurtured by education: it must be both taught formally as an important component of the curriculum; and it must be reflected in teaching method, in school organization and in the relationship between the school and the community. Idealism can be
Figure 10

CYDA and LDA Financing

MINISTRY OF FINANCE
CUSTOMS AUTHORITY
DUTIES AUTHORITY
(MASLHAT AL WAJIBAT)

2%

CYDA

MEMBERSHIP
FEES

AGRICULTURE

HEALTH CLINIC

LDA'S

ROADS

WELLS

SCHOOL
E.G.
ZAKAT - 33.3%
PEOPLE - 33.3%
GOVERNMENT - 33.3%

ZAKAT ON
AGRI. PRODUCTION
CATTLE
WEALTH ETC.

{15-25%
0-10%
75%
}

COLLECTOR

FOREIGN AID

MINISTRIES

Source:
Richard W. Gable, "Government and Administration in the Yemen Arab Republic". (Paper Prepared for Office of Rural and Administrative Development, USAID, University of California, Davis, Jan 1979, p.84)
inculcated by education, but only if there is conviction on the part of the inculcators. Teachers and administrators must be led to see equal reward in commitment to an ideal as in the effort to achieve material security; then they will be in a position to teach with conviction. The implications for curriculum development and teacher-training will be developed later.

**Major problems in the area of living conditions**

During the last twenty years there has been considerable improvement in living conditions, yet much remains to be done. In the area of communications most parts of the country have been linked by roads, and most villages have been linked with towns by rudimentary roads; but many areas are still difficult to reach. Although education is now available on a national scale, the illiteracy rate is still high at 74.9%, 57.9% of the total male population and 92.5% of the total female population. According to Al-Iriani (1982:139), the literacy problem should be regarded as a top priority for Yemeni planners, followed by health, food and housing.

Housing, water supplies and sanitation are generally poor in the country, in particular in rural areas, where all amenities generally associated with good living conditions are lacking. According to the 1975 census there were 904,149 houses, the majority of which (45.6%) rely on water from wells; 31.2% from streams; 9.7% from ponds; 5.7% from public and private projects; the rest not stated. According to a demographic case study conducted in 1981, there have been many improvements since 1975 in living conditions, which were attributed by the study to the remittances from migrant labourers working abroad. The study found that 29% of the households rely on piped water, whereas reliance on wells was reduced to 33.9% and reliance on ponds and streams was reduced to 26.3%. It adds that 59.3% of the households have traditional style toilets; 4.3% have
modern toilets and 34.4% are without such facilities. As well as housing and living conditions, these figures throw light on the health conditions. (CPO, 1981:23).

Health Conditions and Problems

Despite the fact that official sources show a promising picture of many aspects of living conditions, other sources indicate that these reported improvements may not be as impressive as reported, especially if the lack of systematic official records in all areas, and the shortage of human and technical resources in the country are taken into consideration. However, health is generally poor: life expectancy is 42.1 years; the infant mortality rate is 173.3 per 1000 children; the crude total mortality rate is 25.4 per 1000; this contrasts with a crude rate of growth at 25.5 per 1000. Health conditions in the rural areas are even poorer, and many problems still prevail. Those most affected by these conditions are women and children; most health problems arise from lack of awareness and general understanding of hygiene, sanitation and nutrition, rather than from physical illness or actual lack of food. For instance, although the general level of income has improved and people can afford to buy more food, the nutritional level of the food consumed is extremely poor. A case study conducted by Elizabeth Gascoigne (1982:50) finds that: "Infant mortality has [decreased]... since the revolution but it is still found to be high in rural areas where health services and understanding about hygiene and nutrition are lacking." She found in her nutritional survey that 30% of children were "in the malnutritional classes of weight-for-height (70-79% and 60-89%) and these children will be the most prone to sickness and infant mortality because they have the least resistance to common infections and diseases." (op. cit). (4)
Many diseases are endemic in Yemen, and very little is known about the number of people affected by them. The following table shows the most widespread diseases and the number of cases recorded in 1978 and 1983:

Table 12: Major Diseases and the Number of Cases.

<table>
<thead>
<tr>
<th>Disease</th>
<th>Number of Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1978</td>
</tr>
<tr>
<td>Infectious hepatitis</td>
<td>3288</td>
</tr>
<tr>
<td>Amoebic dysentary</td>
<td>6208</td>
</tr>
<tr>
<td>Enteritis</td>
<td>31574</td>
</tr>
<tr>
<td>Whooping cough</td>
<td>5854</td>
</tr>
<tr>
<td>Measles</td>
<td>6531</td>
</tr>
<tr>
<td>Chicken Pox</td>
<td>18</td>
</tr>
<tr>
<td>Poliomyelitis</td>
<td>74</td>
</tr>
<tr>
<td>Malaria</td>
<td>30907</td>
</tr>
<tr>
<td>T.B.</td>
<td>7604</td>
</tr>
<tr>
<td>Bilharzia</td>
<td>11733</td>
</tr>
<tr>
<td>Diphtheria</td>
<td>2</td>
</tr>
</tbody>
</table>


The apparent increase in the number of cases recorded between 1978 and 1983 results from the greater numbers of such cases reported, as health services spread and people begin to seek treatment. Nevertheless, it may be assumed that even with the increase in the 1983 figures, it may be still only a minor proportion of the illnesses to be encountered in Yemen has been reported. From personal experience, I can report that illnesses among children and women would be recorded only in a very few cases.

Health services have developed considerably since the revolution, and more recently have begun to reach the rural areas where the major problem lies, and where people are handicapped by their poor level of income and their lack of awareness of the conditions affecting their health. Yet one should note that this sector is not given its due importance; for example, in terms of budgetary allocation, health seems to have been fixed at about
3.2% of the budget. The sector is also affected by shortage of personnel, in particular nurses and paraprofessionals, as such jobs are not of high social status.

**Recent trends in the official policy for the future**

With the above background in mind there has been more emphasis on the development of man as the end and means of development; on meeting basic needs of all citizens through co-operative efforts on the part of the individual and the society, and on the achievement of self-sufficiency and self-reliance. The National Charter interprets the relationship between the good of the individual and of the collective from the Islamic perspective, as a reciprocal one: "Islam considers the individual as well as the group as a whole, man's life, dignity, freedom, security and rights of the society, for the human being is humanity and humanity is the human being". (p.30). In reference to the development of manpower, the Charter states that "Man is the aim as well as the means of development which cannot be realized without his efforts or without increasing his awareness and understanding". (p.75).

The Second Five Year Plan outlines an overall comprehensive strategy for the mobilization of national efforts and resources for the achievement of a state of continuous and stable self-reliance. It emphasizes the collective responsibility of all citizens for planning, implementing and evaluating the processes of social and economic development; for preserving the religious, spiritual and cultural foundations of the society; and for the continuous improvement of the living standards of the Yemeni people; their material, cultural and educational advancement through developing their capabilities, their personalities and releasing their productive and creative energies. (CPO, 1982:39). The aims of the plan are outlined as
follows:
- to endeavour to meet the basic needs of the individual;
- to develop peoples' abilities and skills, to improve the content of
  education, to provide training institutions and to eradicate illiteracy;
- to reorganize the structures of the productive sector;
- to achieve an integrated, balanced development in all regions;
- rapid improvement of agriculture - crops and animal husbandry - and of
  health, cultural, social and economic conditions in villages and rural
  areas;
- to curb expenditure on consumption, on the part of both individuals and
  government, and to encourage people to save and invest in the productive
  sector;
- to improve skills and abilities of Yemeni migrant workers and encourage
  them to invest their savings rather than spend it in conspicuous
  consumption;
- to improve efficiency and practice in the system;
- to complete the building of the modern state by modernizing the local
  system and improving the security and legal services;
- to encourage the private sector to participate in productive projects and
  in Arabic/Islamic integrated development;
- to give due concern to improving tourism and the environment and
  protecting it from pollution, and from the exhaustion of its material and
  historical resources;

Throughout the Plan and in the National Charter several issues are
repeatedly emphasized:
- development for self-reliance based on indigenous resources:
  agriculture, local crafts and human capital;
- emphasis on basic needs: food, health, housing, communication, cultural
aspects and education for all people, in particular for the rural areas;
- emphasis on women's participation in the process of development both
economic, social and political;
- emphasis on frugality and saving for all people, in particular migrants;
- emphasis on the role of the LDAs in providing services as well as in
production;
- emphasis on the promotion of peoples' abilities and skills and their
capacity to participate in all aspects of development and to develop
their own self-help initiatives.

The translation of these aims, among others, into policy, and their
subsequent implementation, forms the major component of the work of the
curriculum planner in Yemen, for the next decade.

Summary and Conclusions
In this chapter we have analysed the major features of the Yemeni society
which can be summarized in the following points:
1) The country is situated in a historically strategic location, and has a
reasonable amount of arable land and a mild climate, suitable for
agriculture. It has a large population for an Arab country, the majority of
whom are engaged in agriculture, and live mainly in rural areas, but with
the drift to urban centres growing. Consequently, the countryside and its
traditional economic activities are beginning to be abandoned. About half
of the population belongs to the under-14 years age group, so that the
major part of the fast-growing population belongs in the economically
inactive category.
2) Yemen is an Arab country, the lingua franca of whose population and
whose official and national medium, is Arabic. Yemenis are Muslim, and
Islam is the religion of the nation and the source of its philosophy of life.
The country has a strong historical legacy which, if carefully combined with Islamic tradition, may provide a valuable source of cultural identity. Local cultures and social aspects such as the position of women, rural and urban systems, vary in their attitudes to moral, social and political issues.

3) Between the First World War and 1962, the country went through many problems and socio-political and economic changes, some of which were of great disadvantage to the nation, and which have had considerable effect on the psychological character of the people and their attitudes to themselves, others and the process of development in general.

4) Since the revolution, the country has been a republic, advocating Islam as its philosophy, and democracy and co-operative participation as its means of socio-political development. It adopted an open market economy and during the last decade major infrastructural rearrangements have been made, and development plans were introduced, aiming at the improvement of the national economy and the quality of life of the increasing population. It has been noted that development plans and economic development have been hindered by lack of organization, systematic planning and severe shortage of manpower.

5) The country is predominantly tribal, and its social and administrative structure is in its infancy. It has begun to move towards a more decentralized, locally-based political and administrative system. One of the major features of rural politics and of development in general, is the co-operative movement, which holds great potential for social transformation and the improvement of living standards, in particular in rural Yemen. The movement, like other sectors, is hindered by lack of organization and expertise, but more importantly by mismanagement on the part of its leaders and lack of awareness and understanding on the part of the people.
6) As far as the current economic and service sectors are concerned, the country's GDP has improved during the last ten years, with an apparent decline in the share of agriculture and an increase in taxes, especially on foreign trade. The government is poor; revenues are limited and come mainly from customs duties; the government cannot meet its current expenditure of which about 50% goes to defence and security. In the economic sector, the evidence shows that despite the emphasis placed on improving agriculture this sector is showing a rapid decline both in the amount of land under cultivation and in production, especially in coffee and cereals. The industrial sector is still very small and despite its high potential, needs early planning and orientation towards meeting the essential needs of the country. Trade is active, but the country has become almost completely reliant on foreign goods, even food. In contrast, exports have fallen sharply, and consequently the deficit in the balance of payment has reached more than six billion YR in 1982, most of which is covered by migrant remittances. Migration, which could be a beneficial cultural phenomenon, has become a major factor in socio-economic development, bringing many advantages which may turn out to be temporary, and disadvantages, which may become more apparent later on. We noted that whatever position one may take up over the migration question, it is inevitable at the moment, and many of its advantages can be turned into long-term assets if properly managed.

7) Next, we come to the social aspects of development, to the area of living conditions, especially health, housing and education. It has been noted that despite the efforts made so far, both by the state and the people themselves or their LDAs, living conditions are still generally poor. Malnutrition and disease are very widespread and there is a high rate of infant and child mortality; lack of hygienic and sanitation services and awareness, combine with a high illiteracy rate, reaching 92.5% among
women. Health services are still rudimentary and are mostly concentrated in the major cities. The situation is aggravated by shortage of personnel and by socio-cultural factors.

8) More recently, since the 1982 plan, more concern has been given to rural development, to curbing both state and private expenditure, to encourage saving and investment in productive sectors. The main trend is the development of the people, helping them to improve their lives and to take an active part in the process of the development of their country. More recognition has been given to women who are expected to play a major part in future socio-political as well as economic development, both in the rural and the modern sectors.

Each of these points has many implications for education in general, and for what is seen as relevant education in particular. The need for manpower at all levels and in all sectors is obvious, but it is more crucial at the semi-skilled level, which appears to be less favoured by the majority of people. More important is the development of better attitudes towards agriculture, rural living, and of the management of businesses and everyday life. Attitudes of co-operation, collective social responsibility and conscientious and responsible behaviour are a common requirement, as is wider knowledge of many other aspects of modern life in a transitional society.
Footnotes

1. The kingdom of Saba is several times mentioned in the Koran; in one case with specific reference to the fertility of the land: "For Saba also there was a sign in their dwelling-place: two gardens, one on the right and one on the left... give thanks [for] a good land." The Koran; Sura no.34; verse 14.

2. The Imam made a pact with Italy in 1927, and with Russia in 1928. Later, in 1934, he signed a treaty with Britain, despite a traditional distrust of the British. Peterson 1982: 68-86.

3. The term "maldevelopment" is used in reference to Nigeria in an article in South magazine: "In its 23 years of independence, Nigeria has concentrated on developing its consumer appetite for imports and has used its vast oil revenues to feed this habit. It has little stomach for saving and investment and an inclination towards building a productive economy." Chinweizu interprets these, among others, as characteristics of a "maldeveloping" society. Chinweizu; South, May 1983: 45-48.

4. Gascoigne studied four villages and found the rate of infant mortality to be far higher than official estimates; her figures were: 480; 420; 370 and 300 children per 1000. In the first village, where bottle-feeding was widely practiced from an early age, 48% of the deaths occurred in the first three months, whereas in another village where breast-feeding was used, only 24% of infant deaths occurred during the first three months.
The Educational Context: Developments and Difficulties

Education in the Pre-Revolutionary Yemen

To understand the nature and structure of the existing Yemeni education system and its content, and to make sense of the changes that have taken place in Yemen during the last twenty years, in order to identify the main trends and the directions of change and to determine the picture for future developments, a brief historical view of the educational situation before 1962 is essential.

There is a tendency in Yemeni educational literature to deny the existence of any kind of education before the revolution, which seems to overlook the fact that Yemen has a rich cultural history. By denying this history we are denying our roots and the most important element of our cultural identity. Above all we are ignoring the fact that many of the present trends and problems in education may well have their roots in that past.

Yemen has been a major learning centre of Islamic, Arabic and scientific studies since the early days of Islam. In the middle ages for example, learning flourished in Yemen as it did in Bagdad, Egypt and Muslim Spain. Zabid, in the Hodeidah province, is famous for such studies until today. Al-Hadrani provides an interesting historical description of the renowned school at Zabid: the 'Asha'er University', the first stone of which was reputedly placed by Abu Mosa Al-Asha'ri, who was the Prophet's messenger to his people in this area. This, and other centres of higher learning, flourished even more during the Rasulid rule in the southern part of the country (1217 - 1442), whose kings were scholars themselves and who encouraged learning. They were learned in medicine, agriculture and
administration as well as in religion, Arabic language and the Arts, and they contributed to knowledge in these areas. At the time men and women alike attended these schools. (Al-Hadrami, 1974:12).

It is justifiable to criticize the Imamate era for the complete isolation from the outside world imposed on Yemeni people and the deprivation of their basic religious and human rights. Yet this situation should not be exaggerated or examined against present-day criteria; rather it should be analysed from a scientific point of view, in the light of the conditions which prevailed at the time, both in the country and in international circles, not only to do justice to the events of that period, but also to examine those features of Yemeni tradition which still exert great influence on the new system.

Education until recently was a state responsibility only in very few countries of the world. Almost everywhere, education for the masses was provided by religious and charitable groups and organisations. State education catered only for the privileged minorities. It was intended to prepare a small number of the elite for intellectual and high administrative roles which were determined by the ruling groups. When education was provided for other groups, it was provided for a minority of the ordinary people to train them to serve the same purpose in a clerical and menial capacity.

During the first half of this century, Yemen experienced almost the same pattern of educational development, though it unfolded very slowly and with considerable fluctuations that resulted from political changes and upheavals. This pattern of educational development can be traced in three distinguishable periods:
Educational provision during the Turkish occupation until 1918

The Turks appear to have begun the provision of some kind of state schooling at the turn of the century. They began to take an interest in education after their return to Yemen in 1872. During the period of Hussin Basha, the Turkish governor of Yemen, "who loved learning and respected scholars and compelled people to learn", the Directorate of Knowledge was established in 1895, together with a number of 'Makatib' (primary schools) and "a teacher training school, an industrial school and a preparatory school." (Ba-Abbad, 1982:53).

Tibawi (1979:189) states that ninety-six state schools were reported to have existed in Yemen in 1915; he refers to an English traveller who visited Yemen before the War reporting that free Turkish schools were maintained in the principal centres; among these were a substantial building in Sana'a with a section for boarders; a technical school in Hodeidah which was described as 'well-equipped but poorly attended'.

Amin Al-Rihani, a Lebanese Christian Arab who visited Yemen in 1924, reported a Yemeni student saying "We had organised schools under the Turks where geography and arithmetical were taught; they gave us books, slates, paper, ink, pens, exercise books and chalks all free... today we have no modern schools and no teachers except the fagih (a title still used for those who teach the Koran) and he charges eight rials per month." (quoted in Stookey, 1978:187).

However, this account may be both one-sided in that it represents the view of one who enjoyed a position of privilege under colonial rule, and inaccurate insofar as the fees quoted represented a substantial amount of money at the time, and if the suggestion is that all students paid a similar
fee, it strains credibility to some extent. It may be accepted that some kind of formal schooling was introduced by the Turks and that some educational materials were provided free of charge, but that this provision was limited exclusively to a small privileged group who were to man the colonial administrative system, as these schools were situated in the main towns only. This might have been a state policy either to provide for the need of the system for clerks, or to provide for the peoples' demands for education, stimulated by the British presence in Aden since 1638.

b Education during the Imam Yahya's reign 1916 - 46

Information about education and the social life of Yemeni society between the World Wars is very meagre, as a result of the extreme isolation of the country and the lack of reliable data, a problem which still prevails today. The general picture of education during the Imamate rule on the whole is a bleak one. It appears that very little provision was made for education; formal education when provided was for a few upper-class families who administered the Imam's offices or for a small number of those needed in the army and lower status roles. Education for the masses remained as before, the responsibility of the mosques and religious institutions and the local 'Kuttab' in most of the rural areas. In 1925, the Imam however, began to give some attention to education. This attention led to the establishment of:

1 A religious school (Ilmiyah) in Sana'a, which was a free boarding school for post-primary education and its curriculum involved the Koran, Islamic and Arabic studies, arithmetic, geography and other sciences and arts.

2 An Orphans' School in Sana'a, where the Koran, reading, writing, and grammar were taught. A public library at the Great Mosque in Sana'a in
which a large number of precious Islamic, historical and Arabic books and scripts were collected. (Ba-Abbad, 1982:55-7).

Despite the Imam's fear of outsiders, some contact, though cautious, was established with the outside world. After a visit of one of his sons to Italy in 1927, the Imam sent a number of students (about 12) to Rome to study aviation - as pilots and mechanics; others were later sent to Egypt for this purpose. Besides this, a school was established in Sana'a in which mechanics and technicians were trained by Italian trainers. (Ibid:60-61). In 1936, one group of students was sent to Iraq for military training, and another, for teacher training. Later, in 1945, a group of 34 students was sent to Lebanon for Islamic studies. (Al-Awdi, 1980:176).

This concern with educational issues in the thirties included an interest in improving vocational studies and organizing the educational system. Delegates were brought from other Arab states, mainly Egypt, to advise on many issues. In agriculture arrangements were made for establishing an agricultural school in 1936; in the following year, an 'industrial school', for textiles, was established in Sana'a, and so was a teacher training college. (Ba-Abbad, 1982:63). These activities led to the establishment of a Ministry of Knowledge in 1938 when primary schooling was made compulsory. The first Minister was the Imam's son, Abdullah, who was Minister for War and Education. (Peterson, 1982:42). These arrangements however, reflect the Imam's need to consolidate his authority, rather than any interest he had in education: by and large, little provision was made for education that was not aimed at direct political control, as perhaps may be inferred from the rather extraordinary juxtaposition of ministries mentioned above.
c Education in the last decade of the Imamate Rule

After World War II, increasing attention was given to education, possibly as a political imperative in view of looming social change. Imam Ahmed (1946 - 62) made some cautious overtures to the outer world, which appear to have encouraged the provision of education. The available figures indicate that the number of schools increased but the orientation and structure remained untouched.

The UNESCO Statistical Yearbook for 1963 provides some statistical information concerning schools in Yemen in 1958. The figures, however, do not tell us much about these schools, but one may assume that the schools referred to were the official state schools in towns.

Tibawi and Ba Abbad provide a more detailed list of figures and both refer to the same source: a report about Yemeni education presented to the cultural department of the Arab League in 1957. The following table shows the educational situation then:
Table 13: No of Schools, Students and Teachers in 1958.

<table>
<thead>
<tr>
<th>Type and Level</th>
<th>No. of Schools</th>
<th>No. of Students</th>
<th>Length of Course</th>
<th>No. of Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary (in towns)</td>
<td>50</td>
<td>13301</td>
<td>6 yrs</td>
<td>301</td>
</tr>
<tr>
<td>Elementary (in villages)</td>
<td>663</td>
<td>36350</td>
<td>4 yrs</td>
<td>663</td>
</tr>
<tr>
<td>Elementary (local)</td>
<td>1438</td>
<td>53117</td>
<td>Kuttab¹</td>
<td>1438</td>
</tr>
<tr>
<td>Intermediate</td>
<td>4</td>
<td>321</td>
<td>4 yrs</td>
<td>43</td>
</tr>
<tr>
<td>Secondary</td>
<td>3</td>
<td>221</td>
<td>3 yrs</td>
<td>43</td>
</tr>
<tr>
<td>Preparatory²</td>
<td>1</td>
<td>75</td>
<td>4 yrs (after intermediate)</td>
<td>16</td>
</tr>
<tr>
<td>Teacher Training</td>
<td>1</td>
<td>50</td>
<td>2 yrs (after intermediate)</td>
<td>16</td>
</tr>
<tr>
<td>Ilmiyah (religious)</td>
<td>15</td>
<td>814</td>
<td>6-13 yrs</td>
<td>108</td>
</tr>
<tr>
<td>Agriculture</td>
<td>1</td>
<td>38</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Technical (industrial)</td>
<td>1</td>
<td>200</td>
<td>n/a</td>
<td>20</td>
</tr>
<tr>
<td>Health School</td>
<td>1</td>
<td>100</td>
<td>n/a</td>
<td>n/a</td>
</tr>
</tbody>
</table>

¹ These schools are traditional village schools supported by local people in which children are taught the Koran with some reading and writing.

² For preparing children to study abroad

Schools in towns had more teachers; schools in the rural areas, both official and local, each had only one teacher.

In 1956, presumably as a result of the Pact signed between Yemen and Egypt and later Saudi Arabia, the Imam allowed the re-opening of the military and police colleges and the establishement of three other schools related to military service. From these colleges and the high religious schools as well as from the students studying abroad, came the bulk of the revolutionary vanguard, and a number of statesmen of the early
revolutionary government were graduates of that traditional system. (cf. Arrahumi et al 1978:43).

Limited though the opportunities were, some Yemenis received an education in foreign countries. The government sent, as we have described, a limited number of students to study abroad, and to acquire higher skills and knowledge necessary for government administration and the military services. Some wealthy families and the ruling elites sent their children to study abroad especially in Egypt and the European countries.

Table 14: Number of Yemeni students studying abroad in 1960/61

<table>
<thead>
<tr>
<th>Country</th>
<th>No. of students</th>
<th>Country</th>
<th>No. of students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Egypt</td>
<td>718</td>
<td>United States</td>
<td>15</td>
</tr>
<tr>
<td>China</td>
<td>76</td>
<td>Hungary</td>
<td>6</td>
</tr>
<tr>
<td>East Germany</td>
<td>50</td>
<td>Rumania</td>
<td>4</td>
</tr>
<tr>
<td>Tchecoslavakia</td>
<td>40</td>
<td>Albania</td>
<td>4</td>
</tr>
<tr>
<td>Russia</td>
<td>36</td>
<td>R. of Ireland</td>
<td>3 x</td>
</tr>
<tr>
<td>Italy</td>
<td>25</td>
<td>United Kingdom</td>
<td>2 x</td>
</tr>
<tr>
<td>Yugoslavia</td>
<td>20</td>
<td>West Germany</td>
<td>2 x</td>
</tr>
<tr>
<td>Kuwait</td>
<td>20</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


Women's Education

The available data about education in Yemen before 1962 suggests that education for girls was virtually non-existent, though Yemen, as we have pointed out earlier, had favoured women's education at earlier stages, and in Islam, learning is a duty for both men and women. During the reign of
the Imam Yahya, from the end of the First World War to 1946, the official attitude to women's education was a reflection of the heavily repressive conservatism of the era. The education of women was regarded as at best useless (because they do not work, and so cannot use their education), or at worst immoral (on the grounds that devout women must lead sheltered lives, and must be protected from the debasing influence of public life.). Imam Yahya closed a school for girls established earlier by the Turks (Zabara 1962:16).

After the succession of the Imam's son Ahmed, attitudes loosened up to some extent: both official and private newspapers began to talk about the situation of women and their education. According to the official newspaper, Al-Iman (1950:2), a girl's school was opened in Sana'a in 1949, under the supervision of two Palestinian women teachers; the response of the public was reported as indicating great public enthusiasm for the education of girls. Later, in 1952, an editorial in Al-Nasr newspaper supported women's education as a base for nation-building: "the education of women is one of the necessities of life for great and powerful nations". (q. in Al-Matwkil, 1983:228).

These changing attitudes were not, however, universal: in 1961 Abbas Al-Khatib, in Al-Sabah newspaper, was strongly against the idea of women's education, calling it "a disease; women should be taught nothing", he argued. (Al-Khatib, in Al-Sabah, 1961:7). Those conflicting attitudes towards the status of women and their education are still widespread today.

Despite the ambivalence in the attitude of Yemeni society to the question of their education, some girls did succeed in acquiring some learning,
often in the home. Carla Makhlouf (1979:20) points out that “before the revolution of 1962, education for females was restricted to reading the Koran and did not include writing, except for a few upper class women”. She refers to one of her informants reporting that “traditional Sana'anis did not want girls to learn how to write, because they might start writing letters to people’ - obviously to men.

Such freedom for women is not countenanced in many traditional societies. Yet, the limitation of learning to read only was not completely confined to girls; a substantial number of males also learned only reading so that they could read the Koran. (see table 15).

The quality of education and its content in prerevolutionary Yemen
The quality of education seems to have been generally very poor, particularly in the rural areas where education merely meant learning the Koran and very initial literacy and numeracy skills. Almost all the schools in the rural areas were one teacher schools, many of them without classrooms. Memorization appears to have been the paramount learning/teaching strategy: the Koran was to be learnt by heart, and due to lack of facilities and teachers, new ideas and other areas of study, if they existed at all, were also learnt by heart.

Schools in the main towns, both primary and secondary, were of no better quality. The main subjects were Islamic and Arabic studies; in the existing preparatory and secondary schools, students were taught the Koran, reading and writing skills, some other skills in book-keeping, mathematics including algebra, and geography. (Stookey, 1976:167). The few so-called secondary schools in Sana'a, Taizz and Hodeidah, were secondary in name only; they did not reach the standard of even a
preparatory curriculum. Al-Baraddoni (1983:282) asserts that "the secondary school curriculum did not reach even to the level of today's preparatory school, yet some students were enlightened by the enthusiasm of their teachers." When Imam Ahmed sent a group of princes to secondary schools in Egypt, they had to have special tutors to catch up in the subjects that Egyptian pupils learn in kindergarten and primary schools. (cf. Zabarkh, 1962:16).

Either the Imams genuinely felt responsible before God for keeping the faith pure, as they always claimed; or they were deliberately isolating their people, the better to maintain control by using their lack of self-respect and awareness of their human rights, to direct their aggressions against each other, and thereby control them. The series of revolts in 1948, in which Imam Yahya was killed; in 1955 and finally the 1962 revolution which overthrew the Imamate, in all of which the few school graduates and students played a major role, indicate that this policy of trickery and oppression was never fully successful. In modern times, knowledge and ideas have become as necessary and available as oxygen; they can never be prevented from reaching people, however strong the policy of isolation, nor can the people live without them, however dangerous the path to obtaining them.

Summary and conclusions
Education in Yemen before the revolution was essentially provided by local people based in the Mosques and supported by religious groups, and was confined to learning the Koran and reading and writing skills essentially for boys. By the beginning of this century some official provision for education was made by the Turks, apparently for the purpose of preparing clerks and local state personnel for administrative and military tasks and
manual economic activities. During the First World War and its aftermath, this start that had been made, petered out. Having settled his political problems, Imam Yahya began to give some attention to education; he established a number of schools and sent a number of students to study abroad. Some disruption occurred around 1946 and 1950. In the late 1950's, Imam Ahmed in his turn, began to take some interest in education and a more organized system began to take shape.

Education, at that time, was basically confined to the preparation of the manpower required for the state and it was heavily concentrated on Islamic and Arabic studies with minimum knowledge and skills in arithmetic, geography and the history of the Imams. Military training and use of technology was the top priority; vocational training and preparation of teachers received due consideration from the earliest educational efforts. The system included primary, preparatory and secondary levels, but they were of different duration; the quality in general was very poor; intake in vocational schools was limited and women's education was completely neglected before 1950, after which date, it was at least recognised as an issue to be debated.

From this brief analysis, one may note that some efforts existed on the part of the state, which should not be dismissed. The Imams however, attempted to retain control of the political and administrative system; their suspicious attitudes to the outside world and indeed, to the people in their own world, had brought them to a political impasse, and the country into poverty and confusion. Some attempts to develop the educational system and to reduce the country's isolation were made in the 1950's, but these attempts were inadequate and came too late.
### Table 15: Population 10 years of age and over by educational status (derived 3\% random sample of the Population Census, 1975)

<table>
<thead>
<tr>
<th>Educational Status</th>
<th>Total number absolute</th>
<th>Not stated</th>
<th>Over 60</th>
<th>50 - 59</th>
<th>40 - 49</th>
<th>30 - 39</th>
<th>20 - 29</th>
<th>15 - 19</th>
<th>10 - 14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Illiterate</td>
<td>2,394,998 81.5%</td>
<td>3,068</td>
<td>248,277</td>
<td>215,145</td>
<td>329,310</td>
<td>463,249</td>
<td>472,340</td>
<td>272,528</td>
<td>391,081</td>
</tr>
<tr>
<td>Can read only</td>
<td>170,166 6.0%</td>
<td>12</td>
<td>17,982</td>
<td>18,679</td>
<td>21,500</td>
<td>25,228</td>
<td>24,916</td>
<td>17,514</td>
<td>44,335</td>
</tr>
<tr>
<td>Can read and write, without certificate</td>
<td>328,385 11.0%</td>
<td>127</td>
<td>25,596</td>
<td>28,623</td>
<td>37,389</td>
<td>49,853</td>
<td>57,395</td>
<td>37,197</td>
<td>92,205</td>
</tr>
<tr>
<td>Primary school certificate</td>
<td>18,756 0.6%</td>
<td>0</td>
<td>16</td>
<td>74</td>
<td>143</td>
<td>688</td>
<td>4,058</td>
<td>9,774</td>
<td>4,003</td>
</tr>
<tr>
<td>Preparatory school certificate</td>
<td>10,968 0.4%</td>
<td>0</td>
<td>42</td>
<td>57</td>
<td>339</td>
<td>1,126</td>
<td>4,862</td>
<td>4,316</td>
<td>226</td>
</tr>
<tr>
<td>Secondary school certificate</td>
<td>7,928 0.3%</td>
<td>0</td>
<td>194</td>
<td>290</td>
<td>728</td>
<td>2,224</td>
<td>3,899</td>
<td>593</td>
<td>0</td>
</tr>
<tr>
<td>University degree</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>religious</td>
<td>3,898</td>
<td>0</td>
<td>196</td>
<td>102</td>
<td>546</td>
<td>1,878</td>
<td>1,165</td>
<td>11</td>
<td>0</td>
</tr>
<tr>
<td>Bachelor</td>
<td>808 0.2%</td>
<td>0</td>
<td>98</td>
<td>78</td>
<td>350</td>
<td>131</td>
<td>151</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>MA, MSc, PhD</td>
<td>115</td>
<td>0</td>
<td>0</td>
<td>22</td>
<td>4</td>
<td>65</td>
<td>24</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Not stated</td>
<td>13,594 -</td>
<td>1,404</td>
<td>988</td>
<td>827</td>
<td>1,052</td>
<td>1,531</td>
<td>1,680</td>
<td>861</td>
<td>5,251</td>
</tr>
<tr>
<td>TOTAL</td>
<td>2,949,616 100.0%</td>
<td>4,611</td>
<td>293,389</td>
<td>391,897</td>
<td>391,361</td>
<td>545,973</td>
<td>570,490</td>
<td>342,794</td>
<td>537,101</td>
</tr>
</tbody>
</table>

Another point to be noted is that the high drop-out rate, the difficulties of the vocational training, the dominance of religious studies, the pursuit of theoretical academic fields of study and finally the question of women's education, seem to have been influenced by social attitudes and ideas rather than by written state policy. So when examining the present education system and its problems, it is necessary to go back a few steps to examine the roots of such problems.

Weak as the system was, it sustained a reasonable rate of literacy and provided the newly-established revolutionary government with some urgently needed personnel. Table 15 (for 1975), shows the number of literate people and those who held diplomas at different levels, the majority of whom, especially those over 25 years of age, had acquired their learning and certificates under the traditional system.

**Education in Revolutionary Yemen: 1963 - 63**

The present formal secular education system was introduced to Yemen in 1963, after the revolution of 26th September 1962. Ineffective and weak, the pre-revolutionary educational system and the traditional religion-based education were ignored. The new system was essentially organized and staffed by expatriate Arab personnel, predominantly Egyptians, whose control over education lasted to the end of the 1960's, during which time there was no clear Yemeni educational policy and educational plans; syllabi and textbooks were brought from Egypt and administered and taught by Egyptians.

Arab influence persists, in particular Egyptian input in the area of teachers and curriculum, but since the early 1970's Yemeni input has begun to influence the planning of education, and a true Yemeni policy and
content are beginning to emerge. Yet, foreign input is still substantial, educational policy and goals often are mere aspirations and the means by which they are sought lacking in rationality, efficiency and relevance.

**Goals of education and educational policy**

After the revolution the opportunity became freely available for every Yemeni to take part in defending and running the country; people with any kind of education began to obtain jobs and hold office regardless of tribal, family or socio-economic background. The new republican state had great expectations of education as a means for transforming the society and achieving the aims of the revolution, at the same time influenced by the ideas prevailing in other parts of the world. Education was made free and compulsory and was provided as a right to all Yemenis, men and women, children and adults. Although these goals were elaborated on later, the goal of compulsory education is still far from being realized. During the 1960's a number of schools were built using foreign aid, particularly from Egypt, Kuwait and USSR. In the rural areas local people took part in building and/or making schools available.

The first move towards Yemenizing the educational policy and content began in 1969, as a result of the change in political leadership in November 1967. In a first five-year educational plan drawn up in 1969, it was pointed out that key educational posts should be held by Yemenis and textbooks were to be Yemenized. Religious education also began to revive and a department for religious education was established within the MOE in 1968.

The goals and principles of education were further elaborated in the early 1970's and many Yemeni aspects were incorporated; the system was
diversified with growth in financial allocations and enrollments. The General Education Act, issued by the Commanding Council Decree No.22 in 1974, laid down the rationale and aims of education and the objectives and content of each level and sector of the general system. It also outlined the structure and administrative pattern of the system: how it should be administered and the examination system. This Act is still the basis for subsequent developments and all educational policies and plans relate to it.

The notion of education being the means for national development was apparent in the Act. Education was described as being “in the forefront of the fundamental bases for the building of advanced nations; it is the most important foundation for their scientific and technological development and for the achievement of their spiritual, economic, political, social and national aims.” In a more specific context, the Act stated that “in accordance with this view of education, its importance is even greater for less developed countries, for it is the indispensible means of bringing about the aimed-at radical changes in the life of the society, in order that these countries can compensate for their prolonged isolation and backwardness and achieve the required level of advancement for a life of human dignity.” (MOE, 1974:6). The general aims of education stated in the Act reflect this idea and were expressed under the following headings: religious and cultural aims; economic aims; national aims; social aims; educational aims; and aims of women’s education.

The link between education and national development plans was stressed in the economic aims which stated that education should be directed to meet the manpower requirements of the plans. This view of manpower provision and the link of education to development became even stronger in
the five-year plans. Educational policies within the five-year plans were by the late 1970's, concerned with the quantitative expansion of education, while in the early 1960's, some attention is being given to quality, which is still poor. The First Five Year Plan of the MOE 1976-81, adopted the following strategic goals:

1. Universalization of education at the first cycle (the primary level); compulsory primary education.

2. Achievement of equality of educational opportunity through giving more attention and encouragement to children in rural areas; to girls, and to children with special needs.

3. Expansion of preparatory and secondary education with more emphasis on vocational training to meet the needs of the economy.

4. Encouragement of higher education directed towards both academic and applied studies so that it can meet the needs of the economy for qualified and trained manpower and develop an endogenous academic culture.

5. Efforts must be made to launch a literacy campaign and to provide basic functional training programmes throughout the country.

6. Improvement of the quality and efficiency of all educational programmes, mainly through the improvement of teacher training, curriculum planning and material, especially programmes for educational personnel in a supervisory and administrative capacity, such as headmasters, supervisors and teacher trainers.

(MOE,1977a:47-8).

It became apparent, however, that the system could not meet most of its aims; and many of the goals of the first plan were repeated in the Second Five Year Plan for 1982-86:

1. Consolidation of primary education to cope with the increasing social
demands, through adopting an educational policy that ensures the retention of students to finish the cycle;

2 Qualitative and quantitative improvement of Yemeni teachers through pre-and-in-service training... and functional and professional promotion;

3 Restructure and reorganization of certain educational administrative departments to increase efficiency of personnel for implementing the second plan;

4 Balanced geographical distribution of educational facilities and balance between levels and sexes;

5 Expansion of technical and vocational education to meet manpower requirements at different levels;

6 Development and modernization of curricula and teaching aids to improve the quality of the content of education;

7 Setting a policy for studying abroad which serves manpower planning in the country;

8 Rational utilization of financial resources to ensure greater outputs;

9 Expansion of functional literacy in a manner that would meet the needs of skilled labour. (MOE, 1982L:1).

These goals of educational policy are in many respects desirable and reflect to a great extent the problems of the system and the ways these problems should be tackled; but in practice education, like the socio-economic system, encounters many obstacles and discrepancies; hence these aims must be regarded largely as long-term aspirations.

Educational Expenditure

The 1960's passed with no traceable systematic financial arrangements in education as well as in other sectors. Since the early 1970's the state
introduced a regular budgetary system and from this period records of financial outlays for education can be traced. In terms of amount of money being allocated to education the last twelve years saw a rapid growth in expenditure, especially since the mid-1970's. The following table shows the amount of money spent on education during 1971 - 1981 and the amount projected for the second Five-Year Plan.

Table 16: General Expenditure on Education between 1971/72 - 1986.

<table>
<thead>
<tr>
<th>Year</th>
<th>YR,000000</th>
<th>Year</th>
<th>YR,000000</th>
<th>Year</th>
<th>YR,000000</th>
</tr>
</thead>
<tbody>
<tr>
<td>1971/72</td>
<td>10.7</td>
<td>1976/77</td>
<td>100.9</td>
<td>1982*</td>
<td>1 715.0 (1189.6)**</td>
</tr>
<tr>
<td>1972/73</td>
<td>17.2</td>
<td>1977/78</td>
<td>200.2</td>
<td>1983*</td>
<td>1 814.0 (1327.3)**</td>
</tr>
<tr>
<td>1973/74</td>
<td>18.6</td>
<td>1978/79</td>
<td>391.7</td>
<td>1984*</td>
<td>2 097.0</td>
</tr>
<tr>
<td>1974/75</td>
<td>31.0</td>
<td>1979/80</td>
<td>495.1</td>
<td>1985*</td>
<td>2 420.0</td>
</tr>
<tr>
<td>1975/76</td>
<td>57.8</td>
<td>1980/81</td>
<td>967.8</td>
<td>1986*</td>
<td>2 646.0</td>
</tr>
</tbody>
</table>


Even taking into consideration the fact that inflation increased during the First Five Year Plan (1976-81), at a rate of 25% p.a., this still represents an enormous increase in educational expenditure. In the first five year period 1976-81, there was a tenfold increase. Related to general public expenditure the educational budget has been doubled, as it represented 5.7% of public expenditure and 0.5% of the GNP in 1973/74 and 10.8% of public expenditure and 1.8% of the GNP in 1980/81. A comparison with expenditure in other sectors, especially Health and Defence, indicates that, in common with the lists of priorities of many other countries, Education receives a larger share of the national budget than Health, but is totally eclipsed by Defence. (cf. Ch.5, Table 8).

The share of education in public expenditure is increasing steadily, and in
the last two years higher education seems to be receiving more attention. However, the increase in financial allocation has been matched by a more rapid increase in cost of materials and teachers' salaries. The available data seems to indicate that the greater part of the budget is spent on salaries and other items of current expenditure, rather than on capital investment and developmental aspects aimed at improving the quality of education such as training, research, curriculum and equipment. The following tables provide a typical picture of how the budget of general education is distributed:

Table 17: Allocation of the MOE's budget during 1982-86

<table>
<thead>
<tr>
<th>Sector</th>
<th>Total allocation (in 000YR)</th>
<th>%</th>
<th>Current Expenditure</th>
<th>Capital Expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td>General sector</td>
<td>9067040</td>
<td>65.4</td>
<td>6125269</td>
<td>2941771</td>
</tr>
<tr>
<td>Technical Educ.</td>
<td>250008</td>
<td>2.3</td>
<td>129567</td>
<td>120541</td>
</tr>
<tr>
<td>Commercial Educ.</td>
<td>27400</td>
<td>0.3</td>
<td>26200</td>
<td>1200</td>
</tr>
<tr>
<td>Agricultural Educ.</td>
<td>67408</td>
<td>0.6</td>
<td>52333</td>
<td>15075</td>
</tr>
<tr>
<td>In-Service Training</td>
<td>37545</td>
<td>0.4</td>
<td>37545*</td>
<td></td>
</tr>
<tr>
<td>Literacy programme</td>
<td>674700</td>
<td>8.2</td>
<td>604300</td>
<td>70400</td>
</tr>
<tr>
<td>Functional training</td>
<td>32171</td>
<td>0.3</td>
<td>29100</td>
<td>3071</td>
</tr>
<tr>
<td>Curriculum</td>
<td>114602</td>
<td>1.1</td>
<td>106010</td>
<td>8792</td>
</tr>
<tr>
<td>Educational R&amp;D Centre</td>
<td>28795</td>
<td>0.3</td>
<td>9277</td>
<td>19518</td>
</tr>
<tr>
<td>Printing Press of the MOE</td>
<td>5197</td>
<td>0.8</td>
<td>52992</td>
<td>32200</td>
</tr>
<tr>
<td>School Health</td>
<td>22875</td>
<td>0.2</td>
<td>3795</td>
<td>19080</td>
</tr>
<tr>
<td>MOE personnel training</td>
<td>9466</td>
<td>0.1</td>
<td>9466*</td>
<td></td>
</tr>
</tbody>
</table>
| Total                   | 10,617,407                  | 100 | 7,385,854           | 3,231,648           

Compiled from the MOE's Second Five Year Plan, MOE 1982.
* these two figures were not specified in the plan and considered by this author to be current expenditure.
In the second Five Year Plan the overall capital expenditure on education has been estimated at 3 447 million YR. The Ministry points out that capital expenditure has been reduced by 1.4 billion YR because of financial limitations, indicating that when financial problems arise, substantial cuts in the educational budget can usually be expected, again a situation not uncommon in many other countries. In the general sector of education including teacher training we observe that 64% of the total allocation to that sector, and 62% of the current expenditure, is spent on teachers' salaries, of which 91% is earned by expatriate teachers whose salaries are usually double those of their national counterparts. The following table shows how the teachers' salaries were planned:

Table 16: Distribution of Teacher Salaries

<table>
<thead>
<tr>
<th>Year</th>
<th>Yemeni teachers</th>
<th>Expatriate teachers</th>
<th>Teachers paid by aid donors</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Primary Prep &amp; Sec</td>
<td>Primary Prep &amp; Sec</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1982</td>
<td>60660.0 13416.0</td>
<td>496038.2 95335.9</td>
<td>78825.6</td>
<td>74475.8</td>
</tr>
<tr>
<td>1983</td>
<td>63486.0 17784.0</td>
<td>533408.6 112221.6</td>
<td>83462.4</td>
<td>810362.6</td>
</tr>
<tr>
<td>1984</td>
<td>66312.0 22464.0</td>
<td>694278.0 129789.0</td>
<td>83462.4</td>
<td>998305.4</td>
</tr>
<tr>
<td>1985</td>
<td>69966.0 28080.0</td>
<td>817959.1 164937.6</td>
<td>88099.0</td>
<td>1169041.9</td>
</tr>
<tr>
<td>1986</td>
<td>73620.0 34008.0</td>
<td>905796.1 197892.0</td>
<td>88099.2</td>
<td>1299415.3</td>
</tr>
<tr>
<td>Total</td>
<td>334044.0 115752.0</td>
<td>3447480.0 700176.1</td>
<td>421947.9</td>
<td>5021401.0</td>
</tr>
</tbody>
</table>

only 9% 91%

Compiled by the author from the second Five-Year Plan, Education Sector, 1982.

Structure of the Yemeni Schooling System
The present system follows the Egyptian model which prevails in most Arab countries in the Peninsula: the 6-3-3-4+ ladder: six years of primary education, three of preparatory education, followed by three years of secondary education and finally, four or more years of university education. The general level of education prior to university, is duplicated
by the traditional structure of religious education. Each of these levels culminates in a nation-wide public examination leading to a general certificate for the respective level. (cf. Fig. 11).

General education is the responsibility of the Ministry of Education which finances and administers it centrally through general offices in each Governorate. The MOE plans the educational policy; determines the aims and content of education and decides and administers the public examination. Higher education is the responsibility of Sana'a University's administration which is independent financially. The MOE, however, is responsible for those who receive their higher education abroad.
Figure 11:

THE EDUCATION SYSTEM OF THE YEMEN ARAB REPUBLIC

[Diagram showing the educational system with stages from Primary to Higher education, including divisions for General, Science, Religious, Commercial, Agricultural Science, Technical Education, Preparatory, and University of Sana'a or Overseas Study.]
General Education

General Education refers to the main sector of the system that consists of the primary, preparatory, secondary and higher levels of formal academic education. Teacher education will be included here for its close relationship with the general sector.

Primary Education  This level seems to be an extension of the pre-revolutionary educational arrangements; figures for schools and students of the primary level appear in statistical records since 1962/63. The general commitment is to make this level compulsory and provide it as a universal right. The ratio of school-age children enrolled in the first grade of the primary level, is still modest; in 1981, at the end of the First Five-Year Plan, only 29% of the children aged 6, 7 and 8 years, the official ages of school entry in Yemen, were recorded to have been enrolled. The Second Five-Year Plan (1982-86), has set a target for 1986 to achieve 37.8% enrolment at the first grade of the primary level, which will represent 62.6% of the male age-group population and 12.8% of the females of that age-group. (MOE, 1982:28 & 35). The target for achieving Universal Primary Education (UPE) has been set for the year 2002 for males and the year 2012 for females. (Ibid). The available figures for 1982/83, appear to be very encouraging, provided they are accurate; according to these figures in the age group 6-17 the ratio of students to the population in this age group has reached 30.2%, 50.9% of the male age-group and 8.8% of the females. In the age group 6-11, 51% are enrolled in school, 86% of the boys and 15% of the girls. If the numbers of students enrolled in Religious Institutes are added to this, the ratio of total age group enrolment becomes 55.5%, representing 93% of the boys and 17% of the girls. (MOE, 1984d:10).
Preparatory Education  This cycle started in 1962/63, and has expanded rapidly since then. Its main purpose is to prepare children for the next level, both general and vocational, yet it is a self-contained stage as it ends with a general public examination. It falls uneasily between primary and secondary levels. Many attempts have been made to start diversifying the curriculum at this level. When technical education was introduced in 1971 it began at the preparatory level. Teacher education also starts at the preparatory level. In 1976/77 a number of schools at this level were converted into multi-purpose schools in which part of the curriculum was vocational; this attempt, encouraged by the World Bank, was largely unsuccessful and the schools were reconverted to their general academic curriculum.

Secondary Education  This level started in 1963/64, in which a three year course is provided. In the first year all students follow the same general course; in the second year they are streamed into scientific and literary courses, both leading to the General Secondary School Certificate (GSSC), the highest diploma in the Yemeni system below the university. This diploma entitles the holder to enter the university at home or obtain a scholarship for study abroad. The scientific course is the most favoured by students, apparently for the variety of chances it offers for those who can pass the examination and continue their studies in areas such as medicine and engineering. The following table shows the number of students in each stream in four different years.
Table 19: Number of students in grade 2 and 3 of the secondary level by specialisation and sex

<table>
<thead>
<tr>
<th>Year</th>
<th>Second Grade</th>
<th></th>
<th>Third Grade</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Scientific</td>
<td>Literary</td>
<td>Scientific</td>
<td>Literary</td>
</tr>
<tr>
<td></td>
<td>M</td>
<td>F</td>
<td>M</td>
<td>F</td>
</tr>
<tr>
<td>1971/72</td>
<td>446</td>
<td>1</td>
<td>111</td>
<td>-</td>
</tr>
<tr>
<td>1975/76</td>
<td>1384</td>
<td>60</td>
<td>341</td>
<td>20</td>
</tr>
<tr>
<td>1978/79</td>
<td>1323</td>
<td>119</td>
<td>452</td>
<td>118</td>
</tr>
<tr>
<td>1981/82</td>
<td>2618</td>
<td>313</td>
<td>957</td>
<td>149</td>
</tr>
</tbody>
</table>

Sources:  

Teacher Education  
The shortage of Yemeni teachers has been a preoccupation of the system since it was established, and will persist for a long time to come. The first teacher training school for boys, was established in 1963/64 and in 1966/67, teacher education became the only sector available for girls at the post-primary level. These schools are called Initial Teacher Training Institutes (ITTIs) and provide a very general course at the preparatory level. The major part of the curriculum is devoted to general academic subjects. At present these institutes are to be replaced by higher-level schools, providing a more professional education. In 1968/69 teacher training was introduced at the secondary level by establishing general teacher training institutes. The development of these Institutes is considered a high priority by the current administration. A project for establishing a higher institute at the post-secondary level is contained in the second Five-Year Plan.

The Faculty of Education at Sana'a University which was opened in
1973/74 is also playing an increasingly important role in the training of educators. Appendix 4 shows the expansion of Teacher Education between 1963 and 1983.

Higher Education Sana'a University was established in 1970/71 to provide the country with the manpower required for staffing the new institutions. The University started with three faculties: Sharia (Islamic Jurisprudence), Law, Science and Arts (Humanities). In 1973/74 two other faculties were opened: Education and Commerce/Economics. This latter attracts the largest number of students, with between 35 to 40 percent enrolled in this school since 1975 to the present time. In the second Five-Year Plan, three higher professional faculties are scheduled to open: Medicine, Engineering and Agriculture, the first of which (Medicine) was started in the 1983/84 academic year. The purpose of these faculties is to base study in these areas, medicine, engineering and agriculture, on the problems that prevail in the country and to make the curricula in these fields more relevant to the needs of the Yemeni people.

(Sana'a University, 1982). Appendix 5 shows the growth of the number of students in Sana'a University between 1971 and 1983. A large number of Yemeni students are currently studying abroad particularly those studying technical subjects: in 1983, 3,164 students were studying abroad.

(CPO, 1984:253).

Quantitative expansion at the general level
Despite the difficulties and shortages of material and human resources, a remarkable expansion has taken place since the revolution and in particular since 1970, after the civil war. The following table shows the growth of the educational population in the last two decades. For more details of this progression year by year, see appendices.
Table 20: Number of students by level and sex

<table>
<thead>
<tr>
<th>Level</th>
<th>1962/63 No</th>
<th>(% of F)</th>
<th>1972/73 No</th>
<th>(% of F)</th>
<th>1982/83 No</th>
<th>(% of F)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td>61335</td>
<td>2.9</td>
<td>154607</td>
<td>11.4</td>
<td>602212</td>
<td>14</td>
</tr>
<tr>
<td>Preparatory</td>
<td>730</td>
<td>-</td>
<td>7306</td>
<td>1.3</td>
<td>43302</td>
<td>12.3</td>
</tr>
<tr>
<td>Secondary (upper)</td>
<td>-</td>
<td>-</td>
<td>2267</td>
<td>0.8</td>
<td>11984</td>
<td>11.6</td>
</tr>
<tr>
<td>Teacher Training</td>
<td>-</td>
<td>-</td>
<td>333</td>
<td>44.4</td>
<td>1093</td>
<td>38.5</td>
</tr>
<tr>
<td>University</td>
<td>-</td>
<td>-</td>
<td>433</td>
<td>5.1</td>
<td>6872</td>
<td>12</td>
</tr>
</tbody>
</table>

Despite this rapid growth in the number of students attending schools at all levels, there remains much to be done, for the system suffers from many exceptionally serious weaknesses, especially in view of the great investment of finance and human effort so far made; for, as we shall discuss later, the system has to overcome many grave problems of inefficiency and irrelevancy of its content.

Vocational Education

Vocational education in Yemen at present includes commercial, technical and agricultural education. This sector, minimally represented in the pre-revolutionary period, was developed in the early 1970's and the source of the initiative appears to have come from aid donors, in particular China, West Germany and the World Bank. The government has emphasized the importance of this kind of education and considerable attention has been given to it, in particular in the Five-Year Development Plans. Nevertheless, vocational education has remained confused in conception, unpopular with users and ineffective in operation in Yemen as in many other countries.

The development of vocational education over the last 13 years

Commercial Education: a start was made in 1969/70, when a class for commercial education was begun with eight students; the number of classes and students increased at a reasonably steady pace, reaching 25 classes with 427 students in 1981/82; in 1982/83 and 1983/84, the
number of classes is reported to be only 19 in six schools. However, commercial education is still provided in classes annexed to general schools; and in the teacher education school for girls although a project for establishing specialized commercial schools was outlined in the Second Five-Year Plan. Despite the tentative nature of these plans and the small enrolments, the amount of financial allocation to commercial education is considerable: 27.4 million YR for the five years 1982-86, of which 26.2 million is for current expenditure. (see Table 17). 

Technical Education: the first technical school was established in Sana'a in 1970/71, as part of a Chinese-Yemeni technical co-operation programme. At the beginning, the school offered a five year course after the primary level, which was extended to six years in later stages and finally, since 1976/79, the duration of the course has been fixed at three years after the preparatory level. A similar school was established in Taizz in 1979/80, which offers the same three year course. Technical subjects in these schools are highly organized and taught by Chinese teachers, while cultural and general subjects are taught by Yemenis and Arab expatriate teachers. Development of students' interest in technical education appears to be very slow considering the facilities provided for these students. Each school has between 4 and 8 specialized sections with classes of only 11 to 15 students. The teacher/student ratio is made even lower because the Chinese teachers have Chinese translators who are regarded as teachers.

Related to technical education is a new sector called industrial training. Introduced in 1979/80, based on industrial centres which have increased from one centre in 1979/80 to four in 1983/84, and are supported financially by the IDA programme in Yemen. (World Bank, 1979:171, MOE, 1984b). Essentially these centres offer a three year course for a
combination of primary and preparatory school leavers. The second Five-Year Plan for education contains a project for establishing a post-secondary polytechnical institute which was to commence in 1983/84, with a capacity of sixty students per year. (MOE, 1982L). At the time of writing, however, a start had not been made on this project.

**Agricultural Education:** In an agrarian economy like that of Yemen, agricultural education should be an essential element of the system; unfortunately, this area is among the weakest elements of the system. There are only three agricultural schools, the first of which was established in Ibb in 1979/80; the second is the Sirdud Agricultural School, established in 1981/82. The third is the preliminary veterinary training school in Sana'a, started in 1982/83. The latter is essentially staffed and financed by West Germany. Appendix 6 shows the growth of vocational education in terms of schools/classes, students and teachers.

**Religious Education**

Religious education grew out of the traditional Yemeni system which prevailed in the country before the revolution. Immediately after the revolution, this sector was neglected; some believed that the new system would be able to shoulder the whole responsibility for mass education and that a secular system was what the country wanted. Yet the Koranic schools and religiously-oriented schools survived, as did some of the 'Kuttab' schools in the rural areas. There was no mention of them in the statistical sources until the 1970's.

After the civil war, social pressures coming from traditional forces that began to regain their influence in the republican system, combined with the inability of the new system to provide modern schooling for the majority, encouraged the government to take an interest in religious
schools, which are now growing rapidly. In 1968, a department for religious education was established within the MOE aiming at reviving Islamic studies in the formal education sector. In the early 1970's, several attempts were made to establish an independent body for religious education, which resulted in the establishment of the Islamic Science and Educational Board in 1974 and the Chairmanship of the Religious Education Institutes in 1977. The latter is the highest authority responsible for religious education and is now independent, except for a kind of advisory co-operation with the MOE in the area of the curriculum.

The central aim of the religious sector, has been to provide the country with religious leaders and teachers for religious education; but recent developments in this sector seem to go beyond that goal and it has become a rival to the new general educational system, as it has begun to attract more students through financial incentives, receiving considerable support from other Arab countries, especially Saudi Arabia. (World Bank, 1979:171).

Religious schools exist at all levels: at primary, preparatory and secondary levels. There are also two post-secondary institutes in Sana'a and Sa'adah.

The number of religious schools and of Koranic schools has been growing very rapidly since the late 1970's. In 1962/63, there are reported to have been 13 religious schools with 680 students; and 16 Koranic schools with 3,310 students. The religious schools rose to 510 schools with 56,584 students in 1982/83; and the Koranic schools rose to 161 with 10,662 students. The Koranic schools are at the primary level and apparently confined to boys; the religious schools have 42,189 students at the primary level, 18% of whom are female; 3,837 students at the preparatory level, 4% of whom are female, and 945 students at the secondary level, all boys. (MOE, 1984d:11).
**Non-Formal Education**

One of the main concerns of the MOE is to eradicate the high rate of illiteracy in the country, which extends to 87.8% of the population: 75.8% among males and 98% among females. The absolute number of illiterates was estimated in 1982 to be 2,826,405, 1,116,300 male and 1,710,105 female (MOE, 1982a:119). The Ministry of Education has been concerned with the problem of literacy since 1964, when a number of literacy classes were established in the main cities. In 1970, Presidential Decree No 3 concerning the eradication of illiteracy was issued, in accordance with which the 'High Commission for illiteracy Eradication' was established. In 1974, literacy classes reached the rural areas where the real problem is to be found. Literate members of the local community and school teachers were urged to participate in running these classes on a voluntary basis, and some nominal allowances were provided for them. The experiment did not achieve the expected objectives.

Since 1981 considerable concern has been given to this area; in the 1981 UNESCO conference on literacy programmes in the LDC’s, the Secretary General of UNESCO gave particular attention to the problem in Yemen and urged other countries to help. In the 1981/82 plan, a more articulate programme was initiated for the Second Five-Year Plan and a substantial sum of money has been devoted to the campaign: 90.8 million YR for the five years.

The objectives laid down in the plan are as follows:
- to lower the illiteracy rate among both sexes of the age group 10-45 years with special emphasis on females and all adults in the rural areas;
- to launch public efforts in a campaign of self-reliance to eradicate illiteracy on a national scale.
The objectives are not only to provide adults with basic skills in literacy, but also functional skills and knowledge useful in their lives such as:
- agricultural knowledge and skills for the rural inhabitants;
- general literacy knowledge and skills (the three Rs);
- health awareness and basic skills;
- Islamic education;
- training in some basic craft skills;
- women's skills in home economics, child care and needle work.

(MOE, 1982:11-12).

Major characteristics and problems in the system

The educational system, like the socio-economic system, is characterised by a number of critical features and problems which militate against the achievement of most of the goals adopted by the MOE. Yet from the point of view of the need for relevance, these problems may be regarded as a starting point for valid planning.

1. Geographical disparities: despite the ostensible commitment to equal opportunity for education, one may note that the major provinces and in particular the cities of Sana'a, Taizz and Hodeidah receive the biggest share of educational provision. In terms of the number of students, we find that Sana'a and Taizz Governorates account for about 50% of primary, 72% of the preparatory, and 76% of secondary education; if Hodeidah and Ibb Governorates are added the percentage rises to 75, 93 and 95% respectively; the majority of students enrolled, in particular in secondary education, are in the main cities. (cf. Appendix 7). Apart from some Initial Teacher Training Institutes that have been established in other areas, all technical and vocational education is located in these major cities.
This concentration of schools in the major cities has important implications for the availability of educational facilities, such as school buildings and equipment, teachers and school staff.

Many of the schools mentioned in statistical records do not actually exist in physical terms; many of them are only classes attached to other schools, for example, some preparatory classes in primary schools, secondary classes in preparatory schools or vice versa, as is the case in commercial education where classes annexed to secondary schools or to teacher training schools are often recorded as 'commercial schools'.

Many of the schools in the rural areas consist of one, two or three classrooms; many of those which include six classes of students are short of classrooms. In the rural areas even when a building is available, it usually lacks essential facilities such as electricity, water, and consequently any other educational media that would require these to function. Headmasters and teachers with less training and lower qualifications are usually assigned to remote and rural areas.

2. Disparities between male and female enrolments: despite the official commitment to the provision of similar educational opportunities to girls, the number of girls enrolled in schools is still very low and seems to have become fixed at 13% of the general schools population. If one considers that technical, vocational and religious education are almost exclusively confined to boys, the rate of girls' participation becomes even lower. Social attitudes generally do not favour women's education; many people do not see any point in educating girls; at best a primary education may be regarded as sufficient for them. From a policy point of view, lack of schools especially in the rural areas, and shortage of women teachers are
important factors. Despite the fact that at present a great number of primary schools in the rural areas are mixed, and in the preparatory and secondary schools one may find a few girls in each class, the majority of people do not approve of this situation and would prefer to sacrifice the girls' education rather than release them from the strict social control that can be exercised in a society that adheres to rigid segregation.

3. **Duality of the system**: this refers to the rise of two parallel sectors, the secular and the religious. In a country like Yemen with an almost 100% Muslim population, whose modern schools' curriculum devotes about 30% of its timetable to Islamic studies, most of whose learning materials in other subjects are drawn from Islam and the Islamic culture, there seems to be no logical justification for such duality at the lower stages of the school system. It may be justified at secondary level, when students choose options within the general sector: religious studies could be treated as such an option.

In Yemen, however, the religious sector, as mentioned earlier, is not growing in harmony with other sectors; indeed, it is probably inimical to them. This situation is both culturally and politically dangerous: cultural imperialism in the Muslim context cannot be divorced from the political sphere, and the growth of such a parallel system must further promote that polarization of secular and religious issues that has been so developmentally dysfunctional in many Islamic societies. Apart from political considerations, one of the most serious criticisms levelled against the religious sector is that it is economically unproductive and that it is therefore even more expensive and less cost-effective than the general sector.
In a country committed to the goals of national unity and social cohesiveness based on Islamic participative democracy, co-operation and authentic fraternity, such dualism in education, especially in such an essential area, may well hinder the achievement of these goals even if the intention is basically good.

4. Reliance on foreign input: as we have seen in the last section, the system is heavily reliant on foreign financial support and it becomes apparent that the reliance on foreign personnel is increasing despite the fact that the system has been producing educated manpower for over fifteen years. At the university we find that in 1970/71 the number of staff was 93, of whom only 6 were Yemenis. The number rose to 210 in 1977, 61 of them Yemenis. The following table shows how the preparatory and secondary levels are very highly dependent on expatriate teachers, and how even the primary level is becoming more and more reliant on expatriates.
Table 21: Number of teachers in the three general levels, by nationality.

<table>
<thead>
<tr>
<th>Year</th>
<th>Primary</th>
<th>Preparatory</th>
<th>Secondary</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yemenis</td>
<td>Expat. %</td>
<td>Yemenis</td>
</tr>
<tr>
<td>1971/72</td>
<td>3099</td>
<td>47</td>
<td>44</td>
</tr>
<tr>
<td>1972/73</td>
<td>4053</td>
<td>200</td>
<td>62</td>
</tr>
<tr>
<td>1973/74</td>
<td>4651</td>
<td>274</td>
<td>62</td>
</tr>
<tr>
<td>1974/75</td>
<td>5552</td>
<td>221</td>
<td>4</td>
</tr>
<tr>
<td>1975/76</td>
<td>6209</td>
<td>314</td>
<td>4.8</td>
</tr>
<tr>
<td>1976/77</td>
<td>6651</td>
<td>333</td>
<td>4.8</td>
</tr>
<tr>
<td>1977/78</td>
<td>5957</td>
<td>1011</td>
<td>14.5</td>
</tr>
<tr>
<td>1978/79</td>
<td>3785</td>
<td>2065</td>
<td>35.5</td>
</tr>
<tr>
<td>1979/80</td>
<td>2656</td>
<td>4111</td>
<td>60.8</td>
</tr>
<tr>
<td>1980/81</td>
<td>2496</td>
<td>7330</td>
<td>74.6</td>
</tr>
<tr>
<td>1981/82</td>
<td>1513</td>
<td>10187</td>
<td>87.1</td>
</tr>
<tr>
<td>1982/83</td>
<td>2016</td>
<td>11149</td>
<td>84.7</td>
</tr>
</tbody>
</table>

Compiled by the author of the Statistical Yearbooks for 1979/80, MOE 1980
The Second Five-Year Plan 1982, pp. 316-7; the Statistical Yearbook 1982 p. 169; and
1983/84 p.49.

5. Inefficiency in the system: data from the experience of the last decade shows that most of the projected targets have failed to materialise:

Table 22: Comparison between projected number of primary school leavers and actual achievement in seven years.

<table>
<thead>
<tr>
<th>Year</th>
<th>Boys</th>
<th>Girls</th>
<th>Total</th>
<th>Actual</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1974/75</td>
<td>6823</td>
<td>973</td>
<td>7796</td>
<td>8081</td>
<td>103.7</td>
</tr>
<tr>
<td>1975/76</td>
<td>9646</td>
<td>680</td>
<td>10326</td>
<td>9612</td>
<td>93</td>
</tr>
<tr>
<td>1976/77</td>
<td>11778</td>
<td>862</td>
<td>12640</td>
<td>7457</td>
<td>48.4</td>
</tr>
<tr>
<td>1977/78</td>
<td>14219</td>
<td>1188</td>
<td>15407</td>
<td>7457</td>
<td>48.4</td>
</tr>
<tr>
<td>1978/79</td>
<td>17070</td>
<td>1562</td>
<td>18632</td>
<td>8502</td>
<td>45.6</td>
</tr>
<tr>
<td>1979/80</td>
<td>20012</td>
<td>1921</td>
<td>21933</td>
<td>10695</td>
<td>48.8</td>
</tr>
<tr>
<td>1980/81</td>
<td>22722</td>
<td>2224</td>
<td>24946</td>
<td>15771</td>
<td>63.2</td>
</tr>
</tbody>
</table>

Compiled by the author from CPO, Assessment of Manpower Development 1976; and MOE, 1982a.
Table 23 shows that all the targets of different levels and sectors fall short of achievement. Three observations may be made: that the primary targets are closer to being met than those at other levels; that the achievement of the general academic sector is higher than that of other sectors except for the commercial sector; and that the low achievement of the teacher training schools at the preparatory level may be accounted for by the fact that the Ministry of Education is intending to abolish them over the next few years.

Table 23: Comparison between projected enrolment in the first Five-Year Plan and actual achievements at the end of the plan period in 1980/81.

<table>
<thead>
<tr>
<th>Level</th>
<th>Actual 1976/77</th>
<th>Plan target 1980/81</th>
<th>Actual 1980/81</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td>252 726</td>
<td>426 860</td>
<td>414 273</td>
<td>97</td>
</tr>
<tr>
<td>Preparatory:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General</td>
<td>15 619</td>
<td>40 300</td>
<td>25 037</td>
<td>65.2</td>
</tr>
<tr>
<td>Teacher Training</td>
<td>970</td>
<td>3 290</td>
<td>772</td>
<td>23.5</td>
</tr>
<tr>
<td>Secondary:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General</td>
<td>6 050</td>
<td>15 510</td>
<td>9 895</td>
<td>63.8</td>
</tr>
<tr>
<td>Teacher Training</td>
<td>408</td>
<td>1 364</td>
<td>776</td>
<td>56.9</td>
</tr>
<tr>
<td>Tech. Vocational</td>
<td>348</td>
<td>1 095</td>
<td>322</td>
<td>29.4</td>
</tr>
<tr>
<td>Commercial</td>
<td>210</td>
<td>535</td>
<td>530</td>
<td>99</td>
</tr>
<tr>
<td>Agriculture</td>
<td>476</td>
<td>88</td>
<td>13</td>
<td></td>
</tr>
</tbody>
</table>


6. Wastage: to low enrolments must be added a high rate of wastage. Here the term applies to those children who start the cycle and do not finish it at the end of the official period, as well as those who register for the examination and fail to pass it. The rate of drop-out is very high, especially at the primary level, and the effects of the examination make it even worse. One study conducted by Abdullah Al-Kumim, the ex-head of the Supervision Department in the MOE, in 1980, shows that of those children enrolled in the first grade of primary level, only about 25% of the
Figure 12:

Rate of drop-out in six years. Male and Female at Primary Level

<table>
<thead>
<tr>
<th></th>
<th>GRADE 1</th>
<th>GRADE 2</th>
<th>GRADE 3</th>
<th>GRADE 4</th>
<th>GRADE 5</th>
<th>GRADE 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1968/69</td>
<td>718</td>
<td>650</td>
<td>591</td>
<td>501</td>
<td>441</td>
<td>413</td>
</tr>
<tr>
<td>1969/70</td>
<td>702</td>
<td>584</td>
<td>587</td>
<td>487</td>
<td>340</td>
<td>240</td>
</tr>
<tr>
<td>1970/71</td>
<td>696</td>
<td>571</td>
<td>581</td>
<td>404</td>
<td>331</td>
<td>194</td>
</tr>
<tr>
<td>1971/72</td>
<td>682</td>
<td>577</td>
<td>596</td>
<td>396</td>
<td>245</td>
<td>192</td>
</tr>
<tr>
<td>1972/73</td>
<td>676</td>
<td>532</td>
<td>534</td>
<td>393</td>
<td>244</td>
<td></td>
</tr>
<tr>
<td>1973/74</td>
<td>813</td>
<td>392</td>
<td>391</td>
<td>391</td>
<td>192</td>
<td></td>
</tr>
</tbody>
</table>

boys, and 32% of the girls reach the sixth grade (see Figure 12). This study has been confirmed by a similar statistical analysis of the number of children enrolled in the first grade in 1976/77, of whom only 16.6% of the boys and 27.7% of the girls reached the sixth grade in 1980/81. (MOE, 1982a:7). The rate of drop-out in other levels is also high but it is difficult to determine from the available statistics, for there is no study of this phenomenon at these levels. To give a rough idea of the rate of wastage at the preparatory level, in 1976/77, 7750 students were enrolled in the first grade; in 1978/79 only 5819 students (77.5%) registered for the examination. (MOE; Educational Journal, 1982).

To give a clearer picture of the rate of wastage, some examples of the high rate of failure in the final examination are shown in Tables 24 and 25. This phenomenon prevails at all levels and sectors. The examination system has a main examination, which all students registered have to take; those who fail in two subjects are allowed a second chance to resit the subjects they failed. On this basis, in 1978/79, of the 14,124 pupils registered for the examination at the end of the primary level, only 6,502 passed both exams. (MOE, 1979). A more detailed example is provided here for the preparatory and secondary levels.
The following table shows the number of students who entered the examination at the end of the preparatory level in 1976/79, and the numbers of those who passed:

Table 24: Examination results of preparatory level, third grade, 1976/79.

<table>
<thead>
<tr>
<th></th>
<th>Main Exam</th>
<th>Qualifying Exam</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>F</td>
</tr>
<tr>
<td>Candidates</td>
<td>5075</td>
<td>744</td>
</tr>
<tr>
<td>Present</td>
<td>4895</td>
<td>730</td>
</tr>
<tr>
<td>Absent</td>
<td>180</td>
<td>14</td>
</tr>
<tr>
<td>Pass</td>
<td>1827</td>
<td>316</td>
</tr>
<tr>
<td>Fail</td>
<td>3068</td>
<td>412</td>
</tr>
<tr>
<td>Pass as:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of present</td>
<td>38.1</td>
<td>52.9</td>
</tr>
<tr>
<td>% of total</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Compiled from MOE, Statistical Yearbook for 1978/79.

At the secondary level the problem is no less serious, as the following table shows:

Table 25: Examination results of secondary level, third grade by stream and sex

<table>
<thead>
<tr>
<th></th>
<th>Scientific Stream</th>
<th>Literary Stream</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Main Exam</td>
<td>Resit Exam</td>
</tr>
<tr>
<td></td>
<td>M</td>
<td>E</td>
</tr>
<tr>
<td>Candidates</td>
<td>1615</td>
<td>139</td>
</tr>
<tr>
<td>Present</td>
<td>1585</td>
<td>134</td>
</tr>
<tr>
<td>Absent</td>
<td>30</td>
<td>5</td>
</tr>
<tr>
<td>Pass</td>
<td>659</td>
<td>62</td>
</tr>
<tr>
<td>Fail</td>
<td>926</td>
<td>72</td>
</tr>
<tr>
<td>Pass as:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of present</td>
<td>41.9</td>
<td>61.8</td>
</tr>
<tr>
<td>% of total</td>
<td>48.5</td>
<td></td>
</tr>
</tbody>
</table>


Other sectors, except for the Technical and Commercial schools, suffer
from a similar situation: Appendix 6 shows the extent of the wastage problem for which very little explanation has been offered, and no solution has been attempted.

A phenomenon closely related to the last is the high cost per student compared with world standards. In the Statistical Yearbook for 1979/80 the following table was worked out by dividing the school budget of each level by the number of students registered in schools in the same year, and the result was:

\[
\begin{align*}
\text{YR} & \quad \text{US$} \\
\text{Cost per student at primary level} & \quad 1263 \quad 280.7 \\
\text{Cost per student at preparatory level} & \quad 2266 \quad 503.6 \\
\text{Cost per student at secondary level} & \quad 3050 \quad 677.6 \\
\end{align*}
\]

\( (4.5 \text{ YR} = 1 \text{ US$}) \)

(MOE Statistical Yearbook, 1979/80)

If compared with unit cost in other countries this is higher than usual for developing regions. The cost per student at post-primary level almost resembles that of higher education in some developing regions, as the following table shows.

Table 26: Cost per student in different regions of the world

<table>
<thead>
<tr>
<th>Region</th>
<th>Cost per pupil in primary education (US$ 1974)</th>
<th>Cost per student in higher education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northern America</td>
<td>1734.2</td>
<td>2662</td>
</tr>
<tr>
<td>Europe</td>
<td>549.3</td>
<td>1346</td>
</tr>
<tr>
<td>Oceania</td>
<td>325.4</td>
<td>2197</td>
</tr>
<tr>
<td>Latin America</td>
<td>87.0</td>
<td>757</td>
</tr>
<tr>
<td>Asia</td>
<td>78.0</td>
<td>556</td>
</tr>
<tr>
<td>Africa</td>
<td>50.4</td>
<td>2941</td>
</tr>
</tbody>
</table>

This high cost is to a large extent caused by reliance on expatriate staff, whose salaries are higher than those of indigenous teachers. However, if we take the rate of wastage into consideration, we find that the cost per student is even higher than that shown above, and it is worse still if those who drop out or fail the examination lose touch with what they have learned in school, something that frequently happens, especially when the work they do afterwards has no relation to their education.

A paradox therefore appears to be operating in Yemeni education. Despite the fact that educational services have improved in terms of expenditure, better-qualified teachers and more allowances for those students who enrol in vocational and teacher training education both at the University and pre-university levels, the rate of wastage is increasing and the rate of examination success is lower in 1979/80 than it was in 1975/76 (see Appendix 6). Apart from technical education, all sectors, general, vocational and religious, are failing to meet the targets set for them: the number of students in vocational and teacher training education is showing some decline; at the university the number of students at the Faculty of Education has shown a steady decline since 1976/77. (see Appendix 5).

More recently, many people have begun to question the quality of education and the official policy as expressed in the Second Five Year Plan. But it seems that the improvements aimed at in the plan have yet to be realized. As Ba-Abbad observes, "the decline in the standards of teaching at all levels of general education and university is obvious and felt by all people involved". (Ba-Abbad, 1984:3).

The high rate of wastage, the poor quality of the school output and reluctance of children, in particular girls, to enrol in schools and of
students to enter teacher training, vocational and technical schools have been attributed to a number of factors which may be grouped in two categories:

1) External factors which include socio-economic elements:
   - many children engage in economic activities with their families; other students, most of whom marry at an early age, try to earn a living while studying.
   - migration to other countries and the national labour market in urban centres attract large numbers of youth.
   - for this economic reason and other socio-cultural reasons, many people, especially in the rural areas, do not find it useful to send their children, and girls in particular, to school.
   - many children are not actually interested in schools and are more attracted by TV, sports and other forms of entertainment that are now available.
   - lack of support for children who do attend school from the family most of whose members are illiterate, from the media and from the society in general.
   - students' reluctance to enrol in vocational schools, particularly teacher training institutions, is attributed to a number of economic factors as well as the low status of such professions.

2) Internal, educational factors which include the following:
   - the quality of the teachers, which almost all sources see as the main problem. The teachers are criticized on two grounds: that the expatriate teachers, who are reasonably qualified, are less aware of the Yemeni environment and the needs and interests of the Yemeni children. Nor are they all committed to their vocations; the Yemeni teachers in many cases, are not well-trained and have little interest or commitment to the profession.
- Shortage of well-trained school administrators, consultants and inspectors.
- Shortage of school buildings, facilities and equipment, all of which affect the quality of education.
- The content of the curriculum and the examination system itself.

The area that is receiving most attention at present is teacher training. There is also some support for in-service training for headmasters and inspectors. Despite this, as the school population increases and the number of Yemeni students enrolling in teacher training institutions decline, the reliance on expatriate teachers will persist for some time to come.

There exists, however, an even more serious and pervasive factor which may account for the high rate of wastage and the declining quality of education, and which, if resolved, may in turn provide a solution for many other problems connected with cost, efficiency and attitudes to vocational education and the education of women: this factor is the quality and relevance of the curriculum. Many of these problems prevailed before the revolution and their persistence indicates that education has failed so far to change social attitudes which are intended by the new socio-political system. As Al-Ani (1978:2) points out, "to change the attitudes of people, to transform the society and move from traditionalism to modernity, appears to be among the great challenges to educationalists and particularly, to the curriculum developers", for, as he notes from his experience in Yemen as a curriculum planner, there is a dichotomy between the traditional and modern values, social backgrounds and modes of thinking.
It is the contention of this work that the question of relevance in the curriculum has not been given due consideration, and that much of the current spate of interest in curriculum issues is superficial and has not touched upon the core of the inherited problems and dichotomies in the area of attitudes and values. The flaws in the process of curriculum planning as practised in Yemen, and the problems of the content itself are numerous. The following chapter will be devoted, therefore, to a critical examination of the existing curriculum.
CHAPTER SEVEN

A Critical Analysis of the Existing Curriculum in Y.A.R. Official Plans and Actual Practice

This chapter examines the present curriculum of General Education to determine areas of strength and weakness which may be taken as the point of departure for developing more relevant curricula. The main objective here is to understand people’s perception of the curriculum both at the official level and public and school level; to identify what flaws exist in the process of curriculum planning and development and in the organization and orientation of the content of the curriculum.

The term 'curriculum' in the Yemeni context

The concept of the curriculum in Yemen is vague and many of those involved in the process of education are not quite certain of its meaning. To the majority of teachers and students, the term denotes the textbooks that are prescribed for the student at a certain level and in a certain grade; the outline of the syllabi and the lists of the topics to be taught are regarded as the curriculum. As one Yemeni writer puts it, "It has become printed in peoples' and teachers' minds that the curriculum is only the subject matter taught to children". He refers to some typical teachers' comments: "we have finished the curriculum this term or year", or "we still have to complete such and such topics of the curriculum" (Ghalib, 1980:120). Indeed, many headmasters, teachers and students often complain of 'delays with the curriculum', meaning that textbooks often reach schools late in the school year. Even the official documents and reports dealing with curriculum issues and the official machinery responsible for the curriculum, that is the CBIAD (Curricula, Books and Instructional Aid), concentrate mainly on the subject matter to be taught.
and the textbooks that contain the content of the subject.

Since, in practice therefore, curriculum in Yemen means the prescribed subjects and the topics to be taught, all of which are included in the syllabi and the textbooks, in my analysis of the Yemeni literature I shall use the term curriculum in this sense. When it implies a different connotation, this will be specified.

As is apparent from the chapter on the Yemeni educational background, at the time of the revolution, Yemen inherited no formal educational tradition. However, a powerful informal tradition existed in the form of ideas and values, customs and skills valued in everyday life and handed down verbally from generation to generation, either on an individual and familial basis or through the traditional 'Koranic' schools.

The formal curriculum currently under revision in Yemen, was imported from Egypt after the revolution; Egyptian influence has dominated the Yemeni educational system virtually until the present day. However, present-day curriculum planning is characterized by a determined attempt to increase Yemeni input into the curriculum, both in process and in content. This attempt may be referred to as 'Yemenization', and since this is a term in frequent use in the Yemeni educational context at present, a note on its origin and application follows.

Yemenization of education – a move towards relevance

The term 'Yemenization' implies the reorientation of the overall educational system to Yemeni reality - the content to be based on conditions in Yemen and the system staffed by Yemeni personnel. This process has undergone several different phases, which seem to have close
links with changes at the political level.

Some attempts to create a Yemeni educational cadre and develop Yemeni textbooks were undertaken after the November 1967 change of political leadership. At the same time a Yemeni educational cadre was developing which began to participate in decision-making and planning. Some aspects of the curriculum now became unacceptable in the view of this new Yemeni consciousness, especially in the areas of religion, Arabic and social studies. In the early stages, the argument was that the curriculum was irrelevant, since its contents, by which was meant the textbooks, contained many topics, items, examples and names which are alien to the Yemeni reality and the Yemeni environment.

Besides this new Yemeni consciousness and the desire to improve educational practice, a new source of influence came onto the scene. In 1973, an agreement was signed between YAR, UNDP and UNESCO for the establishment of a project to support the MOE, improving the efficiency of the system and the quality of its content.\(^1\)

**Current Provision for the School Curriculum**

Available evidence suggests that very little provision has been made for curriculum reform that would mean real changes in the content of education. The Department responsible for the curriculum is still only a small section of the Ministry and is poorly organized and staffed.\(^2\) A more positive step taken recently is the establishment of the Centre for Educational Research and Development in 1982/83, a section of which specializes in curriculum studies. At present, however, it is extremely difficult to provide any kind of assessment of this Centre, which as yet has barely begun to function.
With regard to curriculum reform, three major attempts have so far been made. Curriculum policy was initiated around 1970, but the real action only began during the Three Year National Development Programme 1973-75 in which an attempt was made to revise the primary school curriculum, and some syllabi and textbooks were rewritten. (World Bank, 1979:170).

The second attempt came with the First Five-Year Plan for 1976-81, during which the whole curriculum was revised, aims and syllabi were restated and textbooks were rewritten, especially those of the preparatory level. The third phase came within the Second Five-Year Plan 1982-86. In preparation for this plan, again the whole curriculum was revised, aims and syllabi were rewritten and some changes in the area of textbooks were recommended, some of which were carried out during the first year of the plan, 1982-83.

The outcome of these efforts and of the time and financial resources that have been spent during the last ten years, appears to be minimal; most of the changes hoped for are still far from being realized. The quality of education in Yemen is commonly regarded as being in a state of constant decline and the rate of drop-out and of failure in examinations is increasing.

Since the early 1970's, a national educational policy for Yemen has been taking shape. However, although more authentic and serious attention has been paid to the curriculum, there does not seem to be a set of common, well-defined principles to inform the content, nor a systematically planned strategy that would guide successive attempts at curriculum
reform. The state of affairs in Yemen is similar to that described by a Nigerian administrator, (quoted in Bray, 1981:73) "An outsider may assume that we have a policy. But very often we have no policy. Everything is done on an ad hoc basis." In Yemen there is no co-ordination between the Departments responsible for the curriculum. "There is only fragmentation and the current attempts to modernize are individual and separate efforts," in the words of the Director of the Unesco Project. (Interview).*

Criticisms of the existing Curriculum

Despite the fact that awareness of curricular issues is very limited, many people have firm ideas of what they expect the school to offer for their children and a number of criticisms have begun to be heard, especially in the last five years(3) Public concern expresses many sound misgivings about the curricula; the fact that these are not expressed in educational or psychological jargon in no way invalidates the depth of their perception. There is a concern with the relevance of content, to the Yemeni environment and with the suitability of the material to the children's level of maturity. Other criticisms focus on the poverty of resources, administrative inefficiency and pedagogic inadequacy.

The reliance on Arab educational experience and curricula has been criticised on the grounds that the curricula of most Arab countries are themselves irrelevant to present developments in the field of education and to many aspects of everyday life in modern times. A symposium on the development of learning and training curricula in the Arab world was held in Sana'a in 1984, in the course of which it became apparent that the

* All interview material referred to as above, is taken from the tape-recorded interviews collected in the course of field-work for this thesis, 1984.
present approach to curriculum issues and content are badly in need of updating. In this symposium, the theme of Basic Human Needs was introduced, especially Maslow's theory as a basis for the development of learning and training curricula. (Athawrah, 5 April 1964:5). Further criticism of Arab curricula is offered by a Yemeni educator, writing about teacher education, who describes vividly the condition of Arab education and how the curriculum is conceived, planned and presented in our systems. "The curriculum in the Arab countries is planned and presented by the Ministry of Education, by experts and officials, to the teacher to implement. This situation robs the teacher of creativity, enthusiasm and enrichment. Reliance totally on these centrally designed and written textbooks makes the teacher and learner alike, come to believe that truth and important knowledge are embodied in the textbook, hence they are bent on studying it by heart in preparation for the examination in order to obtain the certificate which ensures a job." Referring to curriculum planning in other countries where students, teachers and parents are involved in the planning and development of the curriculum, and how curricula can be geared to different realities within countries, the writer concludes that "meanwhile, in the Arab countries, we find that curricula are unified for all parts of the country and require the child to learn all the subjects" (Ghalib, 1984:6).

Many of the criticisms levelled against the Yemeni system of education, are therefore criticisms of the features the system shares with those of other Arab countries; a bias towards the academic and a prejudice against vocational content; centralized planning which limits participation; lack of congruence with the socio-economic environment and criticism of the reliance on foreign input in terms of materials and personnel. All these difficulties are compounded in the Yemeni case, by lack of resources and
trained personnel.

The conditions referred to in the criticisms quoted in this section may become clearer from a closer examination of the process of curriculum planning in Yemen, and of the content of the curriculum which is contained in the two following sections.

The Process of Curriculum Planning and Development

In this section, I will attempt to trace the process of curriculum planning and development, noting how decisions are made, who makes them and on what basis; how aims and objectives are formulated and translated into content; teaching/learning material, activities and strategies of teaching.

1 Educational policy and aims of education

Educational policy, together with the aims of education and the aims and objectives of the curriculum, is formulated, planned and translated into content, at the higher level of the system, i.e. by the Ministry of Education. The basis on which decisions are made and aims are formulated seems to be of a political and administrative nature, involving normative principles of what the leaders feel ought to be taught rather than what is needed and what can be done. Throughout the documents concerning educational policy and in the statements of aims of education, the necessity to make education relevant to regional needs, to socio-economic development and to the needs, interests and level of development of the children is repeatedly stressed. However, there is no sign that such aspirations are being translated into practice on any significant scale.

The 1974 Act of General Education, in which the general aims of education and aims and content for each level are stated, still represents the
foundation for present educational practice. All documents refer to the Act; most officials claim that it is still the core source of any development in education. When the Assistant Director of the UNESCO Project was asked in an interview about the sources of educational aims and how the latter are formulated, he said, "all you have to do is rely on the 1974 Act and no other source". The Head of CBIA Department asserts that the Act is 'the law', and that apparent divergences in subsequent statements about the aims of education, are merely reinterpretations, sometimes only personal opinions of individual officials. (interview).

The Act was formulated by the Ministry of Education, endorsed by the Government and then issued in the Commanding Council Decree No. 22 in 1974; thus it represented the official view of what education is and what it should do.

It seems that both the general aims of education and the aims and objectives of the curriculum are formulated by experts, often based on their own ideas and opinions, which are usually influenced by current political orientations of the country in general and of the educational system in particular, rather than on the objective socio-economic and cultural reality of the country, the needs and abilities of the learner or even the capacity and resources of the system itself.

A report about curriculum improvements in the late 1970's presented by the UNESCO expert, Al-Ani, outlines some of the changes that occurred during that time; "Based on the social philosophy of the Y.A.R. and derived from the educational policy adopted by the Ministry of Education, the expert has formulated aims and objectives for the three stages of education - primary, preparatory and secondary. These aims and
objectives attempt to specify the purpose of each stage and the foundations for the courses of study suitable to the stage, the subjects to be taught and the contents to be selected for the attainment of the educational goals..." (Al-Ani, 1978:4). This account implies that the aims and objectives are based on national philosophy and that they therefore provide the criteria for the selection and organization of relevant content and methods.

A similar process seems to have taken place at the time of preparing for the second Five-Year Plan. A report was presented by another UNESCO expert in curriculum, Khalil, which begins with an introduction to the theory of curriculum, referring to the concept and the recent developments; the social, economic, philosophical and psychological foundations on which curriculum planning is to be based, although in reality, a shift appears to have taken place from this broad perspective to a far narrower set of sources for curriculum planning. The expert put forward in his report the following elements as being the bases for planning the Yemeni curriculum:

1. The Islamic religion with all its values, concepts, moral and practical principles;
2. The National (Arabic) culture and affiliation with the Arab nations;
3. The Yemeni environment with its natural resources of wealth and beauty;
4. The aims of education; the 1974 Act; and the Yemeni educational policy;
5. The Five-Year Development Plan;
6. The reports available at the MOE and the UNESCO Project, on education in general and the curriculum in particular since 1962. (Khalil, 1961:4-5).

In an attempt to obtain a more elaborate view of the process of policy-
making at this level, I discussed this aspect with the Director General of
the UNESCO Project in the MOE, Abu Bakir, who was a key figure in
formulating the Second Five-Year Plan for Education. Abu Bakir points out
that the general aims of the educational plan are essentially based on:

1. the aims of the first Five-Year Plan and the results of its
evaluation;
2. the general orientation of the state's national policy as derived
from directives coming from the Central Planning Organization;
3. opinions of the MOE technical staff - the Minister, the Deputy
Minister and Heads of Department, about the problems they
experienced during the implementation of the last plan;
4. the educational policy of the country, relevant aspects of the
Constitution, the Act of General Education and the National Charter.

These bases provide the planner with 'indicators or parameters and long-
term objectives...we put these things (sic) in the form of somewhat vague
objectives and then call upon the technical committee responsible for the
plan, which is headed by the Deputy Minister and includes Directors of
Planning and Statistics, and the Technical Affairs Department'. He adds,
"It would have been much better if these things were put before a general
public conference or even discussed through the media, for a plan in the
formulation of which a large number of people at all levels and from
different parts of the country take part becomes a popular plan
representing the demands of the people". (interview).

The obstacle most frequently referred to by Abu Bakir and other
interviewees is the severe shortage of resources and in particular, the
shortage of Yemeni expertise. This factor does not allow for public
discussion on a wide scale, yet a thorough understanding of the
educational issues and commitment on the part of the available personnel may be more important than the amount of material resources and the number of people involved in the process. As has been noted, the plans contain frequent references to the social philosophy, to consideration of the reality of the country as a Muslim and Arab country and as an agricultural economy and to the fact that children's abilities and needs are to be considered, yet none of these sources suggests what is meant by the social philosophy or what has been done for the learner.

As far as the curriculum is concerned, the interview with Abu Bakir shows that the same process described by Al-Arai above has been repeated. Abu Bakir rightly raised a criticism of the first plan, "In the first plan they said that the curriculum would be developed and improved, and internal efficiency increased but without saying how. This time we started by determining the aims of each stage, clarifying and specifying the aims of the primary, preparatory and secondary levels. On the basis of these aims, we turned to the existing textbooks, examining them to see what is Yemeni and what is not; whether the book is suitable to environmental conditions, to the people who are using it; whether we need to change the book or not, to improve it, revise it or have a new book written. From this kind of evaluation the plan for the curriculum specified:
- new books to be compiled;
- books to be revised and rewritten;
- cost and time were discussed and specified. First priority to be given to the 'Yemenisation' of science textbooks, which are still either Egyptian or Saudi". (interview).

The foregoing description of the process of policy-making and aims formulation pinpoints a flaw which may be one of the major factors
contributing to irrelevancy in the curriculum. This flaw is contingent on the fact that the aims of educational policy as well as the aims and objectives of the curriculum and even those of specific levels of schooling are to a great extent based on political considerations and shaped by the views of administrators at the Ministry level. They are formulated by experts virtually on an individual basis, some of whom may have very little knowledge, let alone experience, of Yemeni society and environment, especially when the lack of accurate socio-economic data about Yemeni society is taken into consideration. The insufficiency of this data renders suspect the assumption that a coherent Yemeni 'social philosophy' exists, there is not even an outline of such a philosophy that might guide educational planners in their works. Islam, might provide a philosophical perspective, from which an educational philosophy can be derived. The National Charter deals with some essential socio-political elements and the national development plans analyse the most important socio-economic trends in the country. These sources, however, in their general form, do not provide specific guidelines for educational policy.

2 Curriculum planning and development

The previous section states that the general purpose of education and the aims and objectives of the curriculum are formulated at the highest level of the system; that these aims are often of a general political nature, in the formation and moulding of which professional educational personnel play no role; that consequently the gap between intention and reality is very pronounced. At this stage an attempt will be made to find out how these aims are translated into content and by whom; and what other inputs are involved in this area.

As in most documents of this nature, the general aims of education and the
broad outlines of the curriculum plan appear to incorporate sound educational principles. However, at the stage of laying out the syllabi and developing the material of the curriculum, a serious flaw in the process becomes apparent, that many of those who undertake the task of making specifications and writing the textbooks are not fully aware of the aims of education to an extent that would enable them to embody such aims and principles in the syllabi and material they select.

When I asked the Head of the CBIA Department how the department ensures that the content of the curriculum is related to the aims and objectives of the school, he said, "Those who compile the textbooks or make the curriculum plan (who write the syllabus) for any subject are acquainted with the subject-matter. In addition we inform them that there is an educational policy to which they should adhere and they are instructed to follow what is included in the aims of education of the 1974 Act of General Education. All specifications set and all books compiled, of course, come back to us here in the office to be put within the framework of the educational policy and the Act of General Education". (Interview; my italics).

This account shows that acquaintance with the subject-matter is probably more important than anything else in the curriculum; the members of the panels undertaking the task of syllabi and textbook writing are only informed that there is an educational policy and that general aims are to be considered and that only after the work has been produced, may it be examined for its relationship to policy and educational aims. Considering the capacity and organization of the CBIA Department and the procedures through which such tasks are accomplished, it appears unlikely that the relationship between the aims of education and syllabi and textbooks is
established in any formal sense.

The process of syllabi and textbook writing goes through two distinguishable stages; in most cases each separate stage is carried out by different people. In the first stage a panel is appointed for setting the syllabus and specifications for a certain subject. The panel usually revises the existing syllabi and suggests the changes required in terms of the topics that should be taught; some topics or parts of a topic may be removed and/or replaced by others.

This panel is usually composed of university teachers specialized in the subject concerned, subject advisers and consultants working in the MOE, most of whom are expatriates and subject specialists usually working in the CBIA Department. The panels are appointed by Ministerial decree, in which tasks are specified and the members are named, always on a temporary basis. (MOE, 1980c; 1980d)

Members of these panels as well as of the panels undertaking the task of textbook writing, which are formed by the same procedure, receive allowances for fulfilling the prescribed tasks, apart from their official salaries. This applies even to the members of the CBIA whose everyday work is concerned with the curriculum, which indicates that such tasks are outside these peoples' normal responsibility and that the latter responsibility is by implication an administrative one. It is significant that the rate of the allowance is determined by the level at which the text is aimed and the number of periods the subject occupies in the weekly timetable, rather than by the quality of the work or the complexity of the subject-matter. (6)
At the stage of writing textbooks, some different approaches may be considered. The MOE may organize a competition for writers interested in compiling textbooks, so as to attract the best writers. But often a group or a panel, usually composed of two or three people, fulfils the task. Despite the fact that official data show that a large number of people are involved in the process of revising and writing school textbooks, other sources indicate that some modifications of the numbers also take place. Panels undertaking the revision and writing of textbooks usually include only two or three people. The Head of the CBIA Department asserts that an experienced teacher, a subject consultant and a university lecturer specialized in the subject compose a textbook-writing panel.

To get a clearer picture of how the material (textbooks) is developed, written and delivered, I asked the Head of the CBIA Department to describe the process through which the textbook goes from the stage of specification until it reaches the school and how its suitability (relevance) is ensured. He replied, "In fact there is more than one way to create the school textbook. We find that from the educational point of view, to form a committee is the most suitable. This usually includes the field educational adviser, an experienced teacher from the field with consideration to the academic aspects, we involve Sana'a University and its specialized lecturers in the subjects. The committee becomes a mixture of these, the academic knowledge combining with field experience, to ensure the maximum effectiveness of the books. We always apply for the endorsement of the committee by a Ministerial decree. Then, if we find, which often happens, that the book needs revision in terms of its language, we hand it to one of our staff specialized in language. If the revision is an academic one, we give the book to a specialist in the subject to have a general look into its material, who then gives us his opinion."
about the book and the extent to which it is suitable or not. When the composition of the book on this basis is completed it is sent for printing. The book then is put on an experimental basis for one year in schools. We try to distribute questionnaires about the book by which to survey teachers' opinions about it or the Inspectors themselves during their visits to schools give us their opinions based on what they have heard about the success of the book, about the errors in the text to be amended or corrected or rewritten for the following year". (interview).

This account provides a very honest and significant, if somewhat sketchy, picture of the process of curriculum planning, development, implementation and evaluation. A number of points may be discerned:

- Firstly, the process of curriculum planning and development, like the policy-making and aims formulation, is dealt with at the central level in almost complete isolation from both the professional and practical levels. Even the educational consultants and advisers are officers working in the MOE office; the experienced teachers to whom the account refers may not still be in contact with school life.

- Secondly, the emphasis on the academic subject-matter, which reflects peoples' perceptions of, and attitudes to the curriculum, needs no comment members of the panels are all specialists in the subject. Although textbooks include assessment questions at the end of each topic and section, some of which are not much different from the final examination questions, there is no attempt to involve teachers, teacher-trainers, headmasters, evaluators or psychologists, as would be required if the curriculum is to be drawn up in accordance with childrens' level of development and maturity. It could be argued that the people appointed may have acquired sufficient experience to give them authentic educational insight to produce suitable material, but even if this argument
is accepted, the way the process is organized and carried out does not allow for the accumulation of experience that would ensure continuity and relevance in the material. For instance, apart from the Head of the CBIA Department, who is overloaded with administrative responsibilities, the panels are only temporary; their members are commissioned to fulfill a specific part of the task within a certain span of time, often a completely different panel is appointed to complete the task. Even more disruptive in its effect, is the fact that most of the members of the panels are expatriates, who leave before the work is finished or put into practice.

Thirdly, the account indicates that there is no specific framework for the process, nor are there any systematic procedures or defined criteria to be followed when the material and textbooks are produced and evaluated. The textbook may be completed successfully, although in many cases it is not; if not, it is revised, either linguistically or academically by another person or team. The lack of evaluation formulae is another major flaw in the process. Evaluation depends on inspectors' casual observation and the personal opinions they form of teachers' impressions of the textbook; often these impressions take account only of the factual and linguistic errors in the text. Furthermore, the process is almost entirely self-contained: there is no liaison with curriculum work between subjects.

To provide a more precise and concrete picture of the process of curriculum improvement, and to detect the flaws between intention and action which may be the source of much irrelevance in the curriculum and thus detrimental to the quality of education in general, I will examine in some detail a specific phase of curriculum reform. Despite all its flaws and weaknesses, the plan for curriculum improvement undertaken as preparation for the Second Five-Year Plan, 1982-86, is the most adequate educational programme available so far in the Yemeni system. It offers a
good picture of the existing curriculum and the attitudes to different areas of study, and provides an outline of the curriculum development process and those involved in it.

3 The revision and improvement of the curriculum

In preparation for the second Five-Year Plan, the whole curriculum, general and vocational, of all stages below university level, was revised, and a report on the revision was published by the MOE in 1961. Panels were organized to deal with each subject of the curriculum at all levels. Each panel, in the case under analysis, involved the UNESCO expert, Khalil and the Head of the CBIA Department, who are both members of all the panels which took part in this revision. They were joined by one or two subject experts to form each subject panel. The panels, so constructed, dealt with each subject on its own, and there is no indication that the relationship of each subject to other areas of the curriculum was considered. The procedure used in the panel discussions is not clear. However, at the beginning of the report on each subject the following statement is repeated: “The information provided herein about the subject, is the substance of the inquiry, search and deliberation which took place in the meetings between... (states the names and official position of the members of the panel).” (Khalil, 1961). The information about each subject was presented in a very brief and general format, subject by subject. In each subject the textbooks of each grade and level which were due for revision, were discussed and recommendations were made. Here I will summarize the essential aspects of what was recommended in Islamic Education, Language, Science and the practical activities.

A) Islamic education

(i) The primary level: “all the books used in this level are Yemeni except for two prescribed for the fourth and fifth grades, which are Egyptian. The
Yemeni books however, require urgent reconsideration in the future and may need to be rewritten.” The Egyptian books are described as not sufficient to achieve the aims of the curriculum, and it is claimed that they do not match the modern curriculum.

(ii) The preparatory level: “books of this level are all Yemeni, with some limited improvements that had been introduced in a previous revision, but they need reconsideration with a view to further improvement in all aspects, particularly in style and methods.” (p.13).

(iii) The secondary level: the same statement made above is repeated here.

Recommendations:
For the book prescribed for the fourth grade, “a panel composed of the Head of the Curriculum Department and the Head of the Religious Affairs Department has been formed to compile the book. The panel, we were informed, is about to finish the task”. The same people and descriptions apply to the fifth and sixth grades. Of the earlier grades, only the first grade was mentioned, “in our opinion, about two thirds of the book are unnecessary and this places a heavy burden on the children. This part should be abolished or improved by concentrating on the functional aspects. A group should be set up during 1961/62 to revise this book”.

B) Arabic language

(i) The primary level: “books at this level are completely Yemeni, except for the story for the fifth grade which does not achieve the aim desired. The rest of the books need some revision and evaluation for future improvement.” (p.15).

(ii) The preparatory level: some of the books have been Yemenised and described as ‘suitable’. Others, especially ‘grammar’ books are still being printed or even compiled. “The story book of the first grade is not suitable; that of the second grade is suitable and that of the third grade is suitable, but too long.” (p.15).
(iii) The secondary level: "books of this level, (12 books) are not Yemeni. These books need to be recompiled during this year and the next (1981, 1982). Books in current use are Egyptian and do not match the curriculum nor the Yemeni environment in some of their topics and the examples they provide."

Recommendations:
The general tone of the recommendation is to urge the authors to finish their work as early as possible. The panels compiling these books and those who were to revise them before printing, were named. For the secondary level, it was recommended that three groups should be set up to compile the books required: one for reading and literature, one for grammar and one for rhetoric. (p.16).

C) Science
(i) The primary level: "most of the books at this level are Yemeni but they are 'weak' in their composition, concentrating basically on the academic aspects and neglecting the practical and experimental aspects. Some of them are very short - mere summaries." (p.24). The report refers to the Natural and Social Environment book for the first and second grades which has been referred to in the section on social studies.
(ii) The preparatory level: "books at this level are Yemeni, compiled recently, except the Health Education and Nutrition book for grade three, which is prescribed but not available." These books, like those of the primary level, are 'weak' and need reconsideration. (p.24). The report describes the books as very long, which makes it impossible to cover all the topics in four periods a week, especially when this time allocation includes health education and nutrition. Then the following observations are made:

1. "These books depend on summaries quoted from books of other Arab countries;"
2 The academic aspects are dominant in these books, whereas students need some concentration on practice and experimentation;  
3 They use only the Arabic symbols and not the Latin as is the case in other Arab countries. It would be better if there was a unified Arab policy. It is better to introduce these symbols;  
4 In health education the terms and concepts used are not explained, which is very necessary in our opinion."

(iii) The secondary level: "the books at this level are not Yemeni, but Egyptian, replete with examples drawn from the Egyptian environment." (p.25). Therefore urgent action is called for to compile alternatives which would match the new curriculum in Yemen whose topics and examples are drawn from the Yemeni environment and which would consider its characteristics and needs.

Recommendations
The CBIA was to consider the recompling of the primary and preparatory level textbooks during the second Five-Year Plan. It was to construct a questionnaire to obtain teachers' and consultants' opinions about the subject as feedback for evaluating the books. A panel for compiling 'Health Education, Grade Three' was to be set up. The Department suggested that the consultant for the subject, a secondary school teacher and a University teacher specialised in the subject, should carry out the task and the specialist for the subject should represent the Department in following this up. (p.26).

As for the secondary level, the report states six points which I will quote here for their importance not only for this subject but for other areas of the curriculum. With regard to these books, the CBIA Department suggested:

1 "The final aim of the CBIA is to produce Yemeni books for this level
and this is to be done during the Five-Year Plan;
2 To start preparation for this ultimate aim in 1981/82 as the time and budget permit;
3 The Egyptian books should remain in use in 1981/82 unless the department should manage to produce one or more books before then;
4 During this year, letters and/or delegates should be sent to other Arab countries, 'advanced' in this area, to study their textbooks in Science and to bring back their books for the secondary level to reflect on them and to use them as models;
5 Books brought from Arab countries are to be studied by a committee to be set up for the purpose. From these books the most suitable and those nearest to the Yemeni curriculum and its specifications, are to be chosen. Then these books (those found suitable), are to be imported from the country concerned, to be used until new Yemeni books are produced, which may be compiled in the light of these imported books;
6 The books to be brought from abroad should be accompanied by teachers' guides or even summaries that would help teachers, most of whom are not properly qualified in their work. (p.26).

D) Practical fields of study
Under this heading I will discuss what the report has to say about Physical Education, Home Economics, Art and Music.

(i) Physical Education: the report pointed out that a start is being made in Yemen to introduce P.E. in schools; however, more attention should be given to it. As for the curriculum, it stated that there is a curriculum written three years ago. It has no general aims and exists in note form. There are no books or notes about how this subject should be taught. Such books, however, are available for teacher training. It was recommended that a curriculum for this area should be created. The ultimate objective
of the CBIA is to find ways of creating a Yemeni curriculum for P.E. during the second Five-Year Plan and advice and models to be sought from Alesco and UNESCO. (p.37).

(ii) Home Economics: this area is discussed under the heading, 'Womens' Education'. The report points out that although girls study the same curriculum as boys, this subject is related to girls' education. It states that "there is the beginnings of interest in Yemen in teaching Home Economics to girls, but the area needs more concern and organization. A curriculum prepared by a specialist some time ago, is in the form of lists of topics to be taught and methods of teaching." The second Five-Year Plan adds that no general aims have as yet been compiled for this subject. (MOE,1982a:174). It was recommended that consultants for the subject should make use of the books prescribed for Teacher Training, and that help should be sought from Alesco and UNESCO in the process of developing a Yemeni curriculum for the subject by May 1981. (Khalil, 1981:50).

(iii) Art Education: it was reported that no curriculum existed for this subject in Yemen - there was a plan which was neither complete nor suitable. A curriculum was to be developed, advice and help to be obtained from the same sources mentioned above. (p.37).

(iv) Musical Education: the report commenced by referring to the importance of this area, indicating that while music has been taught to some extent, there is no fixed time allocated to music in the timetable. As far as the curriculum is concerned, the report points out that a curriculum exists at the primary level, though not up to the required standard. "It is not in use at present, musical education is provided at this level only in the form of extra activities." At the preparatory level there is a curriculum, though not complete. At the secondary level there is no curriculum, nor any time allocated to music. It is recommended that "a
Yemeni curriculum for musical education is to be developed for all levels.” (p.54).

4. The Main Features of the Process
The foregoing description of the process of curriculum improvement may help to clarify how curriculum change takes place, how it is handled and what flaws are involved in the process, what the general attitudes are towards the content of the curriculum in different areas and what is the current situation with regard to the curriculum and what the future aspirations are. It is possible to isolate a number of features and flaws in the way the curriculum is handled:

a) The basis on which the overall revision was undertaken seems to be no more than the opinions of those who carried out the task, the UNESCO expert, the Head of the CBIA, an educational consultant or adviser or both, the latter specialists in the subject concerned. Other groups which might have had an original or interesting contribution to make, are excluded.

These opinions, moreover, appear to be the result of 'round table' deliberation rather than field investigation or of data analysis, as there was no mention of such sources of information in the report.

b) The phrases which are repeated throughout the report concerning the suitability or otherwise of textbooks suggest that if the textbook is Yemeni it automatically justifies itself, and if it is compiled abroad, it automatically becomes unsuitable or irrelevant. Many Yemeni textbooks are recommended for revision and future improvement but only on the grounds that they are mere copies of the Egyptian books previously used throughout the Yemeni educational system. Many of the Egyptian textbooks have been designated as unsuitable on the grounds that they use topics and examples drawn from the Egyptian environment. By implication, the textbook that draws its topics and examples from the Yemeni environment,
regardless of what topics and which part of the Yemeni environment, automatically becomes suitable. For example, a Yemeni book would replace references to 'Cairo' with references to 'Sana'a'; would use the Yemeni Riyal instead of the Egyptian pound; would contain a picture of a Yemeni citizen wearing a 'jambiya' (traditional Yemeni dagger) instead of a picture of an Egyptian peasant. In other words, to change the textbook merely implies to exchange a few superficial facts and images for other facts and images which may be no more conducive to a questioning and discovering approach to learning than the original ones - although admittedly, the substitution of familiar matter for unfamiliar must mean an improvement in the students' identification with the learning material.

As for the introduction of a new approach to science and mathematics, which may be justified on the basis of their relevance to the Yemeni reality or that we want to keep up with the latest developments in these areas, the importance accorded to these subjects appears to derive from the fact that some other Arab countries, described as advanced in these fields, have introduced them and that our curriculum is still 'far behind'. The recommendations put forward in the report for the reform of science and mathematics are disappointing - instead of setting up an indigenous machinery for investigating whether these changes are really feasible and urgent; whether our level of development and our children are ready for them and our resources and teachers adequate, it was recommended that delegates be sent to other Arab countries to bring back their textbooks and use them, or replace the contents with Yemeni material. The speculation may perhaps be justified that such changes are prompted more by a realignment of political allegiance than by a concern for human development by means of educational improvement. But there is a further risk attached to this 'modernization' - that the Yemeni system is
dependent on Egyptian teachers and advisers who may not be fully familiar with these 'advanced' texts, which does little to further the cause of relevance in the curriculum.

c) Learners' needs and abilities: the process of curriculum planning and textbook writing seems to have been carried out with no consideration of the learners' needs, abilities, aptitudes and their socio-economic backgrounds, as the objectives of the process indicate. Bearing in mind that this curriculum operates on the national scale, destined for all the children in the country who will study the same topics and who at the final stages must answer the same examination questions, considerable flexibility might be expected of the textbook material to make it relevant to every learner and to the natural and social environment in which he lives. There is no indication that these factors have been taken into consideration; the composition of the panels and the way the revision was handled do not suggest that there was any reference to the well-being of the individual learner either at the inception of the process or during its implementation. The Head of the CBIA Department, who is officially responsible for curriculum planning and development, who is a permanent member of all the panels that revise the curriculum, and who also participates in writing some of the textbooks in Islamic studies, was asked about how individual differences are dealt with in the plan. He replied "so far we are trying to complete the Yemenization of the curriculum...we had more than one idea to deal with...at the moment we are considering what is being taught to girls, i.e. to give more care to females both psychologically and educationally, in view of the fact that they will become wives and mothers...but we are taking very slow and careful steps because of limited resources". (interview).

d) This revision provides a reasonable picture of the content of the present
curriculum and the attitudes towards it that prevail at present. Many of 
the textbooks are still imported from Egypt or other Arab countries, the 
so-called Yemenized books are essentially copies of those old ones or 
summaries collated from different sources. The main long-range aim is to 
change all the existing textbooks and even those proposed for the first 
half of the eighties. The concern of the curriculum planners for academic 
subjects is obvious, but concern for the less traditional educational aims, 
associated with the more practical aspects of the curriculum, is not so 
assured. The practical areas of education, such as P.E., vocational 
subjects, art and music seem to be of secondary importance; they have no 
curricula. Despite the ostensible emphasis on vocational education and on 
the relationship between education and development, there is no mention 
of any vocational element in the general curriculum, apart from Home 
Economics.

e) It appears that syllabi and textbooks are written in isolation from the 
aims and objectives of the curriculum, ie., an analysis of aims does not 
always seem to be an intrinsic part of the process of material production, 
viz: P.E. and home economics are reported to have curricula without 
general aims. The validity of a curriculum or a syllabus that is written 
without clarifying and focussing on the ends it is meant to bring about, 
may be open to question.

f) The approach followed in the revision under discussion shows very 
clearly how fragmented the curriculum is. Each subject of the curriculum 
is outlined and revised by different panels and so textbooks are written. 
In some cases, as in the case of Arabic language and literature, different 
branches of subjects are dealt with separately, hence the curriculum is 
ever seen as an integrated, coherent whole. It is apparent that there 
exists no theoretical framework which could be used as a criterion to 
examine the outcomes of curriculum change. Moreover, there is
considerable evidence to the effect that even the simplest elements of the curriculum, such as accuracy of the facts and language have not been ensured.

In a report on general education for 1982/83, published by the Directorate of Guidance and Inspection, some very important information is to be found. On such information curriculum planners claim to rely on their work, for in the Yemeni system, feedback information is collected by the Inspectors. The report however, describes the educational system as a whole and outlines the problems. Here I shall rely on the information available about the curriculum, about what had happened in the first year of the plan, after some of the recommendations had been carried out.

The report itself, is no different from the previous report here dealt with, in its perception of the curriculum and its methods of dealing with it. Under the heading, 'Curriculum and Books', subjects, or more precisely, textbooks, are referred to almost in the same order in terms of subjects and levels. The only difference is that this report, after describing a book as being Yemeni or Egyptian, provides some more details about the material. This information, though very useful, is merely a result of reading through the textbooks rather than observation in the classroom or discussions with teachers and children; only language and academic errors are dealt with, modifications or redistribution of some topics are suggested. For example, in the area of Islamic education for the primary level it was suggested that “some of the statements in the textbook should be rewritten in simpler and clearer language”. At the secondary level the report states that “we are fully in agreement with those who call for prohibiting the use of the book on the Assirah (the Prophet’s biography) because of the errors involved in it”. (MOE, 1984a:33).
In the area of the Arabic language, in which some of the textbooks were written after the general revision analysed earlier, the nature of the criticisms voiced in this report, points to the conclusion that during the process of revising the curriculum, these books were not even read, let alone analysed. The report mentions that all the books at the preparatory level have been Yemenized, but adds that "most of the books of this level are replete with errors; such errors could be forgiven if they were in any other subject, but in a book intended to teach children language, they can hardly be overlooked". (p.34). Two pages of the report (pps.35-36) are devoted exclusively to examples of those errors, most of which involve errors in the verses quoted from the Koran as examples of the Arabic language. In mathematics, the report refers to the fact that modern mathematics texts have been modified and are ready for use in the next year; these books, it states, "have been borrowed from a brother Arab country", which is Saudi Arabia, as became apparent from the schools and from interviews with officials, notably the UNESCO expert. In all other subjects similar points were raised and lists of linguistic and factual errors were made. These references are completely confined to the academic subjects and there is no mention of how the teachers feel about the curriculum or its relevance to the children or the environment.

Three pages of the report consist of a list of page numbers of errors in the social studies texts, some linguistic and others factual. Suggestions are made for the reorganization of some topics, such as 'to include Somalia and Djibouti in the map, and sections dealing with Arab issues'; (p.42) and to follow a single approach in organizing the material dealing with different states, i.e. to follow this pattern: location, borders, surface, climate, water, plants, human activities, the capital and main cities and the relationship of each state with Yemen. (cf. p.44).
The nature of this information and the tone of the criticisms indicate that the new books distributed for the first year of the plan were not yet in the schools on an experimental basis, as claimed by curriculum planners, and even if they were, such information does not in any way represent data for classroom evaluation; it merely provides a more detailed examination of the textbook material and organization. This report gives rise to doubts about the efficiency of the process of curriculum planning and the commitment of those who plan and write the curricula and textbooks and who revise them and endorse their suitability. These textbooks have been Yemenized and revised once or twice, some of them have been rewritten and have gone through the process described earlier by the CBIA officials. Although a considerable amount of time and money has been spent on them, their condition still leaves a lot to be desired.

Some aspects of the process, such as the errors described above, especially those concerning the textbooks written earlier which were revised and found suitable, raise doubts as to whether the books were read at all, in the course of the revision. Some examples indicate that even if the texts are read for revision they are not thoroughly examined. The history textbook for the sixth grade, on the British colonization of the Gulf, states, “Britain maintains its domination over some of the Gulf states at present, but people in the Gulf sooner or later will compel Britain to withdraw from this Zone…” (p.60). Dealing with the same issue, the textbook of National Education for the same grade, referring to the efforts made by the Arab League to help the states of the Arabian Gulf, states, “...the Arab League supports the people of these states in their struggle for self-determination and provides for them in all aspects. The Arab League supports the general trends in these areas to form a union that will unite them against British domination” (p.51). The British
domination referred to, ended in 1971 and in the same year the United Arab Emirates was established, as mentioned in another textbook of the curriculum. (Geography, Second Preparatory Grade, p.72). It is clear however, that very little attention is given to curriculum issues, as such shortcomings need no high level of expertise and require only some careful reading and commitment on the part of those in charge of the process.

The Content of the Present Curriculum

In order to have a clearer and deeper understanding of the debate concerning the quality and relevance of the content of education in Yemen, it is helpful to examine in detail the curriculum of the general sector of the system. To make the task possible, I will confine my analysis to the two general levels of the school system; the primary and the preparatory levels. My reason for this is that these two stages and in particular, the former, are the fundamental base for all other levels, whether academic or vocational. They also affect the majority of the Yemeni people, most of whom abandon school after this general level for a variety of reasons. The analysis of these levels will also give a reasonable picture of the other sectors, as they all receive similar treatment.

Aims of the Primary Level

The primary stage has been described as the foundation on which the entire system stands, and through which almost every citizen passes. The content of this level is seen to represent the minimum learning necessary for everyone so as to become an enlightened citizen able to fulfil his personal and social responsibilities in the environment in which he lives. It is also the basis for preparing people to pursue their interests in the fields of knowledge, work and leisure. (cf. MOE, 1974; 1982a:262-65).
The aims of this level are stated in two lengthy statements which break down as follows:

1. The development of the child spiritually, ethically and physically in accordance with Islamic principles, to prepare him to be
   i) a good citizen participating in social and economic development;
   ii) able to interact positively with the society and to develop his environment;
   iii) imbued with the values, ideals and norms of his society;
   iv) proud of the society's history and culture, co-operating with family and community in order to build his country and nation.

2. The development of the child as an individual with an autonomous personality. To this effect, the school should endeavour to
   i) unfold and develop his abilities taking into consideration his level of physical and mental maturity;
   ii) provide him with the basic skills, knowledge, facts and concepts appropriate to his level of maturity, disposition and interests;
   iii) prepare him to encounter the problems and challenges he may face in his future life.

These general aims of the school are broken down into a number of more specific objectives which allegedly represent the objectives of each subject of the curriculum.

1. Islamic education, whose objectives are to:
   i) inculcate in children a commitment to the Islamic faith, train them to perform the Islamic duties that suit their age, nurture them in virtuous and decent conduct;
   ii) raise their awareness, interest and pride in the originality of their heritage;

2. National education (Arab nationality) whose objectives are to:
i) make children understand and assimilate the history of the Arabian nation;
ii) make them aware of the destiny and unity of the Arabian nation and to believe in it; to know the forces which will bring about Arab unity;
iii) realize the problems and dangers that threaten Arab ideals, and the advantages that would accrue to Arab unity;
iv) develop attitudes of reverence for the Arabic language and the cultural values it has transmitted;
v) encourage children to take pride in the Arab cultural heritage and to endeavour to contribute to its continuation;

3. Education for good citizenship, whose objectives are to:
i) nurture in children a devotion to their country, appreciation of the State’s efforts and services, and to prepare them to participate in them;
ii) help children to understand their rights and duties;
iii) train children in bearing responsibility, co-operation and consideration for the common public interests;
iv) know their country, its nature and characteristics and what surrounds it;

4. Development of basic skills whose objectives are to:
i) help children acquire and master the skills of the Arabic language; reading, writing, comprehension, listening and skills of understanding; analysis, synthesis, discrimination, criticism, appreciation, evaluation and creativity;
ii) acquire mathematical skills of numbers, quantity, measurement and how to use them functionally.

5. Development of intellectual abilities whose objectives are to help children to:
i) develop their abilities and mental faculties for learning to learn throughout life;
ii) acquire an amount of knowledge, ideas and concepts which will benefit them functionally and help them develop the abilities of discrimination, imagination, orderly scientific thinking and objective evaluation.

6. Health education whose objectives are to help children to:
i) develop physically in a sound and proper manner through acquiring good health habits, knowledge of the importance of the correct foods and of their resources;
ii) develop interest in sport and knowledge of its effects on sound physical and mental development.

7. Preparation for work whose objectives are to help children to:
i) develop and integrate all aspects of the body and personality;
ii) develop positive attitudes and commitments; (presumably to work).
iii) acquire the necessary skills for work; appreciate work and respect workers; participate in production and in improving their environment and community.

8. Aesthetic education whose objective is to help children to:
i) develop awareness and appreciation of aesthetic values and respect for artistic and literary works;
ii) develop their interests and encourage their creativity;
iii) polish their minds and develop an emotionally balanced personality.

**Aims of the Preparatory Level.**
The preparatory level of schooling has been described as an extension of the primary level and as a preparation for the study at the upper secondary, for it provides the number of students required for the academic and vocational schools at that level. The Five-Year Plan states that this level “contributes directly and indirectly, both to the process of production and development and to agricultural as well as industrial progress”.

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The aims of this level are more detailed than those of the previous level and they seem to follow the order of subjects as in the objectives of the primary level. These aims are:

1. Due concern for religious education, Islamic heritage and ethical values of Islam which provide the general indicators for personal and social behaviour;

2. Concentration on national education, more acquaintance with the role of the Arabs in human civilization; inculcating positive attitudes towards Arab unity;

3. Due concern for the development of children's abilities and all aspects of personality; sound guidance and concern for special talents and abilities;

4. Extension of the general knowledge provided for children; preparing them to pursue their studies at the secondary level, both in the academic and vocational sectors;

5. Enhancement of abilities of intelligible reading and oral expression, writing and comprehension, habits of attentive listening and critical analysis;

6. Provision of opportunities for acquiring other languages and a knowledge of other cultures so as to enrich the student's language and literary abilities;

7. Development of scientific thinking so that students can express their ideas clearly; knowledge of the effects of science on the life of the individual and society;

8. Development of good health and physical fitness, of sound health and nutrition habits, and of concern for hygiene;

9. Raising of social and national consciousness in children in order to prepare them as good citizens able to adapt, co-operate and bear
collective responsibility for building their country and to appreciate the
efforts made by the political leadership for developing Yemeni society and
promoting the status of the Arab countries and people;
10. Development of necessary skills for children which would enable them
to participate effectively in production;
11. Development of the abilities of discrimination, discovery, evaluation
and inventiveness in the varied fields of knowledge, particularly in the
sciences and the ability to encounter problems;
12. Guiding students to make positive use of leisure time, providing them
with opportunities for expressing their appreciation of aesthetic values,
of literary and artistic works and to enjoy the magnificent natural scenic
resources that are bestowed on Yemen.

These aims emphasize the religious and political content of the
curriculum, although 'religious' in this context, is confined to the Islamic
dimension and has no universal connotation. Issues of global concern are
barely hinted at. However, the pedagogical content of these aims is
reasonably comprehensive in scope; apart from the somewhat perfunctory
attitude to aesthetic education and emotional development, they represent
an adequate, even conventional educational ideal.

Their content and expression are reminiscent of the statements of
educational aims and objectives of many developing countries and bring to
mind Beeby's comment that "half the primary school curricula in the world
read as if they were written by the same high minded committees and yet
the kinds of schooling practised under them are vastly varied". (Hawes,
1972:8). Similarly, the practice of Yemeni education diverges
considerably from the policy expressed in these aims, as will become
apparent from the following pages and from Chapter Eight, which presents
the findings of the survey administered in the course of field-work for this thesis.

The Curriculum Plan and Syllabi

The Yemeni curriculum for all levels of general education is organized around a number of fields of study from which the content of the curriculum is derived. These fields of study are presented in the following subjects:

1. Islamic education;
2. Arabic language;
3. English language (as a foreign language starting in first grade of the preparatory level);
4. Social studies;
5. Mathematics;
6. Natural science;
7. Vocational education;
8. Aesthetic education;

The General Education Act 1974 (p. 14 and 15) described these areas of study as the basic fields of knowledge to which every learner must be introduced. The present subject matter taught in school in principle represents these areas. The aims of the curriculum cited earlier are derived from these subjects; some of the general aims and objectives are related to a specific subject. Some subjects even have syllabi and material before they have aims, as in the case of PE and Home Economics reported in the revision of the curriculum (1961:50) and in the Five-Year Plan (1962:274) respectively. This practice reflects the traditional view of the curriculum in which the subject matter to be taught is the essence
of education. The assumption here is that each subject is capable of inculcating and developing certain values, attitudes and skills. On that basis, subjects are planned, written, presented and evaluated independently of each other.

The relative importance of each subject can be inferred from the time allocated to it in the school's weekly timetable. Tables 27 and 28 show the number of periods that are allocated to each subject per week. In these tables, I selected three different years during which changes were implemented in the timetable. These changes, though slight, may signify curriculum planners' attitudes to different areas of the school programme, though the practice is often not an accurate implementation of the written programme.

The general picture of the curriculum gives the impression that it is heavily biased towards religion and socio-cultural issues. Islamic education and Arabic language account for 54.3% of the primary school timetable and 31.5% of that of the preparatory level. When English is added to the latter, cultural elements at this level occupy about 46% of the timetable. Social studies (history, geography and national education or civics), although emphasized in policy statements, is not given a high status in the timetable. At the primary level, social studies accounts for 7.4% of the school timetable and at the preparatory level this triple subject accounts for 13.9% of the timetable. Yet given the present state of affairs, social studies represents another area of the religious and cultural aspects of education, for much of the material presented in these subjects is often information about Islamic and Arabic culture and issues, much of which is already contained in other subjects.
Table 27: Time allocation for the areas of study per week in the Primary Level

<table>
<thead>
<tr>
<th>Area of Study</th>
<th>Grade</th>
<th>1976/77</th>
<th>1981/82</th>
<th>1982/83</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1 2 3 4 5 6</td>
<td>1 2 3 4 5 6</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>Islamic Education</td>
<td></td>
<td>6 6 6 6 6 6</td>
<td>8 8 8 8 8 8</td>
<td>8 8 8 8 8 8</td>
</tr>
<tr>
<td>Arabic Language</td>
<td></td>
<td>10 10 10 8 8 8</td>
<td>10 10 9 9 8 8</td>
<td>9 9 9 9 9 9</td>
</tr>
<tr>
<td>History</td>
<td></td>
<td>- - - 2 2 2</td>
<td>- - - 2 2 2</td>
<td>- - - 2 2 4</td>
</tr>
<tr>
<td>Geography</td>
<td></td>
<td>- - - 2 2 2</td>
<td>- - - 2 2 2</td>
<td>- - - 2 2 4</td>
</tr>
<tr>
<td>National Education</td>
<td></td>
<td>- - - - - 2</td>
<td>- - - - - 2</td>
<td>- - - - - 2</td>
</tr>
<tr>
<td>Mathematics</td>
<td></td>
<td>4 4 4 4 5 5</td>
<td>4 4 4 4 5 5</td>
<td>5 5 5 5 5 5</td>
</tr>
<tr>
<td>Science &amp; Health</td>
<td></td>
<td>3 3 3 3 4 4</td>
<td>3 3 3 3 3 3</td>
<td>3 3 3 3 3 3</td>
</tr>
<tr>
<td>Arts</td>
<td></td>
<td>2 2 2 2 2 2</td>
<td>2 2 2 2 2 2</td>
<td>2 2 2 2 3 3</td>
</tr>
<tr>
<td>Crafts</td>
<td></td>
<td>1 1 1 1 1 1</td>
<td>- - - - - 2</td>
<td>2 2 2 2 2 2</td>
</tr>
<tr>
<td>P.E.</td>
<td></td>
<td>2 2 2 2 2 2</td>
<td>- - - - - 2</td>
<td>2 2 2 2 2 2</td>
</tr>
<tr>
<td>Music &amp; Songs</td>
<td></td>
<td>1 1 1 1 1 1</td>
<td>- - - - - 2</td>
<td>- - - - - 2</td>
</tr>
<tr>
<td><strong>Total periods/week</strong></td>
<td><strong>29 29 29 30 32 34</strong></td>
<td><strong>29 29 30 32 34 36</strong></td>
<td><strong>29 29 31 31 34 34</strong></td>
<td></td>
</tr>
</tbody>
</table>

( ) - the number of lessons devoted to the koran per week.

Sources: 1. The Organized Plan of General Education, MOE, 1978
2. Educational plan for 1981/82, MOE, 1982,
Table 28: Time allocation for the areas of study per week in the Preparatory and Secondary Levels

<table>
<thead>
<tr>
<th>Area of Study</th>
<th>Preparatory 1976/7</th>
<th>Preparatory 1981/2</th>
<th>Preparatory 1982/3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade</td>
<td>1 2 3 1 2 3 2 3</td>
<td>1 2 3 1 2 3 2 3</td>
<td>1 2 3 1 2 3 2 3</td>
</tr>
<tr>
<td>Islamic Education</td>
<td>6 6 5 6 6 6 5 3</td>
<td>6 6 5 6 6 6 5 4</td>
<td>6 6 6 6 6 6 5 4</td>
</tr>
<tr>
<td>Arabic Language</td>
<td>6 6 6 6 8 6 5 5</td>
<td>6 6 6 6 8 6 5 5</td>
<td>6 6 6 6 8 6 5 5</td>
</tr>
<tr>
<td>English Language</td>
<td>5 5 5 6 7 6 6 6</td>
<td>6 6 6 6 6 7 6 6</td>
<td>5 5 6 6 6 7 6 6</td>
</tr>
<tr>
<td>National Education</td>
<td>3</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>History</td>
<td>2 2 2 2 3 3</td>
<td>2 2 2 2 3 3</td>
<td>2 2 2 2 3 3</td>
</tr>
<tr>
<td>Geography</td>
<td>2 2 2 2 4 3</td>
<td>2 2 2 2 4 4</td>
<td>2 2 2 2 4 4</td>
</tr>
<tr>
<td>Sociology</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Economics</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Islamic Civil., Philos. Logic &amp; Psyc.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mathematics</td>
<td>3 3 3 4 9 9</td>
<td>4 4 4 6 9 9</td>
<td>4 4 4 6 9 9</td>
</tr>
<tr>
<td>Sciences</td>
<td>5 5 4 5 2 5 6</td>
<td>6 6 6 4 3 7 8</td>
<td>6 6 6 5 7 8</td>
</tr>
<tr>
<td>Health Education</td>
<td>1 1 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P.E.</td>
<td>2 2 2 1 2 1 2 1</td>
<td>2 2 2 1 2 2 2 2</td>
<td>2 2 1 1 2 2 1 1</td>
</tr>
<tr>
<td>Arts and Crafts</td>
<td>3 3 3 2 2 2 2</td>
<td>1<em>1</em>1* 1 2 2 2 2</td>
<td>1<em>1</em>1* 1 2 2 2 2</td>
</tr>
<tr>
<td>Songs and Music</td>
<td>1 1 1</td>
<td>1 1 1</td>
<td>1 1 1</td>
</tr>
</tbody>
</table>

Total periods/wk: 36 36 37 36 34 32 34 30 36 36 36 36 36 36 35 35

* only arts
** science stream

the Educational plan for 1981/82, MOE, 1982.
A significant development is that Islamic education has increased its share of the timetable from six periods a week in 1976, to eight periods a week in the 1980's at the primary level, and one period has been added to the third grade of the preparatory level. The Koran, which has usually been a component subject of Islamic education, has become a subject in its own right, accounting for six periods a week in the first, second, third and fourth grades, and four periods in the fifth grade. In the sixth grade it accounts for four periods, but in this grade it is regarded as part of Islamic education. At the preparatory level the Koran is considered part of Islamic education and accounts for three periods a week in each grade out of six periods. Another development in Islamic education is that a Ministerial circular (no.7, 1980/1) required schools to place Islamic subjects among the early lessons of the day, a time generally allocated to priority areas. (MOE, 1964c:93).

Mathematics and Science together account for 25.5% of the primary school timetable and 27.6% of the preparatory school, an allocation that matches neither the expectations of the present curriculum for these subjects nor their importance in modern times, particularly as many other aspects of the present curriculum, as well as the hidden curriculum, do not seem to promote scientific knowledge and thinking. The share of the timetable allocated to Mathematics however, has been increased at the primary level from four periods in 1976/7 to five periods in 1982/3. Mathematics covers arithmetic and geometry at the primary level, the former accounting for 80% of the marks assigned for the subject and the latter for 20%. (MOE, 1964c:29).

Science usually includes health education which sometimes appears on the timetable as a subject usually occupying one period a week in each grade.
of the primary and preparatory levels. Science itself occupies three periods a week in each grade of the preparatory level and only two periods at the primary level. In the 1976/7 plan, science and health education were allocated four periods, only to return later to the original allocation. A serious problem with the teaching of science in Yemeni schools is that, although the practical aspects of the subject are included in the curriculum, the lack of facilities and the bias towards the academic in traditional education, have led to a neglect of these aspects in the schools.

The Syllabi

The syllabus for each subject usually covers a wide range of topics, leaving little space for in-depth analysis or reflective understanding of particular concepts, or for the development of a holistic view of the branch of knowledge encompassed in the subject. Facts and information seem to be the focal point; any appreciation of the meaning and applications of the facts does not seem to be required. The selection of topics and the way they are sequenced, do not appear to follow any established formula, apart from traditional assumptions held by the subject specialists about the nature and aims of the subject itself.

To take some examples from the social studies curriculum, we find that this area of study (starting at the fifth grade of the primary level upwards), includes three subjects; history, geography and national education (civics). Although these subjects are dealt with as one area of study and regarded as one unit, they are treated in the curriculum as separate subjects; they have different textbooks and are taught in different lessons, often by different teachers. In the examination they are presented in one paper divided into three sections, each of which includes a number of questions from that specific area. The marks are treated as
The Social Studies Curriculum

History seems to be perceived as a linear sequence of events which starts somewhere in ancient times passing through medieval to modern and contemporary times. The Yemeni history syllabus deals mainly with the political history of the Arab world and of Yemen. Some mention of the history of other nations, especially of European events, is made, but only if they are related to Arab or Yemeni history. At the first grade of the secondary level, European history of the Renaissance and the Industrial Revolution is taught as a subject. The learner is expected, throughout his time at school, to learn the sequence of historical events between about 2000 BC right up to the seventies of this century.

In the fifth grade of the Primary level, where history is first introduced, the syllabus deals with the history of ancient civilizations in Yemen until the rise of Islam; the Mean, Sabean and Himyarite kingdoms of ancient Yemen are dealt with in terms of the rise, rulers, economic and cultural events and activities, decline and fall of each; the major events between the fall of the Himyarite kingdom and the rise of Islam, which includes the Abyssinian invasion, the Yemeni resistance and the Persian occupation of the country; then the general aspects of the ancient Yemeni civilizations are dealt with and finally the relations between Yemen and other civilizations at the time; Egyptian, Syrian and Roman.

In the sixth grade the syllabus continues the outline of history from this point or thereabouts, up to the 1970's. This syllabus concentrates on Arab-Islamic history during the life of the Prophet, the four Caliphs, the Umayyad and the Abbasid dynasties, dealing with the rise, the
achievements and the end of each stage. Ten Yemeni states are dealt with in this section, followed by a section on Yemen and foreign competition in modern history – the Arab world and the European powers and finally the Yemen since the end of the First World War until the 1970’s. (See History syllabus, Appendix 9).

In the first grade of the preparatory level, the ancient history of the Arabs and Yemen is taught again, this time with some further events included. The syllabus of the primary sixth grade is repeated with more details in the second and third grades of the preparatory level. The second grade syllabus covers Arab-Islamic history of the period starting with pre-Islamic history until the 13th century, the third grade syllabus concentrates on the modern history of the Arabs and of Yemen, particularly the events related to the Ottoman empire and Western colonial powers in the Arab region during this century.

In geography, the syllabus deals with some basic geographical facts such as the natural features of the globe; the earth and its place in the universe and its relationship with other planets; there follows information about the Arab World including Yemen, about other continents with a closer study of one or two countries from each continent. This information includes location, boundaries, the capital and the main cities, the population and the main economic activities; animal husbandry, agriculture, trade, industry. These topics are repeated in higher grades with very slight modification and additions.

National education (civics) in the first and second grades of the primary level, deals with the social and natural environment and is closely related to the teaching of science and health. To begin with, topics dealing with
animal life and human health issues are taught. The syllabus goes on to
cover some of the social institutions - the family and the role of each
member in the family, the school, the village, the district and the
province, dealing with social structures at these levels, and some of the
local economic activities concentrating mainly on the government
institutions and services. At the sixth grade, the syllabus deals with
issues of Arab unity, the Arab League and the United Nations, ending in
each grade with the study of a number of Muslim and Arab personalities.
Again, as in the case of history and geography, most of these topics,
especially the components of the sixth grade syllabus, are repeated in the
higher grades. As well as the material that is taught, the methods by
which it is taught have important implications for any valid criticism of
the curriculum; a closer look at both may help to clarify these remarks
about the syllabus. The syllabus attempts to cover a wider range of topics
than the time would allow, if they are to be properly understood and
assimilated by the learner. Also, the opportunity to learn/teach about the
realities of the modern world is sacrificed to some extent to the decision
to use these subjects to consolidate a political aim, that of Arab unity.
One of the merits of the social studies syllabus, is that it tries to start
from the familiar and concrete; the family and local environment, leading
to wider areas, to the national then the Arab and finally, the global
dimensions. It also 'revisits' the same areas in an attempt at a 'spiral'
approach - although unfortunately at present this repetition merely
results in the addition of further information, with no real attempt to
understand or widen perceptions and insights.

The Learning/Teaching Materials
The topics laid down in the syllabus are followed in the official textbooks
which present the content of the curriculum. It is the teacher's task to
transmit the knowledge and information written in these textbooks, which
the learner is expected to memorize. The material presented in the
textbook is regarded as an educational end: it appears to represent the only
accepted source of truth and the criterion for worthwhile knowledge and
the examination is based on this view; the learner as well as the teacher
is discouraged from relying on any source of knowledge other than the
official textbook. This policy is ensured by restricting the teacher’s area
of responsibility through official regulations. Such restriction is a
form of control over knowledge; what is important to the policy maker
must be important to the learner and if the latter discovers something
different, he will be punished in the examination.

Textbooks prescribed by the MOE often include an introduction outlining
the importance of the subject and its objectives which usually takes the
form of a few brief general statements, often including instructions for
the teacher on the treatment of the subject. The body of the book consists
of the content of the subject arranged according to the syllabus item by
item; illustrative maps, diagrams and charts are often included but poorly
printed. The content presented in each topic is generally very brief and of
an exclusively factual nature; the questions that come at the end of the
topic are confined to the facts imparted, and seem only to expect children
to memorize or at least remember them.

In history for example, a ten page section in the textbook for the sixth
grade of the primary level deals with ten Yemeni states that existed
between 821 AD and 1517 AD. For each state the textbook provides facts
about the origin of each ruling dynasty, how it came to power and its
domain of rule and the capital, followed by the names of the powerful
personalities, their major achievements and finally how their reign ended.
A wide range of topics is thus covered, with a density of factual material that is bound to be confusing for children at this level, and the questions that follow the respective topics, require the reproduction of these facts, as shown by the following example questions:

1. Who founded the Ziadi state in Yemen?
2. Mention the name of the state that followed the Ziadi state.
3. Mention the important achievements of Lady Arwa.
4. Fill in the missing words in the following paragraph:

   One of the greatest rulers of the Rasolides was ................., who was a determined leader who subdued the whole country and whose rule spread to ................. in Taizz and to three ................. in .................

   The Tahirris left magnificent ................., despite the difficulties they encountered. They established ................. and ................., and also founded the town of .................;

At almost all levels, history is presented in this way where a mass of facts is provided, concerning political history and the achievements of political leaders, whereas the nature of the society they governed is not examined. The material concentrates almost exclusively on political and military conflicts and on conquest in battle, which has the effect of making Arab and even Islamic history appear to be a process of continuous fighting and the exclusive product of a few superstatemen.

In geography, the same factual approach is followed. For example, the textbook prescribed for the sixth grade, deals with eighteen Arab states and six countries from the rest of the world - Indonesia, Ethiopia, France, the USSR, Brazil and the USA. The eighteen Arab states are presented in 47 pages, nine of which are maps. The information provided covers a wide range of aspects as it deals with each country's location, size and borders, population, physical features and climate, economic activities,
agriculture, livestock, industry and trade, the capital, main cities and
ports and finally, the relations of each with Yemen. To cover all these
aspects for each state, the information concentrates on hard facts and
names which do justice neither to the subject, nor to the aims of
education. Nor is all this matter easy for the children to understand. As
an example, there follows an extract from the section on Libya, which
gives some indication of the form of presentation favoured in these books:

The Arab Republic of Libya is situated in the west of Egypt. The republican system was
established on the first of September 1969, after the revolution eliminated the monarchic
rule there. Libya overlooks the Mediterranean in the north, and shares the borders with
many other Arab countries and non-Arab countries. [see map no. and mention of the
neighbouring countries.] Her size is about the size of both Yemens, the population is about 3
million, most of whom live in the northern parts on the Mediterranean.

The dryness and abstraction of this form of presentation is apparent —
there is no attempt to show the connection between one aspect and
another, and it is questionable whether the mastery of these facts will be
of much use to those who learn them.

Even when such topics are reintroduced at higher stages, the same
information is repeated along the same lines, except for minor additions
of more facts. In the second grade of the preparatory level, geography of
the Arab World is taught again and in the topic on Libya, as in the example
above, the same information is given with some expansion, and with the
addition of a historical introduction referring to Libya's struggle against
colonialism under Italy, Britain and France from 1911 until 1969.

Apart from the lack of immediate relevance of such information, the
problem with such compression of a wide range of topics into a small space and limited time, is that the material involves a great deal of abstractions, concepts and ideas that are difficult to grasp, both because its presentation makes no allowance for the child's level of development, and because it goes beyond the child's scope of experience. The way in which the material is written in many cases, seems to reflect the author's attitudes and political outlook and probably his own knowledge of the subject, rather than considering the psychology of the child, the needs of the learners and the community in which they live. The language used often seems more appropriate for political debate than the classroom.

Concepts such as Arab unity, monarchy, revolution, colonialism and imperialism which are presented to children of 9-11 years of age without any reasonable simplification or explanation, are not only meaningless but also inimical to the furtherance of the cause of peace, for much of the information provided in social studies has a strongly political bias, implying that non-Arab nations are not only imperialist, but also decadent and inimical to Arab and Islamic development. Thus a sense of distrust and suspicion of outsiders is fostered, often with the result that even without intention, children may become alienated from all non-Arab people, regarding them as enemies. The history textbook, referred to above, provides some directions for the teacher, i.e., "When teaching colonialism, it should be emphasized to the students that there are many forms of colonialism, among them cultural forms, which intend to uproot our Islamic faith and Arab-Muslim heritage, and to replace these with Western materialistic ways of life in which there is no distinction between good and bad, and in which virtues are considered vices, and evil is regarded as good". In the content of the textbook, the goals of colonialism are listed, one of which is claimed "to launch a crusade
against the Islamic world", for the West is reported to have "inherited a deep hatred against the Koran and the Prophet Mohammed, and so it has tried by all means to destroy the cultural foundations of Islam". (p.56).

Most of the information taught in other subjects such as Arabic and Science is equally condensed, and covers a very wide range of topics - these are generally replete with difficult concepts and terms which are beyond children's experience, and which are not relevant to their needs.

Teaching/Learning Techniques
The existing curriculum is essentially teacher oriented, designed and prepared for the teacher to transmit to children rather than to be learnt by students. The teacher receives the textbook and official instructions from the central authority, prescribing what should be taught and emphasized, how each topic is to be presented to the class, at what time of the term and of the day. Directions are issued every year in which each subject is distributed among the months of the school year specifying whether topics are to be read or memorized, as the latter is a very important part of Islamic education and the subjects connected with Arabic language.

Despite the references made in some documents to the role of the learner, suggesting that he/she should be actively involved in the learning process, the way in which the material is organized and the language in which it is written does not usually seem to expect of the learner more than to memorize the material and to regurgitate it in the examination. The teacher is required, however, to prepare his lesson in advance in his notebook, which is often checked by the head and the inspector when visiting the school. The teacher is required to read the topic, and use the questions, use the blackboard for writing the main points and/or the
summary. If the school is short of textbooks, as is often the case, the teacher writes a summary of the topic on the blackboard.\(^{(10)}\)

The gap between theory and practice and between recommendation and implementation, is as wide in Yemen as in many other systems. Often textbooks and curriculum plans include recommendations which are both realistic and desirable, and suggest how the subject should be taught, the activities to be undertaken by the learner and the teaching aids to be used. The social studies syllabus for the primary level states that "the importance of this subject does not lie in the amount of knowledge being presented to children as much as in the moulding of personality, in the development of the child's intellectual abilities and social consciousness; training him in the principles of sound social behaviour, implanting in him the spirit of identity with the environment and with his Arab nation". On the basis of this view, it recommends the following methods:
- to encourage student dialogue, discussion, to teach them to respect each other's opinions and to interpret the phenomena they observe in the environment;
- to give children an opportunity to express their own opinions and promote their abilities for self-expression through drawing, acting and story telling;
- to use a story approach in teaching history, to take them out of the school to observe the natural environment, to allow for free cultural activities, field visits and to train them to use maps and other figures. (MOE, 1982b.1).

The primary school science syllabus expresses similar educational principles. In teaching science "it should be borne in mind that:
1. Science is not only a body of knowledge, it is also a method of
organized thinking based on obtaining facts from close observation and scientific experiments...therefore the study of this subject must depend on the child's practical activity, so that he may acquire knowledge of living creatures in the environment and of the natural phenomena, thereby to develop his ability for observation;

2. Many teachers use exposition in their teaching and then summarize the facts for the children to write in their notebooks, to memorize later. The study of science therefore, becomes mere oral repetition of facts most of which the children forget. Therefore, the study of science must be based on observation and activities - to examine an animal, a plant, in the context of work in the school field and in carrying out scientific experiments." (MOE, 1962c:2). The Educational Guide includes many similar recommendations for effective teaching strategies to be used in each subject. (MOE, 1964c:33-9).

The implementation of such strategies would result in an education that would be more relevant to the socio-economic reality and to sound pedagogical principles. However, very little of these recommendations are actually implemented. Indeed in most cases, it appears to be impossible to implement them and probably even those who recommend them are aware of the limitations of the system and of the curriculum in its present form. The curriculum itself, is designed to transmit knowledge and hard facts, rather than to develop intellectual and practical competencies and skills, or to develop the inquiring and reflective mind. The way in which textbooks are written and examinations are presented testifies to this academic bias. Apart from the fact that teachers are not well prepared and are often expatriates, they are encouraged to use only the official textbook and to follow the plan set out by the central authority, which requires them to teach certain topics within a limited
time, on which they will be evaluated by the Inspector.

Many schools however, lack any educational facilities, even in some cases, classrooms. Students are considered lucky if they have the textbook and a blackboard. Many classes have over fifty students, a number which virtually precludes dialogue and activity methods of teaching, whether by inexperienced or well-trained teachers.

The Assessment Strategies and Techniques
The examination system provides the only means of assessing and evaluating not only learners' achievements, but also the school performance and curriculum suitability. The results of the examination provide the criteria against which the learner's capability, the school and teacher's competencies are judged, which gives examinations a place of crucial importance in peoples' perceptions of education. The examination is very competitive and is used as a rigid screening device by which children are sorted out for different vocations and professions. Children, parents and teachers are very conscious of its significance and become concerned about it from the earliest stages of education. Promotion from one grade to another takes place through examination, except for the first and second grades of the primary level where promotion is decided by the teacher. Promotion from one level to the next takes place through public nation-wide examination, essentially in written papers, regardless of regional, social and educational disparities and individual differences.

The examination has become something of a bugbear to the nation's youth, as the following quote indicates. In the introduction to an interview with the Deputy Minister of Education in the Athawrah newspaper, the following description of the situation shortly before the examination was given.
"Papers and secret numbers... stamps and secret ink... supervisors and heads of boards of examiners... and hoarse voices of examiners saying 'five minutes left'. All these signify the examination which rings the bell of danger at every door these days. Households are living in a state of full alert. Promises and advice... encouragement and expectations... students are sleepless and exhausted... spending the nights with books... their eyes turn red, their skins pale and yellow... some of them suffer from headaches... all this is happening in preparation for, and in fear of the 'unknown' that the days of examination will bring with them. As the examination approaches, anxiety and puzzlement increase, and with them, tension and sleeplessness and perhaps oblivion. Everyone is getting ready to face the great 'Ghoul'." (Athawrah, 1984:3).

The spirit in which these remarks were made seems to imply that this situation is a matter of course, as the writer adds, "Above all considerations, the examination remains the crucial point at which the student revises what he has attained, measures the achievements through which he determines his position among other students, and contrasts his achievement with his efforts". (Ibid). These anxieties and agonies which seem to happen often, worry the authorities and every year before the examination, there must be some assurance that the examination will be based closely on the textbook prescribed for students, a situation that shows how important the facts of the book are, and at the same time indicates that questions may have been set on occasion for which students were not prepared.

The Director General of the Guidance and Inspection Directorate asserted in 1983, that the examination questions are derived from "the prescribed curriculum", i.e. from textbooks. "They never diverge from the school
textbook”. Students were assured that the questions will be "from the textbooks and will be straightforward, and the examination comes to measure the degree of student understanding, rather than how much has been memorized". (Athawrah, 1 May 1963:3). What is emphasized here is again the textbook and the facts in which it deals.

In the same month in the following year, 1964, the Deputy Minister of Education, assured the public that the questions in the examination would not diverge from the prescribed textbooks and would cover the whole curriculum. He pointed out that questions are written according to the criteria and principles laid down by the MOE, and that they take into consideration the general level of student attainment. Some questions are intended to distinguish the talented and hard-working students, “the examination is only an evaluative technique which assesses the student’s level of learning, his ability and attainments throughout the year...” He concluded that “it has been scientifically and educationally proven that there are differences between human individuals, there exists the genius for whom many countries provide special education, there exists the hardworking students whose efforts make them great achievers, the average and the below average, and all these differences are reflected in the results of the examination”. (Athawrah, 17 May 1984:3).

These frequent assurances that examination questions will be based on the textbooks, indicate the importance of the examination both to the students and the authorities. They also testify to the academic bias in the system, as there is no reference to any other learning activity or level of competency. Despite the saying that what is to be assessed, is understanding rather than memorization, it is very obvious from the kind of material written in the textbooks, that memorization rather than
understanding is the crucial criterion. The individual innate differences referred to above may exist, but it is not true that abstract factual knowledge is the only criterion for sorting out those with ability from the less able, nor, most definitely, the conscientious and the well-intentioned from the merely opportunistic. Moreover, apart from the fact that children come from various socio-economic and cultural backgrounds, most of them from poor and illiterate families, they do not have the same access to educational facilities. In some areas, particularly in the major cities, school buildings and learning equipment are much better than those in most rural areas. School staff, both administrative and teaching, are sufficient and of better quality, and textbooks and other teaching materials are made available first to these schools. In most rural schools one would find only a few textbooks and blackboards, which are often not sufficient and reach the school very late in the year. Teachers are often less well qualified and not trained. The accumulation of such disparities, no doubt, makes a greater difference to children's attainment than is measured by a written examination paper at the end of the year or of the educational cycle.
Footnotes

1. An interview with the Yemeni Assisting Director of the UNESCO Project.

2. The Curriculum Department in the Ministry is composed of fifteen people.


4. Reporting on this conference, Abdullah Ashibani writes, "The Arab curriculum, especially of the Eastern part of the Arab world, are in urgent need of broader and deeper analysis which should start from the first grade of general education... We should choose from the new, what would suit our society, its customs and aspirations which would also represent creative human achievement and the process of human civilization, in order to bridge the gaps which hinder the process of development in the Arab world, and in Yemen in particular." (Athawrah, 5 April 1984, p.5)

5. The General Education Act, 1974 devotes Article 6, p.11 to emphasizing that the content should be relevant to the learner's ability, aptitude and interest.

6. Those who work with primary school material earn less than those who deal with material for the preparatory level, and if the subject occupies three periods a week the textbook writer will receive less payment than the one that writes a book for a subject occupying four or five periods.

7. The report was published separately from the Five Year Plan by the Ministry of Education under the title, 'A Comprehensive Analysis of Curriculum Development and Proposals for Curriculum Improvement in
8. The science panel consisted of two consultants, a subject specialist and the two permanent members. In the Arabic language panel, an expert from ALESCO and the subject specialist form the panel along with the two permanent members. For most other subjects, one subject specialist or consultant joined the two members.

9. A statement made by the Director General of the Inspection and Guidance Directorate throws some light on the question of what source of knowledge is to be used. "We are confined to the official textbook that is issued and prescribed by the Ministry of Education, and do not rely on any other book... I would like to remind the students that any attempt to use imported commercial books will not lead to any result. We advise against commercial books. We assure our students that the examination will not diverge from the books which have been distributed by the Ministry." (Athawrah, 31 May 1963).

10. This is officially regarded as part of the teachers' duties, as witnessed the Director General of the Inspectorate, "The teacher is obliged to write the summary on the blackboard when the textbook is not available." (Athawrah, 31 May 1963).
CHAPTER EIGHT

Needs and Educational Priorities - Perceptions of different groups

This chapter is devoted to presenting and analysing the data about peoples' perceptions of needs and educational priorities in the Yemeni context obtained from the field-work survey carried out between the 1 January and 20 May 1964. Some of the interview material concerning the process of curriculum planning and development has been used in the previous chapter.

The main objectives of the field work were:
To clarify and substantiate from evidence collected from the immediate environment, the needs and aspirations of the Yemeni people, which may have a bearing on education;
To identify the major educational trends and problems concerning the content of education and the process of curriculum planning;
To examine peoples' (officials, educationalists and others) perceptions of needs and curriculum priorities, on the basis of which a more relevant curriculum may be determined.

Method and techniques used in this work
With such a wide range of issues to be studied, the survey method was the most feasible and the following techniques were used:
- Analysis of the essential official statements and aims stated in major documents; also written evidence of public opinion;
- First hand data obtained through direct contact with officials at the Ministry of Education, and others involved in the process of education by
means of:

(i) informal and unstructured discussions,
(ii) direct observation of school life and classroom activities,
(iii) semi-structured interviews with a number of educationalists,
(iv) questionnaires.

In the first stage of the field work a number of schools were visited, and the people to be interviewed were identified. The interviews followed the process of curriculum planning from the policy-making level down to the classroom level.

The questionnaire

The central objective of the questionnaire was to explore perceptions of different groups about different areas of the content of the curriculum and to identify their most important priorities. The elements included in the questionnaire were drawn from the aims and objectives of the existing curriculum, which I regard as important and of considerable relevance, and from other sources, mainly the National Charter and the National Development Plan, with a particular view of the basic needs. The questions were expressed in terms of school objectives concerning what should be learnt and taught at the general level of formal schooling before the upper secondary stage at which specialization starts.

Having in mind the idea of human needs, and in view of the fact that primary or preparatory levels of schooling, which cover this general level at present, are often final for the majority of children, I tried to incorporate into the questionnaire important aspects of a curriculum relevant to life issues in Yemen. Thirty-three questions were constructed which, for convenience of investigation, were grouped in five major areas:
1 Islamic, cultural and citizenship issues;
2 Issues relating to development and work;
3 Individual personality characteristics and qualities;
4 Techno-scientific and educational issues; and
5 Practical activities and skills.

These areas are not isolated. For example, items included in the area of practical skills are also aspects of other areas, especially of development and work.

In the process of writing the questionnaire, it became apparent that open questions would not be of any use. In a pretest with a sample of ten people (four university students, two secondary school students, two parents and two teachers) answers were both general and limited: a sample answer might claim that the function of the school is “to prepare the person to be a good Muslim and to serve his country”, without any interpretation of what constitutes a good Muslim; and limited in the sense that respondents would not touch upon other aspects of the curriculum, ie. none of these ten people went beyond religious and social values. When I discussed this point with the UNESCO Project Director, he advised that questions should be restricted to statements with a choice of responses to follow them. At the same time, it became apparent that people were beginning to panic about the examination which was due to start after two months (in early May); the ‘objective test’ format was most suitable for the limited time available and for completion under conditions of pressure. When this set of questions was tested with the same group referred to above, the results were satisfactory and the respondents expressed their understanding of the questions in discussions.
One of the major problems I found in getting any valid form of response, is that people in general do not take research seriously and do not think that it is of any use; students and teachers in particular seem to have become disillusioned with participating in research surveys, from which they claim to see little improvement in their situations. I administered most of the questionnaires directly, apart from 35 copies distributed by others who assisted with the work. The following groups were the respondents of these questionnaires:

1. Officials at the MOE and General Directorates: 21
2. Headmasters: 19
3. Teachers: 28
4. Parents and interested groups of the public: 50
5. Students (university: 16 male, 14 female, 13 teacher trainees): 43
6. 161

As the purpose of the questionnaire was to form some idea of the attitudes of the respondents to the aspects of the curriculum presented to them, I tried to avoid vague concepts and expressed the questions in as straightforward a fashion as possible. Some of the questions, such as those on development and the acquisition of basic scientific concepts, (e.g. Questions no.10, 13 and 22) may be seen as vaguely or clumsily expressed. Such questions, however, employ only concepts that occur in the relevant literature, for example, in the list of educational objectives formulated by the Ministry; thus a degree of familiarity with these concepts may be assumed in the respondents, particularly in those connected with education. In personally administering the questionnaire, I tried to devote particular attention to ensuring that each respondent understood each question as completely as possible, especially in the case of anyone not
directly involved in education. Moreover, while the expression of many of these questions has a technical ring in the English translation, this is not necessarily true of the original Arabic in which the questions were read and answered.

I worded the questions positively, offering a five-alternative response as a means of establishing priorities. The 'very important' response was regarded as pivotal in the analysis of the results; priority was regarded as established by the number of responses rating a particular item as "very important", though support from data obtained from interviews is also regarded as of great importance.

In this chapter, the areas examined are:

1. Religious, cultural and socio-national issues
2. Development and work
3. Personality development, and
4. Intellectual and educational issues

Originally, a fifth area, that of practical skills, was added; the responses are included in the analysis of the other areas as relevant. The items included in each area will be arranged in accordance with the percentage of the responses rating them as 'very important'. Data drawn from interviews or other sources are used in support of the questionnaire when relevant.

**Perceptions of the school curriculum at the practical level.**

**Religion, culture and socio-national aspects.**

As borne out by the observations in the last chapter, this area is the most crucial aspect of the present curriculum. Indeed, to many, the inculcation of Islamic and socio-cultural values is the sole purpose of the school.
Talking about the nature of the role of the school, Al-Muallimi, a headmaster of a primary and preparatory school, states that "the school activities confined to instructional and educational aspects are striving to create a competent Yemeni generation which believes in its religion, its country and its obligations to the country. These are the elements forming the fundamental goal of the school" (interview). Such general views of the aims of the school are to be found in most writings concerning the aims and content of education, in particular official documents dealing with the curriculum.

The following table presents the responses to the seven questions which covered this category in the questionnaire according to the number of respondents rating them as 'very important'.

<table>
<thead>
<tr>
<th>Aspect</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inculcation of Islamic faith and values</td>
<td>64.5</td>
</tr>
<tr>
<td>Arabic language and Arabic-Islamic culture</td>
<td>73.9</td>
</tr>
<tr>
<td>Islamic obligations and worship</td>
<td>73.3</td>
</tr>
<tr>
<td>Love of, and loyalty to the country</td>
<td>57.7</td>
</tr>
<tr>
<td>Spirit of co-operation and responsibility</td>
<td>55.9</td>
</tr>
<tr>
<td>Concern for human civilization and cultures</td>
<td>34.2</td>
</tr>
<tr>
<td>Arab unity and national consciousness</td>
<td>29.2</td>
</tr>
</tbody>
</table>

This data will be analysed in three groupings, covering religious, cultural and socio-national issues.

**Religious Aspects of the School Curriculum**

According to the results of the survey, a high level of consensus prevails as to the importance of both aspects of Islamic content in the curriculum.
84.5% of the respondents listed the inculcation of Islamic faith and values as 'very important', and 73.3% listed the training of children in performing Islamic duties, as 'very important'. The level of agreement on the importance of Islamic aspects in the school curriculum is thus very high. There is no significant divergence among the opinions expressed by different groups as to the importance of Islamic aspects of education. The slightly lower level of importance given to the behavioural aspect of religious education may stem from that universal of the human condition, that ethics are easier to define than to live, and the fact that in any case, many people consider that training in religious observation, while it is an important element of the role of the school, is not exclusive to school.

In general this high status given to religious education is not surprising in a society whose entire population is Muslim; it reflects the public preoccupation with religion, which at present is putting pressure on the educational system to place even more emphasis on the Islamic content in the school curriculum. The rapid development of the religious sector, as has been described in chapters 6 and 7, the increase of time allocation for the religious curriculum in the general school, and the emphasis placed on the lessons devoted to the Koran since 1961, partly result from this intense concern with Islamic content.

This relative consensus over the importance of the Islamic elements in the curriculum does not imply a similar level of agreement among people as to the content and objectives of this area. Widespread criticism has been levelled recently at the quality of the content of education in general and at Islamic content in particular, asserting that the quality of education is 'weak' and in many cases, 'unsuitable'. We have noted similar expressions in the analysis of the present curriculum in chapter 7, especially in the
section concerning the 1981 revision of the whole curriculum. A good picture of the situation was provided by the Head of the CBIA Department, who stated in an interview: “Many people complain that the Islamic curriculum is too heavy, others complain that it is not rigorous enough, for everyone approaches educational question from his own point of view... you find that religious leaders, teachers and judges, for example, criticize the MOE policy for not demanding that children should memorize parts of the Koran, while others complain that the curriculum is too difficult for children, that they do not understand it and cannot assimilate its material.” (interview).

It becomes apparent that the main area of conflict over the content of the Islamic aspect of education is not about its level of importance, rather it arises from different groups' points of view about how the desirable values and attitudes are to be developed. Some would emphasize the amount of knowledge being transmitted, while others advocate ability to understand and the assimilation of those values through practical activities.

**Cultural aspects of the school curriculum**

This aspect includes Arabic-Islamic culture, including Arabic language. Arabic language and culture are the fundamental elements of Arab national education. These are also basic elements of Yemeni cultural identity, as well as the means of understanding Islamic principles and moral values, for Yemeni culture and Arab culture related to Islamic culture cannot be distinguished from each other, and the Arabic language is the medium of all these interrelated components of the national culture. Concern for the Arabic language stems from the fact that it is the lingua franca of the Yemeni people, the medium of formal and informal communication, and
above all, the language of the Koran. On these grounds 73.9% of the respondents listed Arabic language and Arab-Islamic culture as 'very important' and all the remainder listed it as 'important', which brings the responses to this aspect to the same level as those of the Islamic issues in the curriculum.

This concern for Arabic language and culture expressed by the respondents to the questionnaire matches the official attention currently given to this aspect as planners attempt to improve the quality of education which has recently been critically questioned. Language as the bearer of cultural values and competencies poses a school problem at present which, like the problem with Islamic content, is ultimately concerned with curriculum relevance. When I asked the Head of the CBIA about the source of the weaknesses in language teaching, currently under criticism, he pointed out that "there could be many factors creating this problem, first you find weakness in the teacher, maybe because of neglect on the part of the Inspector, who does not guide the teacher in understanding the whole curriculum..., the teacher may not be successful in facilitating the material for students..., that is to say his method is not right, his teaching is not understood... Many factors have created this weakness which has made the student look upon the Arabic language, the language of his fathers and ancestors, as a very difficult subject, to the extent that most of the students find Arabic language harder even than Mathematics, Science or any other subject... or in some cases even than English, which is a foreign language regarded as of secondary importance." (Interview). This reply gives some indication as to the nature of the problem and curriculum planners' attitudes to different subjects in the curriculum. It implies that students have more interest in subjects other than Arabic language, an attitude which is clearly incomprehensible to the speaker. As well as the
possibility that students find these subjects intrinsically more interesting than Arabic, the qualifications that accrue to their subjects have more prestige than qualifications in Arabic, carrying as they do, the opportunity to study abroad.

Closely related to the cultural aspect of the curriculum, is the promotion of a wider outlook and an ability to identify with universal human values. I introduced a question concerning attitudes to human civilisation and cultures of other countries, an aspect which is largely neglected in the present curriculum; indeed, hostile attitudes to such wider human issues are often encouraged. The human dimension is an essential element of Islamic ideology and the Yemeni socio-political philosophy as outlined in the National Charter; references to this element are made in the general aims of education. Arab-Islamic culture and civilisation, whatever the special elements they may have in themselves, are part of the wider human civilisation; they have influenced and been influenced by other cultures throughout history. The enrichment and development of the Yemeni-Arab-Islamic culture in modern times and in the future cannot be isolated from other cultures, especially since the barriers, cultural and political, are rapidly giving way to systems that involve human co-operation and close interaction as a result of developments in the areas of communication and media as well as in political and economic international relations. The questions concerning involvement in the development of human civilisation received reasonable acceptance: 34.2% of the respondents listed it as 'very important', and 57.1% listed it as 'important', while only nine people out of the 161, seven of whom were from the group representing the public, find this element 'not important'. The cautious response as to the first ranking reflects the uncertainty of a people who have been isolated for generations from outside influence, and
who are currently subjected to the blast of cultural xenophobia that often accompanies religious revivals or the development of nationalist sentiment.

**Socio-National aspects**

In the Yemeni context this aspect of the curriculum includes the development of values and attitudes that have been adopted by the society and expressed in the national policy. Yemen is striving to build an efficient and strong democratic centralized bureaucracy. In a society in which traditional structures and attitudes of tribalism, sectarianism and political differences are strong and often in disharmony with the common national good, the development of love of and loyalty to the country, and of a spirit of co-operation, democratic behaviour and collective responsibility is a most urgent priority. These qualities and attitudes are regarded as essential by the national policy which places great emphasis on social harmony and national unity. As has been noted in the chapter on the existing curriculum, considerable attention is given to all these in the aims and objectives of the curriculum, but as always, policy does not necessarily guarantee practice.

The responses to the questions on the development of 'love of and loyalty to the country and its values', and of 'a spirit of co-operation, democratic behaviour and collective responsibility', were somewhat lukewarm, a good deal lower than the wording of national and educational policies would imply. 57.7% of the respondents listed 'love of and loyalty to the country' as 'very important', and 55.9% listed 'co-operation and collective responsibility' likewise. Divergence among groups of respondents is very slight, but it is significant to note that the teachers' group is in the lead in both items and that the officials group returned the lowest rating on
both questions.

A third element relating to national issues is the policy on Arab national consciousness and concern for Arab unity, which has been strongly emphasized in the present curriculum. Yemeni national identity is closely linked with Arab nationality; the country’s economic and political survival is inextricably linked to the life of the Arab nations, therefore it should ensure its future security by consolidating in its children a sense of the nature and values of Arab nationality. Naturally, the concern for this issue must not be encouraged at the expense of Yemeni socio-political needs and problems, neither must Arab identity supercede Yemeni identity.

The question concerning the development of ‘Arab national consciousness and concern for Arab unity’ was rated as ‘very important’ only by 29.2% of the respondents, and 46% listed it as ‘important’, a level of response which is lower even than that for the question concerning identification with the wider human issues. Sixteen people, eight of them representatives of the public group, rated Arab issues as ‘not important’. Ironically, the group representing the officials is the least interested in this area, as only two people out of 21 find this area ‘very important’. Again, the teachers came in the lead, as is the case in the two questions concerning Yemeni socio-political issues. This response is corroborated to a great extent by the current public debate in which many Yemenis are critical of too much emphasis on Arab issues in education. It seems that the stress on Arab issues in the present curriculum is a result of the fact that this curriculum is planned and written by Arab staff other than Yemenis; the drive towards Yemenization which has been a preoccupation in educational circles, is an indication of the emerging Yemeni perspective. An outright criticism of this emphasis on Arab issues was expressed in 1977 by the
then Head of State, who said, "Our links with the Arab nations and our commitment to the principle of promoting a unified Arab curriculum have been taken as a pretext to ignore the Yemeni culture and the development of Yemeni children's awareness and understanding of their country's social affairs and history." (MOE, 1977a:11). The current concern for Yemeni internal cohesion and social unity, and for the unification of the two Yemens stressed very highly in the National Charter, (cf. chapter five) implies that Yemeni cultural and socio-political issues should be given first priority in education. Arab unity, indicates the Charter, can be achieved only when social harmony and Yemeni unity have been realized. The intention to reduce the reliance on Arab input in education was expressed, though indirectly, by the Yemeni Assistant Director of the UNESCO Project, Al-Ghaffari, in his description of the relationship between the MOE and the outside world. He says, "We try to practice international relations in technical affairs... relations with international organizations such as UNESCO and the World Bank, which have more than one experience, for the question is a question of national sovereignty. What we need to give to our children of experience, knowledge, values and concepts should not be limited to one country or based on the experience of a single country, as happened before when our Egyptian brothers were helping us, the system was Egyptian, imported from Egypt. They gave us only their experience. Now we have more than one source from which we choose what is suitable for us and what matches our needs and values." (interview). Moreover, the high priority given to Islamic values and culture militates against the development of a strong Arab identity, since Islam, when interpreted politically, is regarded as a universal movement, and to limit it exclusively to the Arab dimension would curb its political potential and also alienate the non-Arab parts of the Muslim world. These responses indicate that a curriculum relevant to Yemeni needs would
emphasize concerns of the immediate social environment, such as Yemeni national and cultural identity, and at the same time, would give more weight to identification with wider human issues, than to issues of exclusively Arab interests.

In summary of this section it may be noted that Islamic issues and identity are perceived by the people as being of paramount importance superceding all other socio-political concerns. Arab language and Arab-Islamic culture are closely related to the Islamic issues and may have acquired some of their importance from their inextricable relation with the Islamic religion. Social and political considerations concerning Yemeni society, are seen as of more immediate relevance than those elements related to general Arab affiliation. There is also a growing trend towards the development of a wider human perspective which in the questionnaire has been rated higher than Arab political unity. The high rate of response to Islamic and cultural issues, including Arabic language matches the general trends in the national policy which are expressed clearly in the educational policy and curriculum, and which reflect a decided move towards more Islamic influence in Yemeni policy and in education. The response to socio-political issues also matches the new trends in the national policy which shows considerable concern for the development of Yemeni identity and qualities that would lead to social harmony based on co-operation and mutual collective responsibility with a balanced identification with the Arab and the human community.

Development, work and the curriculum

Despite the fact that emphasis has been placed on the relationship between education and development both in the socio-economic sense of the term and with regard to preparation for work and for participation in
the process of production, this relationship is still very ambiguous. The common belief that prevails among educational and curriculum planners is that the public response to the idea of making education relevant to real life issues and work practice is generally unfavourable. Unfavourable attitudes to vocational and technical education and the supposed failure of the introduction of a prevocational type of curriculum in the late 1970's are taken as evidence of a general rejection of such attempts to improve the relevance of education through work orientation.

The data collected in the survey however, indicate that such generalized judgements are not entirely valid, and there are indications that people's attitudes to these issues are not as hostile as has been assumed. Yet if the relationship between education and development is utterly confined to the idea of preparation for vocational work, as the official version seems to indicate, especially if this preparation is to be for the traditional areas of agriculture and crafts, the general lack of enthusiasm for this type of 'development' component in education is probably real. Three main trends emerge from the data relevant to this area:

1. Generally, there appears to be a high level of agreement among people over the desirability of making education relevant to wider development issues;
2. The development of awareness of economic values and attitudes is regarded as more important than preparation for specific economic activity;
3. Skills concerning individual activities take precedence over those of a vocational nature. This is to say that people show interest in making the curriculum relevant to aspects of their everyday life; they expect and want their children to be introduced to the economic values accepted and appreciated by the society; they want them to acquire
certain skills that would help them improve their lives; the school is not, however, supposed to train them in skills which would confine them to a specific and limited vocation in life.

In the questionnaire, people were asked to state their opinions about how important it is to include certain elements relating to development in the general curriculum. The results were organized according to the responses rating these elements as 'very important'. The following responses were obtained:

1. Liking for manual work, respect for workers, interest in agriculture, crafts and rural development; 64.0
2. Understanding of the importance of food, health, education, shelter and forming a family; 55.9
3. Understanding of and concern for the natural environment; 55.9
4. A spirit of frugality, saving and investment; 47.8
5. Preparation for work; 44.7
6. Understanding of the society's needs, resources and institutions; 38.5
7. Awareness of and involvement in international development issues; 31.0

Differences among groups of respondents appear to be very slight, yet it may be significant to point them out. For the first item, apart from the teachers, 71.4% of whom rated this item as 'very important', about 60% of all other groups rated it so. In the case of the second item we find that 73.7% of the headmasters rated it as 'very important', followed by 58% of the public, while about 50% of other groups rated it so. In the case of the third element concerning the natural environment, there appears to be a common agreement on its importance between the groups representing officials, teachers and headmasters, an average of 65% of whom rated it...
as 'very important', while 53.5% of the students so rated it, and only 44% of the public listed this item as 'very important'; this low rating, however, probably reflects a lack of understanding of the issue, rather than any actual hostility to it, a situation that in itself testifies to the need for public education in the area of development.

It is very interesting to find that all groups maintain an average level of response to the question concerning frugality, saving and investment, and more significant that the highest rating is made by the group representing the public, 54% of whom rated this element as 'very important', the lowest rating of 36.8% and 38%, was made by the headmasters and officials respectively, which may reflect a lack of interest among educational personnel in economic issues, which is not shared by the public at large.

As for the last three items we find that a high rating is given by the two groups representing headmasters and teachers, and the lowest is given by the group representing the public. 55.6% of the teachers rated preparation for work as 'very important', 44.4% of the headmasters rated social needs as 'very important', and 44.4% of the teachers rated the item concerning issues of international development as 'very important'.

The general picture that may be inferred from these figures indicates that there is a common interest in and acceptance of the idea of relating the general curriculum to development; they also indicate that officials and interested members of the public would agree with teachers and headmasters that there is considerable need for the inclusion in the curriculum of some training of awareness and attitudes to development issues. However, on such practical issues as preparation for work and knowledge of world affairs, official and public opinion does not appear to favour such elements as highly as do those professionally engaged in
education at the school level.

A more specific picture of the kind of skills that might pertain to the field of development education can be obtained by examining those questions relating to practical activities and skills, the responses to which may also show the differences that prevail between different groups involved in the system. The questionnaire included a section in which respondents were asked to indicate the importance of a number of practical activities and skills to be introduced into the general curriculum. Five of these elements are related to development. The following table represents the rating of these aspects by all respondents as "very important":

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Health, nutrition and hygiene skills;</td>
<td>65.2</td>
</tr>
<tr>
<td>2</td>
<td>Home-making, family management and home crafts;</td>
<td>45.9</td>
</tr>
<tr>
<td>3</td>
<td>Agricultural skills;</td>
<td>22.9</td>
</tr>
<tr>
<td>4</td>
<td>Technical and mechanical skills;</td>
<td>14.3</td>
</tr>
<tr>
<td>5</td>
<td>Traditional local crafts.</td>
<td>13.0</td>
</tr>
</tbody>
</table>

The high ratings accorded to the areas of health and nutrition and home-making, indicates the peoples' general awareness of the need and importance of these skills; these ratings closely match the opinions on development issues dealt with in the previous list. These skills are important to every individual in a society which is striving to improve its living standards and to alleviate the manifestations of poverty, ignorance and disease. Variation in responses among groups is significant in the case of health and nutrition skills, where 63.3% of the headmasters and 70.4% of the teachers rated this aspect as 'very important', and the lowest rating came from the public, 54% of whom found it 'very important'. On the question of those skills relating to home-making and family management
the difference among groups is slight, ranging between 53.6% (the teachers) and 38% (the public), of those who rated this aspect as 'very important'.

As for the questions concerning vocational skills, few individuals found them 'very important', and the groups also vary in their opinions as to the importance of these skills. In the case of agricultural skills, 33.3% of the teachers found their inclusion to be 'very important', while only 14.3% of the officials and 16% of the public so rated them. 33.3% of the headmasters listed technical skills as 'very important', followed by teachers with 17.9%; the lowest response came from the officials with only 4.8%. Again, in response to the item on crafts, 27.8% of the headmasters, 25.9% of the teachers, 14% of the students, 4.6% of the officials and only 2% of the public rated this element as 'very important'.

Data collected from sources other than the questionnaire indicate that there is support for the inclusion of practical aspects in the general curriculum, though different people offered different justifications for this idea: e.g. preparation for vocational specialization or for making the learning experience more meaningful and life-orientated. In a report on the curriculum for the secondary level written in 1976, criticisms were levelled at the curriculum for being too academic and remote from everyday reality and from the need for vocational skills. The report stated that "secondary education, like other levels, depends on remembering information which soon becomes old and out-of-date". (MOE, 1978c:8). The report suggested that some aspects of vocational education should be introduced into the higher grades of the primary level and in the preparatory level, so that children can be familiarized with these aspects.
and positive attitudes towards manual work can be developed early. (Ibid:30).

To improve the quality of education and make it more useful, Al-Bukhiti suggests a number of measures, among them "to link academic subjects to the issues of peoples' daily life, and to give due concern to the practical aspects of the curriculum". (Athawrah, March 1982:5).

When Abu Bakir, the present UNESCO expert and Director General of the UNESCO Project for supporting the MOE, was asked for his view on practical aspects of education which might be developed into a life-orientated curriculum, he felt that Yemen has "a good chance of making education relevant to the reality of Yemeni life". He finds that "education for self-reliance" is the most suitable model for relevant education. "We are not all going up to university... our country cannot afford that everyone goes to university... our situation does not permit it, take for example the rate of drop-out at the primary level", indicating that even if a policy of expanding higher education to cater for the whole school population was formed, this would be impossible to carry out. He claims that children should learn certain skills not only to inculcate respect for manual work, but also as a means of helping the schools to overcome their financial difficulties, "Why do we have to have a budget for maintenance for schools? Get the students to do some manual work, to paint and repair..., which will train the student to like work as well as give him some basic skills; it is part of the discipline itself, the culture of manual work... all these should start when the curriculum and textbooks are set. Some manual work should be introduced at primary level, to be increased at the higher level of general education. After this general level, if the student enters vocational school or the university, he has
learned something potentially useful, or if he does not continue his education he has learnt something which may be useful in the home or in the market-place". (Interview).

The Head of the CBIA Department, when interviewed, pointed out that a booklet is currently being distributed to students at the preparatory level which includes general information about vocational schools, in particular agricultural schools, which "attempts to encourage students to enter agricultural school, and to familiarize them with such schools so that they should not enter them without knowing about their aims and the nature and importance of their activities". The idea of vocationalizing the general curriculum seems to be accepted but the problem of how to do it has not so far been solved. The Head of the CBIA Department, points out that "there are many ideas in this area, some of which have been tried out, and have failed. We opened seven schools at the preparatory level on the basis that they could provide a general education as well as vocational. After three or four years it became apparent that the students were coming out of school neither equipped with general knowledge, nor acquainted with vocational skills, and therefore these schools were abolished and they reverted to their general curriculum". He suggests that the alternative should be to introduce children to life-oriented and vocational ideas and skills through the general curriculum at the preparatory level or even at the primary. (Interview).

Al-Qadasi, head of an educational centre, asserts that there is a great need to link the curriculum in every subject to the needs of the people and to the immediate environment. "In Islamic education you have the principles of ablution before prayer and the principles of prayer which the teacher should not only teach, but must apply practically". He goes on to
say "Some curricula are remote from the environment, some teachers come from Egypt, the Sudan or Jordan, who do not know the environment in which they teach, so the educational consultant should be the source of guidance on how to gear the curriculum to the environment and use its resources".

As for the vocational elements, Al-Qadasi argues that "it is urgent that schools subjects are translated into practice, but we do not have the resources, the human expertise and material facilities, yet the curriculum should be planned in a way that would allow for some projects to be implemented, to make the school a 'workshop' in which theory and practice are brought together, in the rural areas the teacher in teaching his academic subject can refer to the importance of agriculture in the process of growth in plants, he may use the school garden or even a small area beside the school to grow some local plants and make the children look after them and observe their development to find out what affects their growth". (interview).

There is an awareness of the need for the inculcation of values and attitudes concerning development through the social studies curriculum, and the assumption is that these values and attitudes can be developed by the present curriculum. Al-Agil, a specialist in social studies at the MOE, points out that "we are trying to make the curriculum more 'suitable' and linked to the immediate environment especially at the primary level. The child is introduced to the natural environment, the features of his environment, the economic activities prevailing in it, to the social environment, the family, village, district and the province, how they are ruled and what institutions of services and production exist there and how people can benefit from them and participate in improving them".
Furthermore, the main objective is not only to inform the child of these aspects but "to develop in the child, the sense and skills of co-operation, love of his family, brothers and community, and the ability to co-operate with them, to love them, mix with them on different social and religious occasions. He learns how to keep the street and the environment clean and tidy, how to play and communicate with his brothers and neighbours, we develop in him love of manual work and respect for people who do this kind of work such as the craftsman and the farmer, he is taught to realize the importance of these activities and the people doing them, for the nation. Also, we inculcate in him positive attitudes and behavioural habits such as honesty, truthfulness and at the same time discourage undesirable habits and attitudes such as contempt for manual work, discrimination, uncleanliness, lying and deception". (interview).

These responses reflect the ambivalent attitude to vocational education that is found in the educational systems of many industrial Western countries as well as those of the Third World. The justifications of vocational education may be grouped in four categories: those which regard vocational education as a preparatory training for a specific specialization; those which regard the introduction of practical aspects into the curriculum as a preparation for life rather than as training for specific work, and those who favour the inclusion of vocational aspects as a means of developing positive attitudes to manual work, or of consolidating theoretical knowledge.

In general, the responses quoted here indicate an unfavourable attitude to the concept of vocational education as a training for future work; this is particularly true of agricultural, technical and craft education, as the low rating accorded to these aspects indicates. The higher rating given to the
more general life skills, i.e. those concerned with health and hygiene, home and family management, reflect a recognition, particularly at the school level, of the importance of the inclusion of such basic general skills in the curriculum; outside the school, however, attitudes are changing at a slower rate.

Vocational education as a means of changing attitudes to manual work is much stressed on the official level: the reason for this becomes apparent in the light of the determined rejection on the part of the public, of vocational education as work preparation. It is clear that a change of attitude in this area would be welcomed at policy-making level; and moreover, would be realistic on the part of the public in general, in view of the economic conditions that prevail in Yemen, as outlined in chapter 5.

The general tone of the responses is one of acceptance of a practical curriculum as a preparation for life, but of rejection of vocational training as the function of education. There is considerable official preoccupation with the changing of public attitudes to manual work, a preoccupation which may not be entirely realistic in view of the strong disfavour in which manual work is held.

**Personality Development**

Personality development is one of the most subtle aspects of the function of education. While many qualities are highly endorsed in statements of commitment on both the political and personal level, the development of these qualities is more often honoured in the speech than in the observance. The curriculum planners do not seem to have resolved the natural tension between the social and personal functions of education. It appears that often, if not always, the personal development aspects have
been sacrificed to socialization. This imbalance is not, of course, confined to Yemen: one of the most serious conflicts in educational systems world-wide, is the problem of individual rebellion or rejection by individual students of the school norms. In the Yemeni curriculum, in principle, the development of every aspect of human personality is one of the functions of the school, but there appears to be some ambivalence over which aspects are actually valued.

In the questionnaire, I examined a number of the qualities of the individual personality which are constantly referred to in official statements and curriculum plans. The data so collected appear to indicate that people place greater emphasis on personality development than it has been granted in the present practice. The items concerning the development of individualistic personality qualities are rated higher than those qualities of a social and collective nature; indeed, the development of those traits which concern individual personality are rated next to religious values and Islamic cultural identity. Those qualities which relate to creativity, enterprise, personal identity and self-esteem are rated more important than those relating to identification with others at the human level; even more significantly, they are rated as more important than those qualities relating to emotional balance and maturity, such as aesthetic response. The following table shows the items included in this area arranged according to the percentage of responses rating each as ‘very important’:

<table>
<thead>
<tr>
<th>Item</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creativity and inventiveness</td>
<td>72.7</td>
</tr>
<tr>
<td>Self-respect and self-reliance</td>
<td>66.5</td>
</tr>
<tr>
<td>Self-confidence and initiative</td>
<td>64</td>
</tr>
<tr>
<td>Love of work and concern for its perfection</td>
<td>42.2</td>
</tr>
</tbody>
</table>
The traditional structure of Yemeni society, in which the tribal system and the geographical isolation of different parts of the country encouraged individualistic attitudes and personal independence as the tactics of survival, may account to a large extent for the emphasis on the complex of virtues associated with self-reliance and self-assertiveness. This is also reflected in the general tendency in the national policies to favour the development of such entrepreneurial qualities as self-confidence, self-reliance, creativity and initiative, which have been repeatedly referred to in the National Charter, the National Development Plan, and other sources of educational planning.

The relatively low response to the development of positive attitudes to work and appreciation of its perfection may also be ascribed to traditional, social influences which are often at odds with official aims. Both Islamic doctrine and the national policy emphasize work, perseverance, and perfection of work, as religious virtues, and the same applies to the human values referred to in the fifth item. The Director of General Education writes that our education "is trying to look at the person as a whole, who has a body that develops, a mind to think and a soul - this holistic view requires the development of the individual as a full human being who is an active member of the society and able to benefit himself, his society and to participate in the promotion of the quality of life for humanity as a whole" (MOE,1982:73). However, although these qualities are designated as desirable in both religious and official policies, in reality, both regard for work and the practice of benevolence
and tolerance are not taken as absolute human values. Their application is limited by other social attitudes that have developed in the society as a result of geographical and cultural isolation. A case in point: as we have seen in the analysis of the existing curriculum, people are urged to value work and respect workers; students, however, are not involved, or even expected to be involved in work themselves.

Benevolence, empathy and tolerance are often referred to in a general way in the aims of education as basic human values. Their application, however, is often interpreted as limited to Arab people or at best to Muslims. These conflicting value systems may have influenced peoples' opinions and perceptions of reality, resulting in confusion that may account for the low priority given to these aspects in the questionnaire. It is significant that only 44.4% of the teachers and headmasters rated this aspect as 'very important', whereas other groups' responses cluster around 30%.

That emotional development and aesthetic experience are rated so low, is still another reflection of the attitudes prevalent in the society in its present stage of social evolution, that would equate emotional reaction with weakness, and aesthetic activities with frivolity. Moreover, there is still a widespread opinion that activities relating to aesthetic expression such as music, dance and the fine arts constitute anti-Islamic behaviour. To a great extent, a puritan view of aesthetic activities prevails, that regards these as examples of degeneracy. In the area of practical activities and skills included in the questionnaire, only 24.2% of the respondents rated the item relating to art and literary skills, including music, painting and drawing as 'very important'. Broken down by groups, 42.1% of the headmasters, 39.3% of the teachers and about 17% of the
other three groups rated these skills as 'very important'. Consequently, the neglect of these areas by curriculum planners is not, as is often claimed, due to lack of resources, but rather is a reflection of the general perception of such pursuits which does not accept them as worthwhile activities to be included in the curriculum.

**Intellectual and learning issues**

This area concerns the school contribution to the development of intellectual and educational abilities, attitudes and skills, most of which are basic means for achieving the goals of the school, previously outlined. It concerns, to a great extent, the core curriculum the school should be offering to children, especially at the early stages of schooling.

The responses to this area offer a general perspective in which learning skills are of paramount importance and intellectual capabilities and modes of thinking are desired but feared. The following list shows the elements included in the questionnaire ordered according to the percentage of responses rating them as 'very important':

<table>
<thead>
<tr>
<th>Element</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Literacy and communication skills</td>
<td>86.6</td>
</tr>
<tr>
<td>2. Habits and skills of self-education</td>
<td>63.4</td>
</tr>
<tr>
<td>3. Understanding of technological/scientific development</td>
<td>52.4</td>
</tr>
<tr>
<td>4. Mathematical concepts and functional skills</td>
<td>52.2</td>
</tr>
<tr>
<td>5. Scientific thinking and problem-solving</td>
<td>39.1</td>
</tr>
<tr>
<td>6. Basic concepts, facts and ideas in different fields of knowledge</td>
<td>28.6</td>
</tr>
</tbody>
</table>

The response to the question on the development of literacy and
communication skills - reading, writing, listening, comprehension and dialogue, heads the overall list of priorities for the whole questionnaire. The high rating for this element reflects the general perception of the people that these skills are basic to any kind of learning, either in the religious and cultural fields, or in the fields related to practical life.

Traditionally these skills have been made a major function of the school; at present to the ordinary man, reading, writing and intelligible communication may be the only manifestations of good schooling. Concern for the teaching of these skills has been raised as part of the criticisms of the Arabic language in general as mentioned in the section on religious and cultural issues.

Self-education, or the skills and habits of learning to learn, has been introduced in the Yemeni curriculum as an aim of the curriculum at the primary and preparatory levels cited in Chapter 7, even though there is little indication that it is practised. The relatively high level at which this element is rated (63.4% rated it as 'very important' and 32.3% as 'important') reflects a general awareness of the importance of enabling people to learn by themselves.

It is significant to note here, that people who are directly involved in the process of learning/teaching are more aware of the importance of self-education and of engaging children in learning. A breakdown of the groups who rated this element as 'very important' are, 66.4% of the headmasters, 67.8% of the teachers, 67.4% of the students, 61.1% of the officials and 56% of the group representing the public. Another point of significance here is that the response to the question on learning skills introduced in the last section of the questionnaire, came very close to the
response to the question about self-education, which indicates considerable clarity in peoples' perceptions of the importance of this area. 55.9% of the respondents rated the development of learning skills - training in observation, the use of scientific instruments and data collection and processing, as 'very important', and 34.8% rated it as 'important'. As for the responses of each group, almost the same response is given here as that to the previous element of self-education: learning skills were rated as 'very important' by 73.7% of the headmasters, 60.7% of the teachers, 57.1% of the officials, 53.5% of the students and 46% of the group representing the public.

Next to communication and learning skills, came the understanding of technical and scientific development, and mathematical concepts and functional numeracy skills. These two elements appear to be regarded as of relatively average importance: 52.4% of the respondents rated the former as 'very important', and 52.2% rated the latter likewise. The highest rating given to the understanding of technological and scientific development was made by the teachers' group, of whom 71.4% rated it as 'very important', whereas the highest rating given to mathematical aspects was made by the group representing the public of whom 66% listed it as 'very important'.

The last two components in this area - scientific thinking and problem solving, and basic concepts, knowledge and ideas, came a good deal lower on the scale of priorities: only 39.1% and 28.6% of the respondents rated these, respectively, as 'very important'. In terms of the response of different groups, again the headmasters provide the highest rating followed by the teachers, while other groups responded with very low ratings: 66.4% of the headmasters and 48.4% of the teachers rated
scientific thinking and problem solving as 'very important', and 57.9% of
the headmasters and 39.3% of the teachers rated the acquisition of basic
concepts as 'very important'.

If one considers the numbers of responses which rated these elements as
'important' it becomes clear that they are in fact, taken very seriously.
This is especially true of the questions relating to science. The results
indicate a widespread awareness of the importance of more scientific
knowledge and modes of scientific thinking, but this awareness does not
extend to rating their importance as high as that accorded to religious-
cultural and social values and modes of thinking.

The need of modern Yemeni society for scientific knowledge and modes of
objective scientific thinking is recognised in the National Charter and the
National Development Plans, in which the adoption of scientific planning,
implementation and evaluation of development plans bear witness to an
awareness of the need for more scientific input. The official concern for
the acquisition of technological and scientific knowledge and skills and
the development of thinking, has been reflected in the aims and objectives
of the school curriculum of the primary level, with a long list of the
qualities to be acquired, such as analysis, synthesis, discrimination,
criticism, creativity, inventiveness, evaluation and problem-solving. (cf.
Chapter 7, section 2). This list, though questionable on many grounds, is
an indication of the changing attitudes to scientific thought, which is
supported by the increasing number of students, at the upper secondary
level and in higher education, who are attracted to the sciences: the
figures presented in Chapter 6, show that the number of students opting
for scientific fields of study, in all areas of the country, is greater than
those taking other options such as humanities, most of whom choose these
areas only out of necessity.

Despite the indications of the increasing awareness of the importance of scientific knowledge and ideas, both for practical as well as academic use, the level of response shown above is relatively low. This ambivalence in attitudes towards science education and the development of modes of objective thinking, may result from a deeply-rooted suspicion of science, which is regarded as an alien and corrupting influence, inimical to religion and redolent of Western materialism and from the lack of a general grasp of the nature and goals of scientific thought and the confusion that prevails about the relationship between science and faith. It could also be a result of a political tendency towards enhancing conformity and dependency on the leaders' interpretation of reality.

When I discussed this kind of tension between science and faith with two leading Yemeni educationalists, there was general agreement that there exists no conflict between the Islamic religion and science, as long as science is used to support religious belief. Hassan Jabir points out that "theology is no longer as before, belief in spirits or magic and charms. Now there is a movement among Muslim scholars, among them Al-Zandani (a Yemeni scholar) who have used scientific principles and theories to serve the Islamic faith". He indicated from his conversation that the Yemeni curriculum is not tight enough in this area and he placed great emphasis on the influence of the teacher rather than the curriculum, saying "it is all the teacher, even if you have a communist curriculum and the teacher is a good Muslim, you will get good Muslim students". (interview). In the present Yemeni curriculum a start has been made to "incorporate Islamic knowledge especially quotations from the Koran, into other subjects particularly the Arabic language. It is all science," says
Al-Ghaffari, the Yemeni Assistant Director of the UNESCO Project for supporting the MOE. (interview).

Thus, the problem of reconciling scientific and religious issues, becomes an attempt to use science in the rationalization of religious beliefs, a perspective which has very serious implications for the teaching of science.

Summary and Conclusions
Considering the existing circumstances in Yemeni society and the conditions prevailing in the educational system, the general picture that arises out of the data collected from both written and direct sources provides a highly logical pattern for curriculum relevance. A high level of consensus as to the orientation and content of the curriculum, appears to prevail in official documents that have a bearing on the curriculum. The questionnaire I distributed in the course of my field-work and the interviews, provide specific first-hand data that give some guidelines as to the general issues that preoccupy the system. Here, I will try to summarize the main features of the Yemeni educational trends.

1) Religious and cultural values are of paramount importance in the Yemeni curriculum. This high status which is endorsed by the response to the questionnaire and interviews, features very clearly in the National Charter and the curriculum currently provided in schools. People seem to be convinced that identification with Islam and Arab-Islamic culture is the highest of all commitments, and that Islamic teachings, Arabic language and culture are the most essential elements in the education of the young. The rating of these elements in the questionnaire, and opinions obtained from interviews and written sources, match to a great extent, the status
of these aspects in the existing curriculum, judged by the time allocated to them in the school timetable.

The consensus over the importance of the Islamic aspect, including Arabic-Islamic culture, is reflected in the current emphasis on Islam as the national ideology and the source of Yemeni social norms and moral values and laws. At present however, a strong Islamic revivalist movement is active in the country, whose influence is very apparent in the socio-political and educational spheres, but above all these considerations, Islam is the traditional source of meaning and identity for the Yemeni people as a whole.

The general consensus that appears to prevail as to the high importance of these aspects of education does not automatically imply a similar level of agreement as to the nature of the material which is to compose the content of the curriculum or on the orientation of this content and its relationship with other aspects of education. In the Islamic aspect some people put more weight on the amount of Islamic knowledge being taught in school, in particular the amount of Koranic content, in the belief that such knowledge is essential for the inculcation of faith and moral values. Others who may well agree on the kind of principles and values to be inculcated in the child, advocate other approaches to nurture the development of such values. The latter view favours a more meaningful, life-oriented kind of Islamic content and different learning strategies by which the desired ends can be achieved. The former constitutes a more traditional outlook on reality and on the function and methods of education with the emphasis on the past and on the amount of knowledge to be transmitted by the teacher and memorized by the child. This view places far more emphasis on the role of the teacher, as an authoritative figure.
A similar difference of opinion occurs in the area of Arabic culture and language, where some would give more weight to the acquisition of Yemeni aspects of the Arab culture, and the mastery of functional skills of the language such as reading, writing, comprehension and intelligible self-expression, while others would put the emphasis on general aspects of the Arab culture, and on other aspects of the language such as grammar, rhetoric and a more literary appreciation of the language in its classical form. These differences of opinion in both religious and cultural areas, do not affect the status of these aspects but they are a potential source of difficulty for making the content of education more relevant. However, they might also become a source of strength in the curriculum and of richness to Islamic values and Arabic culture, depending on how they are handled and balanced in the curriculum, not only as subjects but as aspects of an integrated curriculum.

The inculcation of socio-political values and positive social attitudes, in particular of loyalty to the country, of a sense of co-operation, collective responsibility, and respect for the political leadership and public institutions, is very highly emphasized by the official educational policy, as the existing curriculum indicates. These values and attitudes, however, according to the questionnaire, are rated lower than Islamic content and the development of individualistic qualities. The pattern of identification with value-systems puts Islam at the top of the scale; the material progress of the individual is the next priority, followed by social (Yemeni) identity and loyalties, and finally the outside world including the Arab world. Whereas the official pattern seems to place more weight on the socio-political aspects and Islamic-Arabic issues, all of which concentrate on the development of the ‘good citizen’. This universal tension, the conflicting drives towards the development of the qualities of
good citizenship and the development of the autonomous personality, is
difficult to resolve by the very nature of the problem, but it is aggravated
in the Yemeni educational system by the widespread
misinterpretation of these concepts and the mishandling of the issues
relating to them in the present curriculum.

2) Economic and Development Aspects. In the field of economic
development a high level of agreement appears to prevail as to the
importance of the values and skills associated with economic development
and in particular those relevant to everyday life activities. The high level
of agreement seems to be maintained in all sources of data: written
official statements and public comments, interviews and questionnaire
responses. These sources indicate that there is a common
concern for basic habits, attitudes and skills which will help people to
improve their living standards, especially in health, nutrition, home
management and family organization, as well as some functional skills and
attitudes for earning a living. The view of the official educational
planners advocates the inclusion of vocational content in the curriculum
as a means of providing sufficient capable manpower for the economy,
while public opinion in general advocates the inclusion of skills useful in
everyday life. However, the idea of preparing children for specific
vocational occupations relating to manual work, especially crafts and
agriculture, or even for many official positions of a clerical nature, is far
from being accepted. The failure of the attempts that have been made so
far to vocationalize the general curriculum at the preparatory level, may
arise out of the generally hostile attitudes to traditional vocations and
the lower social status of those engaged in them.
On the other hand, the acceptance of general development awareness and the acquisition of positive attitudes towards work, and of general skills, provides a great opportunity to achieve most of the official manpower goals, if these aspects are carefully handled across the curriculum, and if more concern is given to attitude formation rather than to traditional forms of teaching which would provide a factual account of various forms of work, and would encourage students to respect those who engage in this work, rather than encourage them to identify with these forms of work. Tension runs very high in this society over any suggestion of interference with the autonomy of the individual, such as the preparation of students for prescribed futures. This tension can be managed, as can that caused by the conflict between individual and social values, by the careful handling of the related issues in the curriculum.

3) Personality Development. The response to certain items in the questionnaire indicates that a high value is placed on individualism and associated qualities, placing it next to the religious and cultural issues. One source of this high regard for individualism may be the Islamic stress on self-assertiveness and self-reliance, as well as on perseverance and work. Another may be the traditional bias of Yemeni society towards individualism and independence that results from prolonged cultural isolation and the effects of the harsh terrain on the character of the people. The findings are in line with aims expressed in the national policy endorsing the autonomy of the individual. The interpretations of autonomy, however, may not coincide. National policy encourages the development of such autonomous personality traits as self-reliance, creativity and initiative as the basis for good citizenship, aimed at the improvement of the quality of the collective social life, whereas many people appear to interpret autonomy as the personal success of the
individual. This motivation towards entrepreneurship is exemplified by the number of students taking commercial training courses both at the secondary and university levels. The popularity of the fields of medicine, engineering, commerce and law, is explained partly by the higher financial rewards that accrue to these areas and partly, by the fact that these careers allow for the development of a private practice along with the security of a public career. Apart from these obvious attractions, the socio-historical factors of regional fragmentation, tribalism and a marked reluctance in Yemeni society to identify with depersonalised bureaucratic systems, may offer a possible explanation for this preference for values that favour the individual.

4) Intellectual and Learning Competencies and Skills. In the area of learning skills and intellectual development there is a high demand for literacy and communication skills, and for the development of habits and skills for self-teaching. The response to the questionnaire shows a reasonable interest in the acquisition of learning skills, such as the management of scientific experiments, data collection and direct observation and attitudes of independent enquiry.

In the aspects concerning mathematics and science there seems to be no significant change in peoples' attitudes towards them. The rate of response to these areas was average, which appears to match their present status in the curriculum. Moreover, people seem to be cautious about the development of intellectual skills and scientific thinking, despite the fact that most students opt for scientific fields of study if they have the chance. Reluctance to value these aspects stems from two central factors: the unrealistic belief held by the majority that science is inimical to religion, and more importantly, from the general lack of
authentic understanding of both religion and science, and of the qualities they develop in the individual. The same source of confusion seems to apply to the areas of emotional and aesthetic experience and identification with human values, which come very low in the list of priorities expressed in the responses to the questionnaire, reflecting their neglect in the present curriculum.

The overall picture of the data
From the last analysis of the data obtained by the questionnaire, the interviews and other comments on the present curriculum, one can note that the responses to the questionnaire correspond closely to data from other sources; these can therefore be taken as general criteria for tackling the issue of relevance and setting priorities. The results drawn from the data in which categories and items are arranged according to the number of people rating them as 'very important', seem not only to reflect the Yemeni context, but also to have certain similarities with trends and attitudes in other countries. The following table show the responses to the original five categories (as % of 'very important'):

<table>
<thead>
<tr>
<th>Category</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Religious, cultural and citizenship issues</td>
<td>56.4</td>
</tr>
<tr>
<td>2 Intellectual and educational issues</td>
<td>53.9</td>
</tr>
<tr>
<td>3 Personality development</td>
<td>49.9</td>
</tr>
<tr>
<td>4 Development and work</td>
<td>48.4</td>
</tr>
<tr>
<td>5 Practical activities and skills</td>
<td>34.5</td>
</tr>
</tbody>
</table>
When broken down according to the responses of different groups, one notes that the variation is not very high as shown in this table:

Table 29: Variations in Group Responses to Categories.

<table>
<thead>
<tr>
<th>Group</th>
<th>Categories:</th>
<th>First</th>
<th>Second</th>
<th>Third</th>
<th>Fourth</th>
<th>Fifth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students</td>
<td></td>
<td>57.1</td>
<td>51.2</td>
<td>48.1</td>
<td>47.5</td>
<td>33.6</td>
</tr>
<tr>
<td>Officials</td>
<td></td>
<td>49.0</td>
<td>46.8</td>
<td>49.2</td>
<td>44.2</td>
<td>29.9</td>
</tr>
<tr>
<td>Headmasters</td>
<td></td>
<td>62.4</td>
<td>61.4</td>
<td>53.5</td>
<td>51.1</td>
<td>48.9</td>
</tr>
<tr>
<td>Teachers</td>
<td></td>
<td>66.8</td>
<td>57.7</td>
<td>59.5</td>
<td>54.1</td>
<td>42.9</td>
</tr>
<tr>
<td>Public</td>
<td></td>
<td>57.1</td>
<td>54.3</td>
<td>45.0</td>
<td>46.3</td>
<td>27.1</td>
</tr>
</tbody>
</table>

Three levels of importance can be distinguished from the responses in Table 30: high, average and low importance. This list provides guidelines for the setting of priorities in the development and planning of a more relevant curriculum. Three areas emerge as aspects of major concern:

1. while high priority is given to basic skills, other equally important components of education such as life/work skills, physical development and the education of attitudes, are regarded as less important;

2. the ambivalence of social attitudes to science and religion hinders the development of science education; similarly ambivalent attitudes prevail as to identification with human issues that do not have a specifically Muslim application, indicating a need for the introduction of a wider cultural content in the curriculum;

3. despite the high priority given to religious and cultural issues, emotional and aesthetic development are not regarded as of high importance, similarly cognitive development is given priority over these.
Table 30:
The overall list of priorities drawn from the questionnaire and arranged according to the rating of 'very important'.

<table>
<thead>
<tr>
<th>No. R</th>
<th>% Y.I.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>141</td>
<td>86.6</td>
<td>Literacy and communication skills</td>
</tr>
<tr>
<td>136</td>
<td>84.5</td>
<td>Islamic faith and values</td>
</tr>
<tr>
<td>119</td>
<td>73.9</td>
<td>Arabic language and Arabic Islamic culture</td>
</tr>
<tr>
<td>118</td>
<td>73.3</td>
<td>Islamic obligations and worship</td>
</tr>
<tr>
<td>117</td>
<td>72.7</td>
<td>Creativity and inventiveness</td>
</tr>
<tr>
<td>107</td>
<td>66.5</td>
<td>Self-respect and self-reliance</td>
</tr>
<tr>
<td>105</td>
<td>65.2</td>
<td>Health and nutrition skills</td>
</tr>
<tr>
<td>103</td>
<td>64.0</td>
<td>Self-confidence and initiative</td>
</tr>
<tr>
<td>103</td>
<td>64.0</td>
<td>Love of manual work and concern for rural development</td>
</tr>
<tr>
<td>102</td>
<td>63.4</td>
<td>Self-education</td>
</tr>
<tr>
<td>93</td>
<td>57.7</td>
<td>Love of, and loyalty to the country</td>
</tr>
<tr>
<td>90</td>
<td>55.9</td>
<td>Awareness and understanding of the basic needs</td>
</tr>
<tr>
<td>90</td>
<td>55.9</td>
<td>A spirit of co-operation democratic/collective response</td>
</tr>
<tr>
<td>90</td>
<td>55.9</td>
<td>Understanding of, and concern for environment</td>
</tr>
<tr>
<td>86</td>
<td>52.4</td>
<td>Learning skills</td>
</tr>
<tr>
<td>84</td>
<td>52.2</td>
<td>Understanding of technological and scientific development</td>
</tr>
<tr>
<td>77</td>
<td>47.8</td>
<td>Mathematical skills and functional application</td>
</tr>
<tr>
<td>74</td>
<td>45.9</td>
<td>Economic awareness, frugality, saving and investment</td>
</tr>
<tr>
<td>72</td>
<td>44.7</td>
<td>Preparation for expected work</td>
</tr>
<tr>
<td>68</td>
<td>42.2</td>
<td>Love of work and its perfection</td>
</tr>
<tr>
<td>63</td>
<td>39.1</td>
<td>Development of scientific thinking and problem-solving</td>
</tr>
<tr>
<td>63</td>
<td>39.1</td>
<td>Understanding of social needs, resources and institutions</td>
</tr>
<tr>
<td>55</td>
<td>34.2</td>
<td>Concern for human civilisation and culture</td>
</tr>
<tr>
<td>51</td>
<td>31.7</td>
<td>Benevolence, empathy and tolerance</td>
</tr>
<tr>
<td>50</td>
<td>31.0</td>
<td>Understanding and involvement in international development</td>
</tr>
<tr>
<td>47</td>
<td>29.2</td>
<td>Arab unity and national consciousness</td>
</tr>
<tr>
<td>46</td>
<td>28.6</td>
<td>Basic concepts, facts and ideas</td>
</tr>
<tr>
<td>39</td>
<td>24.2</td>
<td>Art and literary skills (music, painting, writing)</td>
</tr>
<tr>
<td>37</td>
<td>22.9</td>
<td>Agricultural skills</td>
</tr>
<tr>
<td>36</td>
<td>22.4</td>
<td>Emotional and aesthetic experience and appreciation</td>
</tr>
<tr>
<td>23</td>
<td>14.3</td>
<td>Technical skills</td>
</tr>
<tr>
<td>21</td>
<td>13.0</td>
<td>Crafts and vocational skills</td>
</tr>
</tbody>
</table>

The number between brackets indicates the number of the item in question.
No. R - the number of respondents rating the item as 'very important'.
% Y.I. - the percentage of respondents rating the item as 'very important'.

The questionnaire and the table of responses arranged according to groups, is to be found in Appendix 11.
The task of the curriculum planner in Yemen today is to achieve a balance between the areas of perceived priority and those areas at present neglected. This task, as well as providing the cognitive challenge of choosing and ordering the best curriculum content, calls for a major initiative in the education of attitudes.

These three outcomes, together with other pertinent issues, in particular basic needs, provide guidelines for the outline for a relevant curriculum for Yemen which follows in Chapter Nine.
CHAPTER NINE

Towards a more Relevant Curriculum for Yemen Arab Republic

In this last chapter some attempt will be made to draw together the arguments and principles developed in the previous chapters. As the title of this chapter indicates, the central goal here is to try to find out ways of making the curriculum more relevant to the needs of the Yemeni learners in their local, national and human context in the light of current and future trends in the Yemeni society, in the world of development, in education and current understanding of human psychology. It should be noted at the outset that the very title shows that we neither claim that the existing curriculum is entirely irrelevant, nor that a new one would be capable of meeting all criteria of relevance. This cautious position stems from the fact that any curriculum, however revolutionary, is in practice merely an improvement of an existing one, or at best a synthesis of new ideas and the established tradition. Even if a new radical curriculum is officially and normatively accepted, its success is limited by the degree of availability of human and material resources necessary for developing and implementing it, and by the fact that change in attitudes is a very slow and gradual process. Therefore, a more relevant curriculum is that which starts from the real and moves towards the ideal; it must be related to present needs and problems and to the existing educational practices; at the same time, it must help to promote conditions and attitudes that will foster educational relevance in the future as a means of improving the quality of life.

A core curriculum for children between 5/6 and 14/15 years of age. The challenge to educational and curriculum planners is to draw up a core curriculum involving an appropriate amount of knowledge, concepts, and
principles, modes of thinking and ways of looking at the world; certain
general skills, values and attitudes which are both intrinsically
worthwhile and extrinsically functional and useful for dealing with one's
needs and problems and with the rapid change which characterises our
time. In its general sense, relevance in education should be the concern of
those involved with all levels, sectors and forms of education. But in this
paper we are concerned with the formal school curriculum essentially
acquired under the aegis of the school during the first nine years of
general education, which should provide a solid foundation for all other
forms and levels of education. It is the conviction of this thesis, based on
the ideas and experiences of education examined earlier, that if the
quality of education in general is to improve, if it is to become genuinely
relevant to peoples' and societies' needs and problems, and if the learning
society is to become a reality, one should concentrate on the mastery of
the basic learning experiences and competences in the first nine years of
education.

Principles for the selection and organization of the curriculum.
1. The core curriculum must be derived from and oriented towards the
satisfaction of basic human needs and the development of human potential
as outlined in Chapter Three; it must be informed by present human
concerns and future trends that have been discussed in the theory section,
in particular Chapter Two. This orientation is characterized by:
- concern for the development of the whole person;
- concern for promoting human educability, motivation and
  competencies for learning to learn throughout life;
- concern for meeting basic human needs, improving the quality of life
  for all and promoting justice, equality, peace and co-operation;
- emphasis on bridging the gap between groups and societies, and on
promoting human interdependence and co-operation;
- emphasis on participation, self-help and self-management;
- emphasis on resources and ecology: protection of the environment and on curbing wasteful consumption, pollution and the exhaustion of nature;
- emphasis on human rights as well as on collective responsibility.

2. The human needs components and the above trends will be related to, and interpreted in the light of, the Yemeni cultural and socio-economic context.

3. Educational learning needs derived from the above considerations will be modified and prioritized by:
- peoples' perceptions of their educational needs and priorities as expressed in Chapter Eight;
- the current state of knowledge in curriculum planning and organization and in child development and learning;
- current educational beliefs and practices in Yemen;
- availability of resources, human and material, in schools and in their locality.

To achieve this curriculum in Yemeni schools will involve an organizational synthesis that will bring together theory and practice in four main areas:
- identification of the major, most urgent needs and trends in the Yemeni society and the learning experiences relevant to them;
- translation of learning needs and objectives into the content of the curriculum: curriculum plan, areas of study, learning activities and teaching methods; how the curriculum may be related and integrated with needs and problems;
- the overall organization of curriculum experiences and their evaluation: how the curriculum can be horizontally and vertically integrated; what
may be learnt at each stage and level; how it may be learnt/taught, and how it may be evaluated and by whom;

- curriculum development, implementation, follow up and change: what procedures and machinery would be required for the implementation, continuous improvement and renewal of the curriculum.

**Basic Human Needs in the Yemeni context.**

With the idea of basic human needs and the major human concerns in view, I shall deal with human needs and problems in the Yemeni context, loosely within the framework of Maslow’s theory of basic human needs as outlined in Chapter Three. The learning needs will be analysed under certain themes and topics based on the perceived needs and the problematic issues and contradictions that prevail in the society. As we have pointed out throughout this work, in particular in the last section of Chapter Two, most of the ideas that have been accepted as crucial for a new human order, the paradigm shift in the scientific outlook that has affected ideas of human development and the speed at which change now takes place, all necessitate radical changes in educational structures. Most of these changes will not easily be welcomed; therefore, we emphasize the education of attitudes and of consciousness-raising as the first universal challenge. This is even more essential in Yemeni society than in many others, in view of the strong adherence to traditional attitudes, even more deeply entrenched than is usual in emerging nations. In other words, we are trying to make clear that the function of a relevant curriculum is not only to provide for what people or policy-makers perceive as needs and urgent priorities, but also to respond positively to those areas of conflict, discrepancies and sources of planning dilemmas which may have long-term effects; of which many people are not yet aware or where they may be unwilling to admit their importance.
In this section, I will deal with basic needs in three categories, each of which will include two areas of Maslow's construct of needs. The needs will be dealt with under the following headings:

1. 'Needs for Biological, Physical and Psychological Survival' - This may include what is commonly known in the literature as the "material needs", which in Maslow's model, involves the physiological and safety needs;
2. 'The Psycho-Social and Identity Needs', - which include Maslow's categories of the need for love, belonging and self-esteem;
3. 'Needs for Self-Fulfilment, for the Development of Human Potential and the Well-being of Humanity', - which include Maslow's concept of 'being values' or growth needs that have been termed, 'self-actualization' and metaneeds.

### The Need for Bio-Physical and Psychological Survival

As we have pointed out in Chapter Five, Yemen has inherited an endemic poverty, manifestations of which are still strongly apparent in the living conditions of the people, a situation which will continue for some time to come unless the people themselves undertake to improve these conditions. The most serious features of this poverty may be summarized as follows:

- poor health conditions manifested in a high incidence of disease, high mortality rate, in particular among infants, and low life expectancy;
- widespread malnutrition, which in most cases results from lack of awareness of nutritious food and how it is prepared, rather than from shortage of food;
- poor, crowded housing, reliance on natural sources of drinking water, lack of hygienic and sanitational facilities;
- fast rate of increase in population, large families combined with early marriage and child bearing;
- high rate of illiteracy especially among women.
These features are combined with the virtual non-existence of public services in most of these areas and the inefficiency of the existing institutions, aggravated by a severe shortage of human and financial resources in the society. These conditions have become a preoccupation of development planners in Yemen. The emphasis on meeting such basic needs is apparent in the last national development plan and in the National Charter. (see Chapter Five). To tackle these problems, a curriculum relevant to basic human needs should give due consideration to such issues as:

- basic literacy, communication and learning skills, and computation;
- food and nutrition;
- health, hygiene and sanitation, including issues related to the importance of drinking water and air;
- population, family planning and household management;
- energy and environment.

These areas must be examined at the local, regional and national levels and must also be related to the wider human context. As far as Yemeni educational policy is concerned, these areas have been given due consideration and they are introduced in the existing official curriculum. They are in fact, dealt with within certain areas of the curriculum. On the evidence of the priorities that arise from the field work data these areas command a reasonably high level of priority, with literacy and communication skills ahead of all other priorities. (see Table 30, Chapter Eight). Yet despite this official and public acceptance of the importance of these areas of learning needs as components of the school curriculum, many difficulties remain, not only in relation to the problems themselves, but also to peoples' perception of, and attitudes towards their causes and the methods and techniques of solving them. In the area of nutrition and
health for example, peoples' attitudes to, and misconceptions of the relationship between malnutritious food, contaminated water and polluted air on the one hand, and illness, death and longevity of life on the other, militate against effective improvement of those conditions. The common belief is that such issues are God's will, an attitude which in its crudest form leads to fatalism and helplessness. Another crucial area of similar misconception is that of family planning, which seems to be the most effective strategy for improving the quality of life of the majority, whose income is below the average, in particular under the present conditions of high cost of living. Family planning by means of birth control is unacceptable on both traditional social and religious grounds; many Muslims believe that modern methods would encourage decadence.

The challenge to the curriculum in these areas is to attempt carefully to raise peoples' awareness of such issues without offending their beliefs, and to tackle the area of entrenched attitudes through an increased awareness of scientific facts and examples from other societies. An example in educational terms would be to engage children in learning how better food and health conditions affect one's physical and mental growth and life expectancy, and how the growth of population affects the quality of life, providing examples from the existing literature in these fields.

Security and Earning a Living: Besides the protection of one's security and the mastery of those skills and habits essential for understanding the social and natural environment, earning one's own living is closely linked with psychological security. In the Yemeni context the dominant economic activities are agriculture, small businesses and industries, and state and private sector employment, as well as employment abroad for a great number of Yemenis. Both for those who are self-employed and for wage
workers at home or abroad, the skills and competencies required are essentially of a manual/technical nature: farming, commercial and technical. Even those who pursue their education beyond the general level still have the best chance to enrol in schools and in other institutions concerned with providing manpower for these sectors. The emphasis on improving agriculture, promoting industry and national saving and the move towards self-sufficiency in food and towards achieving the goal of self-reliance, are very clear in the official policy. In education due concern is given to the vocational, technical and agricultural sectors, as well as to promoting children's skills and abilities for participation in production and national development in general, as expressed in the aims of education and the objectives of the curriculum in Chapters Six and Seven.

Yet this positive official policy is combined with unfavourable attitudes to such practical concerns and probably with lack of understanding on the part of the general public. This unfavourable attitude becomes apparent in two areas: the data obtained from the field work shows that acquisition of general skills and competencies relevant to development and work are accorded an average level of importance, but those skills specifically concerning agriculture, technical and craft sectors are given the lowest level of priority. This can also be noted from the lack of enthusiasm with which these areas are treated in the present curriculum, where, even if they are included in the aims and objectives of the curriculum and appear on the school timetable, little time or attention is actually devoted to teaching or learning them.

In the light of these attitudes and the need for peoples' participation in their own and their society's development, curriculum planners should
regard questions of development, work and the intelligent and responsible use of resources as basic components of their task. In the light of the Yemeni reality, the curriculum may first be oriented towards raising peoples' awareness and understanding of the nature of development, of the Yemeni economy and the official development plans and how these issues affect the life of the individual. It should clarify the role and responsibility of individuals as well as those of different institutions both within the country and outside it. Special concern should be given to the development of positive attitudes towards manual work, the dignity of labour, saving and planning one's life and work and of techniques of self-help, self-reliance and collective responsibility.

The Psycho-Social and Identity Needs
The major concepts included in this category are personality development, self-esteem, identity and citizenship. These needs are very critical and although they are interrelated, they seem to be extremely difficult to reconcile, particularly in Yemen where historical conditions of social and political fragmentation were exacerbated by the sudden exposure to a multitude of modern influences, many of the latter conflicting not only with the traditional outlook, but with each other.

In this context, official policy in its attempt to bring about social cohesion and national integration, has emphasized the development of social and national identity, qualities of citizenship such as love for the country and respect for the leadership and identification with Arab and Islamic issues, at the cost of the development of individual identity. The latter, in itself a basic need, is also a fundamental requirement for healthy social development, which is based on the participation of responsible members of the society. The data collected in the field-work...
shows that people would put the development of individual qualities such as self-confidence and self-respect before social aspects such as co-operation and collective responsibility. Islam also regards self-identity and responsibility as crucial for the individual who in the end is the only person responsible for his deeds: "Every man's fate is fastened around his own neck. On the day of Judgement we shall bring out for him a scroll which he will see spread open. Read thine (own) record: sufficient is thy soul this day to make out an account against thee." (The Koran, Chapter 17, verses 13-14).

In the light of these needs the main challenge to curriculum planners is to recognize the importance of love, belonging and identity for the development of a healthy, participating individual and citizen of a healthy, democratic and co-operative society, and to realize that there are many dimensions and levels of belonging and identification which are subject to change and instability. Once the importance of these has been established, planners should attempt to set priorities and to balance all these dimensions so as to help the child relate to each without being confused or alienated. Personality development and the ability to identify with others on both the individual/concrete and group/abstract levels, must be regarded as a prerequisite for responsible citizenship. The levels of identification in the Yemeni context include a sense of self, identification with tribal, communal, national, Arab and Islamic interests, leading to identification with the interests of the human community at large. These levels of identification may be spiralled in that sequence, each level a preparation for the next. Love, tolerance, a spirit of co-operation and sense of interdependence should be major themes in imparting this process of identification; for example, being a self-assertive person should not be seen as inimical to being a good citizen and being a devoted
Yemeni and patriotic Arab and Muslim should not imply a contempt for the values of those who do not share the values inherited in these systems.

**Self-Fulfilment and Development of Human Potential**

The qualities relating to this area are the most difficult to specify precisely in the Yemeni context. As we have outlined in Chapter Three, the major elements of self-actualization and metaneeds are the development of the higher human qualities such as rationality, the emotional and spiritual faculties, creativity, inventiveness, imagination, spontaneity, respect for truth, beauty, justice and for human rights and freedoms in general. In principle both Islamic doctrine and the official pronouncements expressed in the National Charter, the National Development Plans and in the aims of education, all accept the importance of all-round development of the person and encourage the development of rationality, spiritual reflection, emotion and the appreciation of beauty; and they emphasize creativity and the universal human norms. In practice, however, many discrepancies and misconceptions prevail in these crucial domains. Traditional cultures, misinterpretations and the over-politicization of Islam have a strong grip on peoples' thinking and perceptions of life and provide a definite, predetermined view of reality, emphasizing conformity, obedience and self-denial. There is little chance for free expression or even for thought to be freely formed from direct encounter with reality, and as a result those human activities which need freedom to develop, in particular imagination and creativity, receive little consideration. Creativity, spontaneity and emotional experience, as distinguished from knowledge, are stifled. Even the spiritual aspects of Islam that might release the imagination are confined to learning hard facts interpreted as 'divine truth' in which traditional interpretations, which after all, are merely the institutionalization of the opinions of
earlier interpreters, are given the same credibility as the Koran itself and the Prophet's tradition. This picture is confirmed in the responses to my questionnaire, (cf. Chapter Eight), where creativity and inventiveness, which I interpreted as being related to rationality, come high in the list of priorities, whereas qualities such as emotional development and those activities usually related to aesthetic creativity such as music and the arts had very low priority. In the existing curriculum these activities, like those connected with practical and vocational aspects, have very low status and are often neglected.

To qualify for relevance, the curriculum must be based on an assumption of the importance of the development of such dimensions of human personality as rationality, creativity, aesthetic experience and the values relating to them such as love for truth, beauty and justice, the latter to be valued both in their own right and as essential factors for improving the quality of life.

The application of the theories of needs and the curriculum to the Yemeni context is presented in tabular form in the following pages. (Table 31).
Table 31: Basic Human Needs in the Yemeni context: Implications for the Curriculum

<table>
<thead>
<tr>
<th>CATEGORY OF NEEDS</th>
<th>THEMES AND TOPICS</th>
<th>LEARNING REQUIREMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bio-physical, growth and survival needs; [Maslow: physical and security needs]</td>
<td>Food and nutrition;</td>
<td>Awareness of the importance and function of food water and air for survival and sound physical development;</td>
</tr>
<tr>
<td></td>
<td>Water, air and hygiene;</td>
<td>Knowledge of the desirable components and conditions of nutritious food, clean water and air;</td>
</tr>
<tr>
<td></td>
<td>Health and physical development;</td>
<td>Knowledge of local resources of food and water and ways of balancing diet, preserving nutritional content when cooking and of protecting water, air and surroundings from pollution;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Knowledge of hygiene and sanitation problems in the locality and the possible alternatives;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Skills in cooking, food preservation and preparation in water purification and storage;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Habits of organized meals, of cleanliness of food, water, hands and food utensils and containers;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Awareness of the close connection between the above and the state of one's physical and mental development and longevity of life;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Knowledge of the most frequent diseases in the locality in the country and in the world, including mental illnesses; their causes, symptoms, means of prevention and when necessary, cure.</td>
</tr>
</tbody>
</table>
Table 31 (cont..)

<table>
<thead>
<tr>
<th>CATEGORY OF NEEDS</th>
<th>THEMES AND TOPICS</th>
<th>LEARNING REQUIREMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Family management and home-making</td>
<td>Skills in first aid and helping the sick and injured; Habits of organized diet, cleanliness, physical exercise and work; Awareness of the importance of the family for human development and survival and for the upbringing of healthy and strong human beings; Knowledge of the economic factors affecting the quality of household life: income, basic living requirements, high cost of living, number of people and those who are dependent; Knowledge and skills for better household economic arrangement and prioritization; Attitudes and habits such as frugality, saving, concern for basic requirements and to avoid unhealthy habits such as qat chewing, smoking, craving for luxury at the expense of necessities; Awareness of such issues as cost of dowries and marriage arrangements; higher age for marriage; fewer children and of birth spacing and introduction of rational attitudes to family planning. Awareness of the importance of learning for healthy human development and survival. Knowledge of the natural processes of learning Skills and habits of learning from a variety of sources.</td>
</tr>
<tr>
<td></td>
<td>Learning and education</td>
<td></td>
</tr>
</tbody>
</table>


Table 31 (cont.)

<table>
<thead>
<tr>
<th>CATEGORY OF NEEDS</th>
<th>THEMES AND TOPICS</th>
<th>LEARNING REQUIREMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Security and earning a living</td>
<td>Development orientation; Career and employment; Energy and natural resources; Understanding of the environment; Relevant learning and training: acquisition of skills.</td>
<td>Acquisition of basic literacy, numeracy, communication and learning skills and general applied skills. Awareness of the nature of society; the natural, social and physical environment. Knowledge of the process of development, the national plans: their aims, resources and problems and of the local and national institutions engaged in development. Awareness of one's place and role in the process of development. Awareness of national human and natural resources and relevant science and technology. Understanding of the importance of agriculture, trade and basic industrialization for economic development. Development of positive attitudes and habits to manual work, workers, rural development, co-operation and participation. Acquisition of general skills in agriculture, technology and management. Encouragement of women's participation in production and services. Awareness of the employment prospects and the competencies required for certain vocations and the means of acquiring these competencies.</td>
</tr>
<tr>
<td>CATEGORY OF NEEDS</td>
<td>LEARNING REQUIREMENTS</td>
<td></td>
</tr>
<tr>
<td>-------------------</td>
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<td></td>
</tr>
<tr>
<td>Psycho-social and identity needs [in Maslow's theory]</td>
<td>Understanding the socio-political and co-operative institutions' goals, principles, and actual functioning; Understanding one's relationship with social systems, and one's rights and responsibilities; Development of the sense of being a person with self-respect, self-reliance, self-confidence and autonomy; Clarification of the Yemeni identity as a natural process including oneself, family, community, national, and Islamic and human levels; Awareness of the importance of human interdependence at all levels; Understanding of healthy sources of self-esteem and earning people's respect and recognition; Acquisition of competencies for adequately and efficiently in one's study, profession, career, and lifetime; Development of positive attitudes to co-operation, collective responsibility, respect of others and tolerance.</td>
<td></td>
</tr>
<tr>
<td>CATEGORY OF NEEDS</td>
<td>THEMES AND TOPICS</td>
<td>LEARNING REQUIREMENTS</td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>----------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Self-fulfilment and human potential.</td>
<td>Rationality and curiosity; morality and conscience; Free self-expression; Aesthetic appreciation; Love of beauty, truth, justice; Respect for human dignity and for nature, for spontaneity and joy in life.</td>
<td>Mastery of basic principles and methodology in a variety of areas of study; Knowledge and understanding of human psychology, of the human and natural environment; Open-mindedness; to be able to see reality uncluttered by inappropriate and unnecessary expectations; Clarification of Islamic values and principles: Islam as a source of human ethics, rationality and creativity; New interpretations of human rights and freedoms; An environment that allows for spontaneity, joy, self-expression in an atmosphere of love, trust and confidence; Development of aesthetic appreciation, of beauty and the technicalities of the creation of beauty utilized according to gifts and talents of the individual. Study of human cultures and achievements in the sciences, culture, literature and the arts; Awareness of the value of the folk cultures as a source of identity and aesthetic appreciation. Respect for man and nature, for human rights and freedoms and readiness to protect them; Devotion to peace, justice, co-operation and human values for the good of all; Development of rationality as the ultimate means of all intelligent needs satisfaction.</td>
</tr>
</tbody>
</table>
The Treatment of Human Needs in the Yemeni Educational Context

The curriculum may best be organized around themes based on the major categories of needs and their sub-categories, for example:

- **Food** - nutrition, food treatment, food production, processing and marketing;
- **Water** - sources and uses, clean water, water purification;
- **Air** - importance of clean air, physiology and health;
- **Shelter** - uses of shelter, types and healthy conditions;
- **Learning** - types of learning, goals of learning, education and training;
- **Security** - inner/personal security, physical security, national security and human security;
- **Love & identity** - personal identity, social identity and cultural identity;
- **Curiosity & creativity** - the quest for knowledge, expression and various human experiences.

Each category and sub-category should be treated from a multi-dimensional perspective, including those of the individual, social and ecological aspects (cf Table 2, Chapter Three) at four major levels: the individual human life; the local community; the national society and the global human community. The first level indicates that each theme must start with the human dimension, e.g. all human beings need food, learning, security and positive relationships with others, then one may move to relate this to the person's own needs and interests. The theme will then be expanded to relate the need concerned first to conditions in the local community; then to society at the national level and finally to the global human dimension. At each level, however, examples must be drawn from a
variety of cultures within the Yemeni society and within the human community. From a temporal perspective each theme and topic should draw examples from the past, should be applied to situations from the present and examined in terms of possibilities for the future.

Figure 13: Thematic Organization of the Curriculum.

(Adapted from Hicks and Townley, 1982:32).
When educational themes are designated, each theme must include the three components of the curriculum content: knowledge, skills and attitudes. The treatment of the themes is presented diagrammatically in Figure 13.

The selection and prioritization of themes and of the relevant educational content will also require the application of other factors:
- the socio-economic conditions in the Yemeni society;
- peoples' perceptions of needs and educational priorities;
- the level of the child's cognitive, moral and personal development; and
- the educational practices and resources available in school and the community.

The following section will deal with the content and methods of the curriculum in Yemen and the possibilities for improvement both in the quality and organization of the curriculum.

The Content of the Curriculum: Areas of Experience
From a theoretical perspective, despite cultural and socio-economic differences, the Yemeni curriculum in its present form covers all the components of modern, essentially English, curriculum as outlined in Chapter Four. The areas of study, or subjects, considered as basic components of the Yemeni curriculum reflect all the areas of learning experience suggested by the DES (1965) as shown in the following table:
Table 32: Areas of Learning Experience and the Yemeni Curriculum.

<table>
<thead>
<tr>
<th>Area of Learning and Experience, DES</th>
<th>Areas of Study</th>
<th>Main Subjects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aesthetic and creative</td>
<td>Aesthetic Education</td>
<td>Arts, Music and Literature;</td>
</tr>
<tr>
<td>Human and Social</td>
<td>Social Studies</td>
<td>History, Geography and Civics;</td>
</tr>
<tr>
<td>Linguistic and Literature</td>
<td>Language and Literature</td>
<td>Arabic; (+ English at 7th Grade)</td>
</tr>
<tr>
<td>Mathematical</td>
<td>Mathematics</td>
<td>Arithmetic, Geometry &amp; Algebra</td>
</tr>
<tr>
<td>Moral</td>
<td>Islamic Education</td>
<td>Theology, Jurisprudence, Hadith and manners, and the Prophet's biography;</td>
</tr>
<tr>
<td>Spiritual</td>
<td>Science</td>
<td>General science and health, Physical, Chemistry and Biology;</td>
</tr>
<tr>
<td>Scientific</td>
<td>Physical Education</td>
<td>Various Sports Activities;</td>
</tr>
<tr>
<td>Physical</td>
<td>Vocational Education</td>
<td>Crafts, Agriculture and Home Economics.</td>
</tr>
<tr>
<td>Technological</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As we have noted in Chapter Seven, the Islamic content penetrates most areas. Aesthetic, vocational and to some extent, physical education in real practice merely appear on the school timetable but are rarely taken seriously. We also saw that in all areas of study, factual information is given prominence over the basic ideas and modes of thinking and functional dimensions of these subjects.

Despite these shortcomings, which are not exclusive to the Yemeni situation, the essential framework exists, and it can be improved. The basic task is to validate those neglected areas such as the arts, music, technological and physical subjects so that they are taken seriously and become components of a well-balanced curriculum. It is essential to emphasize change and reorientation of these areas of study; to move from facts and information to the mastery of basic ideas and principles, methods of learning and application of each area to one's life, so that they can meet the developmental, pragmatic and professional/academic
objectives of the curriculum. As has been pointed out earlier in Chapter Four, there are certain ideas, concepts, procedural principles and criteria inherent in each area or body of knowledge. These must be mastered, together with the mode of thinking that characterizes each domain and distinguishes a religious, scientific, historical or aesthetic outlook. There are certain human qualities such as rational reasoning, moral judgement and positive attitudes to be developed through engagement in a particular area of study as well as in the whole educational programme; and there are certain bodies of knowledge, skills and competencies relevant to meeting one's individual and collective needs which must be acquired from the study of these areas during one's learning in school.

From the basic human needs perspective and the learning needs that have been derived from them in Chapter Three and in the first section of this chapter, it is apparent that each area of study, learning experience or subject relates to all human needs and the learning needs derived from them, though with varying degrees of relevance. If we take some of those most basic needs such as food, health and environmental issues, considering that the educational objectives of each incorporate the development of understanding, skills and attitudes, we may find that almost every area of study has a role to play: Islamic education would provide a moral structure for life; it also teaches about food, health and the environment. Social Studies and Science would provide social and biological facts and evidence relevant to these topics; mathematics, physical education, aesthetic and vocational education also relate to these topics, as for instance, in theory of nutrition, numbers of calories contributed by different foods, in the case of mathematics; the importance of preparation and presentation of food and of the greater appreciation of life and healthy physical growth that results from the practice of hygiene,
in the case of physical and aesthetic education; and, in the case of vocational education, awareness and skills necessary for dealing with the food, health and environment fields.

If we take other major educational questions such as motivation and skills for learning to learn, the development of rationality and of a scientific and critical outlook, and of qualities such as empathy, respect for human dignity and human values, we still find that every area of study has its own way of contributing to the achievement of these needs. It is also crucial to realize that when looking at the curriculum as a whole, areas of study, subjects, methods of teaching, learning activities and materials, it becomes more apparent that one cannot exclusively attribute any one aspect of learning needs to any specific area of study.

The Dilemma of Curriculum Organization

From the point of view of the holistic approach to the development of the whole person, the unity of human experience and the integrated nature of human needs and the diversity of those issues that have been considered as major educational objectives such as learning to learn and to share one's enlightenment, peace education, world problems, development issues, ecological issues and the like, the ideal curriculum should be organized around themes and topics dealing with major areas of needs and problems, the content of which may be drawn from a variety of relevant areas of study and in which a variety of learning strategies may be utilized.

Nevertheless, because of the long-established tradition of the subject approach and the well-known conservatism of the school system almost everywhere, and because of the limitations that prevail in Yemen, it would be impractical and undesirable to opt for an immediate change of the
existing practices for an ideal model. A radical shift, even if normatively accepted by those involved in the process of education, will require changes in materials, methods and school organization, in training and in the organization of the administrative system, all of which require resources, money and time. Therefore, the required change should be seen as a long, gradual process which may go through stages leading to a final goal at the end, since the whole process is dynamic and continuous.

In the Yemeni context, in the light of the present situation and curriculum practices shown in Chapters Six and Seven, and considering peoples' perceptions of needs and educational priorities shown in Chapter Eight, the first, most urgent step is the reconsideration of the aims and objectives of the curriculum and the issues and needs to which the curriculum may be made relevant. This requires an understanding of the aims of education and the objectives of the curriculum on the part of those involved in the curriculum, in particular policy-makers, curriculum planners and implementers and specialists in various fields of study. These aims and objectives should include concern for human needs, human problems, such as peace, human rights, international understanding and co-operation, individual and local needs and realities, as well as the national goals. From such considerations major themes based on needs must be determined; these can be integrated into the relevant areas of study and methods of learning. Based on this approach, the presentation of the existing areas of study, or subjects, has to be reoriented to meet these demands, even though the content may still be seen in subject form. The problem in most cases is not exactly teaching a subject as such, it is a question of what is taught in a subject-area and how it is taught.

The second step will be then to establish what each subject may
contribute to the general goals and how to co-ordinate their roles horizontally and vertically, avoiding the contradictions and discrepancies which often occur in the existing curriculum. New aspects may have to be introduced into certain areas: in science new themes from biology, agriculture and earth science should be introduced, with more emphasis on the process of learning rather than on facts. In Islamic education the content must deal with religious, social, legal and moral issues which concern peoples' lives; it should bring out and clarify the relationships between faith and science, between spiritual and religious values and moral questions. Major new themes may be introduced in social studies, such as environment, population, development, co-operation and interdependence, world issues and systems, peace and human rights, with a careful handling of the socio-political and cultural aims and the identifications that must be enhanced, though not at the expense of the human dimension, as is the case at present. Language, mathematics, aesthetic and vocational curricula should include materials and activities relevant to certain needs and which support the objectives of other areas.

Relevance, Quality and the role of Methodology

As we have pointed out in a number of places earlier, the central issue involved in change for relevance and for a better quality of education concerns attitudes, qualities and intellectual and psychomotor skills. These are developed through the choice of methods of teaching/learning and school organization and management. A consideration of the issues raised in Chapter One and Four, indicates a change in perceptions of the role of education: a change from traditional views based on the transmission of knowledge to a concern for the process involved in the acquisition and creation of knowledge. These processes imply many changes in educational orientation; some current trends are:
A move
From: Teaching
     Rote learning
     Problem-solving
     Maintenance learning
     Exclusive classroom learning
     Indoctrination
     Exposition and lectures
Towards: Learning
     Critical understanding
     Problem-posing
     Innovative, predictory learning
     Learning from direct interaction with
     the human and natural environment
     Conscientization
     Active discovery/enquiry

One cannot, however, entirely reject all the traditional educational
methods on the sole basis that they are traditional; many of these, with
careful planning and handling, still have considerable validity for the
process-based approach to learning. What is required is a combination of
both in a way that would result in an authentic and long-lasting
competence which can be useful in a variety of contexts and for a variety
of pursuits in one's professional, vocational and personal life. A
consideration of the above list of trends indicates that it has implications
that go beyond an exclusive application to the formal educational context.

One of the most crucial aspects of a curriculum aimed at improving the
quality of education and consequently the quality of life, is not only the
content of the learning experience but the conditions under which learning
takes place. The quality of the content and what may be called its
'generative' power together with its logical structure as well as the
diversity of its sources, are important criteria of a worthwhile education,
but the ways in which the content is presented and the desirable
competences developed, are even more crucial. In other words, it seems
very difficult to separate the question of content from that of the resources and methods used in its presentation.

In addition to the above concerns there are a great number of attitudes, personality traits, human needs and intellectual and psychomotor skills which cannot be developed only by means of knowledge and information but which require direct engagement in activities and situations. For example, identification with others, empathy, caring, co-operation, tolerance and appreciation, interpersonal and social skills, learning to learn and to share one's experience and many other fundamental areas can only be developed by engagement with other people in situations relevant to these issues: to become a self-confident and self-directed learner, the pupil has to be trusted and encouraged to learn independently, to pose problems and suggest solutions on his own; to have a sense of interdependence and co-operation he has to learn with others in order to realize the extent to which people depend on each other in most personal, social and work areas of life.

There are six areas where the influence of the educational methodology used may be most apparent:

1. School organization and ethos;
2. School/community relationships;
3. Attitudes to the natural and physical environment;
4. Attitudes to and use of the media;
5. Learning materials;

1. School organization and ethos: Most human needs such as the need for inner security, love and emotional balance, self-esteem and respect from
others and for the skills and attitudes of empathy, tolerance, dignity, democratic and co-operative behaviour, demand a particular learning environment which can best be created in the school. If the school is committed to the satisfaction of these human needs and to the promotion of the official educational objectives, it should provide a live model reflected in the relationships between the school administration and teachers, between the teachers themselves, between teachers, staff and children and between the school as a whole and the community. It is to be hoped that eventually, the desired forms of relationship will spread beyond the school into the community itself: the school should become a democratic/co-operative unit in which love, caring, equality, mutual respect and understanding prevail, and in which everyone, be it headmaster, teacher, student or parent, is aware of and clear about his/her rights and duties and the ways in which these may conflict or integrate with those of others.

Within the school, peer group learning should be arranged, children should be encouraged to regard their peers, as well as teachers and other older people, as resources of knowledge and partners in the process of learning. Children may work in groups; at the early stages they may engage in games, plays, practical activities and real situations together, with particular attention to those who need special support which must be provided from peers, older children and teachers, on an individual basis. Older children should be encouraged both to initiate and conduct some projects on an individual basis and to engage in group co-operative work, where they may take turns in assuming leadership roles. There are a great number of activities that may take place in school; with particular reference to the Yemeni school, the following approaches to school and classroom organization may be helpful in promoting one or more of the
forms of relationships and educational qualities outlined earlier:

- children may be organized in small groups for some learning activities. It may be easier to use this approach at the early stages, with younger children, as these children will become accustomed to the naturalness of this method of learning, and will thus accept and co-operate with it more readily, in the later stages. Initially, they could be arranged in small groups for expressive and play-type activities, for instance, to perform a play, tell a story, draw, build a model; to play educational games; to collect and classify specimens from the environment, of plants, stones, examples of colours and shapes under the supervision of older children.

- older children might be encouraged to write or adapt plays and stories about animals, and to teach the smaller children to play them; they might also learn to dramatize and role-play some of the scenes they learn in history and literature, or some of the issues that arise in their own lives.

- children should be guided from the early stages to participate to some extent in the organization of their own class at first in arranging the classroom; later, in planning the timetable, or making some of the arrangements for school outings and visits.

- children might be helped to form cultural groups which could put on performances of community interest; to organize sports and games clubs, to arrange competitions with other schools or groups in the area; school monitors/scout groups might be appointed to organize the school environment, to supervise playtimes, to liaise with the community - perhaps to help old people, or others in the community who need help.

- school or class visits might be arranged, to places of local interest or to the capital.

- children may be organized to help with building or maintenance work at
the school; this already happens in many rural schools, and could be organized as a learning situation whereby children could learn skills from members of the community undertaking the work.
- children could manage a school garden, shop or canteen.
- members of the community, representatives of various ways of earning a living, farmers and craftsmen, people with different life-experiences to share such as returned emigrants, might be invited to talk to the children.
- the school could participate with the community in the observation of festivals, local, national and international. (e.g. Children's Day, days of tribute to Peace, International Understanding, etc).

2. School and Community: In principle, the curriculum should be related to the needs of the individual and of the community within which the student lives and the school operates. This implies that the community may become a resource for learning experiences and a context within which learning may take place. When dealing with issues related to basic human needs such as food, water, air, economic activities and socio-cultural questions, some of the learning experiences can be organized to take place in the community, based on the resources and problems there. Children may be encouraged to collect data from the community and to take part in dealing with needs and problems as they arise in the community. They may be encouraged to take part in cultural activities such as local games, ceremonies, folk activities - songs, dance, music and stories - which should later be discussed in the class and compared with cultural activities in other parts of the country and in other communities. Children may also take part in co-operative activities serving the community, in particular in health, communication and education; to take part in the organization of elections which may promote their awareness of the skills
and co-operative abilities required in the process and for social and political participation.

Learning from others: elderly people are often a good source of folklore and stories that provide an imaginative and historical background to the folk-culture. Returning migrants also provide a useful source of direct information about other regions and ways of life. Every village has a mosque, usually provided with copies of the Koran, where children may be encouraged to attend prayers and to read the Koran with others; to help and to get help from other members of the family and the community, most of whom have memorized certain parts of the Koran in their youth. Children may also learn from adults about their life experience, their work and crafts and their ideas about the past and the future. When dealing with economic activities and resources, children may start by examining such activities and resources within the community: farming, animal husbandry, crafts and other forms of earning a living; and from such a concrete base they may develop to wider and more abstract dimensions.

3. The Natural Environment: Nature provides a natural laboratory as well as a rich source of learning experiences and material. Children can study a variety of natural phenomena from direct observation of the natural environment: animals, plants, soil, rocks, water, weather changes, stars and planets. They may learn about these in their relation to the needs of the human community that live in this environment, and to change and growth.

As most schools lack educational facilities and equipment, the skills of observation, classification, analysis and evaluation, may be acquired by observing natural phenomena and sources, and by the organized study of
soil, plants, animals, weather and planetary behaviour. The children may also study the relationship between man and nature in terms of the resources for meeting human needs and of the influence of modern life on the natural environment.

4. The Media: At present the forms of the media with the most educational potential are radio and television, which may become the means for the development of distance learning programmes. Under present conditions, children may be encouraged to understand the ideas, information and news they encounter through the media: these should be discussed in the classroom. Helping children to acquire the competence and skills for self-directed learning and for promoting skills of listening, viewing, accuracy in spatial observation, understanding, data collection and organization may best be achieved through the use of the media, including the written word, as a source and an approach to learning which also raises children's interest, curiosity and awareness of social and human conditions and problems.

Aspects of the media which may be developed for school use:
- Most schools could afford a radio and a tape-recorder. These may be provided from the community, or the children may undertake fund-raising activities to provide them.
- The teacher could collect articles from newspapers and provide them as texts for children to consider. Children could learn a project approach from collecting such material and classifying them; presenting them in book or project form, discussing their findings.
- Apart from the national newspapers, there are other written media which may be used as a resource: for example, the magazines, brochures and periodicals, issued by the Armed Forces, the CYDA, the Ministry of
Education, the Yemeni Centre for Research and Educational Development and the Migrant's Union. Some newspapers and magazines from other Arab countries are available. Material relevant to such issues as health, population, peace, human rights and international relations may be obtained from ALESCO, UNESCO, WHO, UNICEF and ILO.

5. Learning materials, textbooks and supportive material: As noted in Chapters Six and Seven, the learning environment is generally poor; most parents and members of the community are illiterate, the out-of-school written culture is limited, and class size is generally too high. All these factors make the task of the teacher more difficult. The high level of material and cultural deprivation makes it imperative that learning materials prescribed for the learner should be rich both in quality and quantity. The materials should be accurate, simple and self-explanatory enough so that the learner and his parents, even if illiterate, can understand and use them by themselves. Most of the concepts to be learnt should be related to the environment, the needs and problems which directly affect the conditions of local peoples' lives; these concepts may be acquired through activities in which the learner engages both in school and out of school. The material should not be exclusively informative and prescriptive; it should allow for analysis, synthesis and critical evaluation, and for autonomous reasoning and moral judgement. In other words, there should be room for doubt and uncertainty over certain aspects: some questions are open - there are no final answers. The educational process and materials must allow for this. The material should include problems and questions of a socio-political and moral nature as well as covering practical issues, the solution to which the learner is asked to find out.
from people in the community, from social and religious leaders, from written sources other than the school textbook, and from the available media in the community: radio and television.

As for the quality of the material, it is essential in such a poor learning environment that the written material be of good quality, logically sequenced, clearly printed and supported by clear and well-presented maps, diagrams and pictures, whose purpose is not only to help the learner to grasp the idea, but also to help develop perceptual accuracy and practical skills.

6. Evaluation: The changes required by this new approach to curriculum and the diversity of material and methods imply the need for new forms of assessment and evaluation. The traditional approach, based on methods of objective assessment, is still relevant in certain subject-areas: that component of evaluation aimed at the end-product of a teaching/learning process, may be measured with some degree of accuracy, particularly in those subject-areas where the end-product has a specific quantifiable base. When, however, the aims are expressed in terms of qualities, in literary and aesthetic matters, for example, and matters related to personality development, evaluation must include an assessment of the process whereby such qualities are to be acquired. When evaluation is process-oriented, in such unquantifiable areas as the acquisition of qualities, it must in itself be treated as an open-ended, flexible, eclectic process. In other words, only a small part of learning can be objectively assessed, the mastery of the end-product; evaluation of the process whereby that mastery was achieved, must of its nature be impressionistic, even if the impressions are formed by highly trained experts and are expressed and
defended on a basis of rigorous rationality.

This last recommendation, however, does not imply external evaluation by experts, as the ideal approach to evaluation: in countries such as Yemen, where general education is in the earliest stages, the use of such experts is unavoidable for some time to come. The ideal to be aimed at, however, is a system whereby teachers and students will be trained in those forms of consciousness of self and others, and of process of interaction that will eventually lead to independent self-evaluation and self-direction.

**Personnel: Teacher Training and Recruitment**

The success of any realistic, practical curriculum usually depends on those who are immediately in contact with school and classroom activities, in particular on the teacher who is the interpreter of the curriculum. It is true that the teacher is no longer an authority whose central role is to transmit knowledge, control children’s behaviour, carry out regulations and follow prescribed methods and activities; but this by no means makes his/her position and role any less important. The teacher’s role is to facilitate learning; he is expected to become an agent of change, an innovator, a researcher, a curriculum planner, developer, materials producer and above all a model for rationality, morality and human conduct.

Those in charge should not expect all this from the teacher without giving something in return. They should recognize that the teacher, like any other person, the administrator, the student or the parent, has his own needs, aspirations and problems; therefore what is expected of him should be no more than is expected of anyone else involved in the
process. To fulfil his task in improving the quality and relevance of the curriculum, to initiate, provide feedback and facilitate the conditions of learning the teacher needs:

- Education and training for his own profession which would provide him with relevant ideas, skills and attitudes necessary for his task;
- A supportive environment within the school, community and from other administrators; resources and information readily available;
- Freedom to initiate and create; to express opinions and criticise what he feels unsuitable and to offer alternatives. This is also true of head teachers, inspectors and consultants who will provide the immediate support the teacher needs as well as function as innovators themselves.

Where are the innovators to be recruited? Some may be found among teachers already in the system, others already in teacher training schools and colleges, and others are to be recruited and trained. In the Yemeni case, expatriate teachers comprise the majority of teachers at present and will continue to do so for some years to come. These groups will need somewhat varied training programmes and supportive material and personnel. An in-service training programme is the most effective method, not only for those who are not trained, but also for a continuous up-dating and refreshing of teachers' ideas; such a programme also provides a forum for the exchange of ideas and the formation of support-groups. In the course of in-service training, teachers and school staff should be introduced to new ideas in education, curriculum planning, implementation and evaluation, with more enlightenment on the basic human needs, the concepts of lifelong education and of learning to learn; the training should also include
suggestions on how the schools may be linked to the communities they serve.

The programme at the early stages should devote most of its content to enlightening the recruits: to promoting their understanding of how learning takes place as a function of the learning environment; to helping them to come to terms with the idea of being a facilitator, guide and co-ordinator, a resource rather than an authority; to introducing ideas and attitudes about their new roles in the classroom, the school, the community and the system as a whole. They should be allowed to discuss these changes and encouraged to express their views; the ensuing dialogue should offer guidelines as to the advantages and disadvantages of these ideas and for the isolation of those aspects which are a necessity rather than a choice. In addition to this the programme should include some basic technical principles and skills which will help teachers and heads to put into practice some of these ideas. Three areas must be given priority in the training programme: learning and working together and sharing knowledge; how to shift from the transmission of facts to the active engagement of learners and teachers in the process and how to use local resources for learning.

Suggestions for the Training Programme:

- Summer training programmes for all teachers, which should take place at each regional centre and in those districts where facilities are available. These courses should consist of five to eight weeks of intensive learning, based on workshops and practical activities. Written material, and some specific extracts and materials should be distributed to the participants before the
programme starts. They should be requested to read the material, to try to comment on it and to contribute to the work from their own experience.

- Trained consultants and mobile teacher-trainers may provide a support system and follow-up for the participants; these trainers may also run short courses in specific areas on a one-day to one-week basis if necessary. This may be suitable for remote areas where the number of teachers is small and communication and training facilities are lacking.

- Training and resource centres should be opened to teachers who need guidance, information and reference material.

- A well-planned correspondence programme, broadcast by radio and/or television on at least a weekly basis.

- Teacher’s Guides should include ideas and techniques to help teachers to find material and information, to apply ideas and use material. The guide should include lists of places that may be visited, centres and libraries where materials are to be found in the capital, the region and the local area; it may also include a guide to journals, newspapers, radio and television programmes of educational interest, where these are available. (An outline for the Teacher’s guide is provided in Appendix 11).

- Visits to resource centres, museums, to other schools and training institutions would also play a major role in enlightening and refreshing teachers and school staff, most of whom have never been out of their own region and have very little experience and knowledge of the rest of the country. Conferences and one or two day workshops may be held at the local college or at the College of Education, in the capital. The university also can provide facilities and accommodation for courses held in Sana’a in the summer.
Each teacher, or at least each school should be provided with a copy of the Journal of Education; daily newspapers, in particular those which include articles about education and teachers. Each school which has space and facilities for storing materials should have a small library for teachers in which books and journals may be kept. Teachers could share their own books and magazines with each other. The Ministry might also consider the distribution of photocopied material from Unesco and Alesco, together with Arabic material of educational interest. There should be some incentive to attract teachers to engage in such demanding and continuous effort; yet teachers must be motivated to participate for reasons other than material gain, or that participation is compulsory. The material rewards should not be seen as the end, but the means; participants should feel free to express their weaknesses and problems rather than forced to pretend to a competence they neither feel, nor have earned.

This programme will remain even after new teachers have been educated and trained on the basis of the needs of the new curricula. The same methods and techniques may remain after the content and orientation has changed to meet new needs and encounter new pressures. New techniques may also be introduced when facilities become available: closed circuit television, films, special programmes on television and study visits to other countries.

Expatriate Teachers: Except for the summer training programmes, conferences and workshops which may be expensive, all other arrangements may be applied to expatriate teachers. However, it must be recalled that the Yemeni system cannot influence these teachers'
training, nor can it ensure their competence. Even if it could, it would
not be able to ensure commitment and devotion to Yemeni policy. Most
teachers have different political and social outlooks, though they are
all Arabs and Muslims. On this basis, they should be provided with
well-planned and clarified responsibilities and tasks to be undertaken
with the necessary help and support.

**New Recruits and Training:** There is an urgent need for a thorough
reconsideration and assessment of present teacher training policies in
Yemen. The attempt to improve teacher training and make available a
cadre of indigenous teachers was begun in the early stage of the new
Yemeni system; yet it seems that this sector has not been developed:
the numbers of those opting for teacher training are declining and
people already in the system are trying to leave, given the opportunity.

To attract recruits there must be incentives and guarantees as to the
future of those who enter the profession. To tackle the problem of
shortage of teachers in the rural areas, it could be recommended that
more girls be trained as teachers of both boys and girls in primary
schools in rural areas, especially for the first three or four grades.
This would not only provide a chance for girls train for a profession,
but would also cover the gap that is left by male teachers leaving the
rural areas for towns and major cities. There are also educational
advantages attached to the training of women, as most women’s natural
qualities of caring for children are of great benefit to learning in the
early stages.

The curriculum of both the Teacher Training Institutes and the College
of Education must themselves be of high quality. They should be
relevant to those issues with which the school curriculum is concerned, such as needs and human problems, learning to learn and the acquisition of knowledge and skills through practice and active participation. The would-be teachers and educationalists must master the basic principles and methods of learning in the areas they are to teach, as well as a body of knowledge in the area of education and curriculum. The latter must include an understanding of humanistic psychology and theories of cognitive, moral and personal development and their implications for classroom and school practice. Such ideas must be combined with knowledge, skills and attitudes for translating ideas into practice; these should be learned through practical activities in the learning centres and schools; and through participation in workshops and discussions aimed at the creation of a learning environment. These trainees should learn how to learn from their pupils and students, how to share their enlightenment, and how to identify problems, locate resources and guide children to learn for themselves. Human relations, giving support to and seeking support from other learners and the community on a basis of mutual respect, caring and sharing, must be essential elements in their education and training.

If teachers are to use new learning strategies, material and methods in their real teaching they must themselves be educated and trained through the use of these techniques rather than merely be told about them. As many of the young trainees often lack experience and contact with the world outside the school and training college, an essential part of their education and training should be a programme of visits to different parts of the country, to educational centres and institutions in their own region and in the capital, such as high schools, the
University and research centres where discussions and probably conferences and workshops may be held.

**Teacher Trainers:** At present teachers are educated and trained by Egyptian teacher-trainers and a few Yemenis who have graduated from the University of Sana'a. Some of them have studied abroad mainly in the USA. Both the present curriculum and the methods of training are very poor, and trainees can scarcely be said to be trained at all. In the light of the new ideas on curriculum as cultural change, which call for radical changes in teacher training, a corresponding change is required in the education and training of those who train the teachers and educational personnel. Until the country develops its own cadre of teacher trainers with the relevant education and skills for the changing curriculum, there is a need for a number of ad hoc measures which can be organized in co-operation with the Unesco Programme in Yemen. These measures include:

- a training programme for the reorientation and updating of the existing Yemeni teacher trainers, to be held in Yemen and supported by foreign personnel expert in the new needs;
- to select a number of teacher trainers to be sent for training in Unesco institutions which provide the required training; or to countries such as Britain where relevant programmes are provided. Some may be sent to other developing countries with a similar orientation for short visits;
- a group of committed teachers and/or teacher trainers may be sent to study for degrees in other countries, not only for the training itself, but also to acquire experience and enlightenment.
Basic Requirements for Curriculum Planning and Renewal

Having outlined the major components of a more relevant curriculum in Yemen, I will try to outline the strategies and machinery necessary for implementing such a curriculum and for its continuous improvement and change. In the light of Yemeni reality where the system still lacks a well-established tradition and is short of financial and human resources, certain measures are necessary to ensure an enlightened central control combined with regional and local support and participation. The basic requirements include the following:

1. New Ideas and Attitudes

Any improvement of the quality of education depends to a great extent on the ideas and attitudes of those involved in education and curriculum policy planning. The main needs are for awareness and understanding of the nature of the human condition, of new ideas of education, human psychology and the processes of learning and the implications of these for the curriculum and the requirements they place on teachers, learners and communities. There is also a need for a wider understanding of the concept of the curriculum of the process of its planning and renewal, of the various operations involved, and of the people and resources required for this process. The required changes in school organization, in timetabling, in the aims and techniques of examination and in strategies and machinery for data collection and dissemination, will need considerable preparation, psychological as well as technical on the part of those involved in curriculum development.

2. Machinery for Curriculum Planning

At the central level the following measures are crucial:

- an improvement of the status and staffing of the curriculum
This department should be closely co-ordinated with other sections such as Inspection and Guidance, Teacher Training, the Examination department and the National Committee for UNESCO within the MOE; the Centre of Research and Educational Development and Sana’a University, in particular the Faculty of Education.

When revising the curriculum a general committee should be established in which all sectors should be represented: general education, non-formal, vocational, technical, commercial and teacher-training education. It must include at this central level:

i. a curriculum administrator;
ii. a curriculum planner;
iii. curriculum developers;
iv. an evaluator;
v. a psychologist with a reasonable grasp of theories of cognitive and moral development and of humanistic psychology, in particular Maslow and Rogers;
vii. material developers and teaching aid designers and producers;
viii. specialists in each area of study, teachers from each subject;
ix. consultants, practitioners of various professions concerned with the subject-area, for example, physicians, nutritionists, agriculturalists;
x. inspectors, teacher trainers;
xii. representatives from school buildings and finance departments;
xiii. representatives from research institutions;
xiii. support staff and secretaries.
This committee will discuss and revise the whole curriculum: its aims and objectives, plans and syllabi, content, methodology and the evaluation methods and techniques involved. Implications for each level, each sector and each area of study should be outlined with clear lines of horizontal and vertical integration, articulation and avoidance of overlap and contradictions, also the needs for research, information collection and dissemination, teacher training and in-service training should be identified. From members of this committee, panels should be formed for each level and area of study, with additional members from each region, with a co-ordinating panel consisting of the first eight members of the general committee.

At the Regional Level

At each governorate a curriculum committee should be established to co-ordinate the efforts of teacher training, inspection and general education departments in the region. This committee should liaise between the central level and community and school level, as it should provide a resource centre for both the central level and the schools in the region. It should re-examine the central curriculum, modify it and relate it to the realities and needs of the region. It should make arrangements for its implementation, including information dissemination, training, in-service training and support for schools. It also should collect information about the needs and problems in different communities which have a bearing on education, about educational problems and staffing, equipment and resources needed and available, and the collected information should then be provided to the centre as feedback and as a source for modification and change in the curriculum. Such a committee should be formed from representatives of the Curriculum Department in the MOE, the CRED and teacher training. It should have at its disposal, an
administrative headquarters and facilities for the dissemination and collection of information and for carrying out the training required for teachers, school staff and their liaison workers. Links with districts and communities may be established through inspectors and curriculum consultants who visit schools on a monthly basis, through the existing educational centres in each district. Heads of these centres are in charge of providing information and observing the implementation of curriculum programmes in a number of schools in a district or sub-district. These people may become a strong support for schools and teachers as well as providers of feedback for the regional committee. They may provide advice and training for heads and school staff and for teachers. The regional committee should establish relationships with official departments in the regions which have offices locally and which work at the local level, in particular with the LDAs in each area which could help in transporting materials, dispatching letters and small messages, in arranging accommodation, for courses, for expatriate teachers and school visitors.

One of the roles of the regional centre should be to list the resources available in the region and its urban centre, such as museums, buildings of historical and architectural interest, e.g. Mosques; factories and government institutions which may be visited by schoolchildren and teachers; sites of historical, industrial or aesthetic interest; and to make arrangements for such visits and activities associated with them. A list of resources should be provided for each school as well as for the central committee, to be considered when revising the curriculum.

The School Level:
As a learning centre the school should be organized on a democratic and
co-operative basis the form of organization adopted should include a staff committee, a student committee and a community committee, including some parents and possibly the representative of the LDA. The tasks of these groups as a joint body may be:

- to exchange ideas in the light of the official plan, the needs, expectations and resources in the community and to decide on what can be done by each group;
- to identify the needs of the children and the community and find ways of incorporating them into the curriculum;
- to identify resources in the community: people, material, social and natural phenomena and economic-cultural activities which may be used as learning resources;
- to decide on how the curriculum can be organized and on the timetable, allowing for certain out-of-school activities and for project work;
- to ensure community support for the school in accommodating non-local teachers, visitors and officials.

Curriculum Implementation Plan
Despite the logic and apparent feasibility of such a curriculum, even with a high level of acceptance by all concerned, its implementation would require at least one school generation. Many of the issues raised here have already been raised in the existing curriculum, in particular in the list of aims and objectives included in the official policy, which has acquired national acceptance in principle. Every learner and parent would welcome these ideas; every teacher and administrator would like to have more responsibilities and support. However, a commitment to improvement implies more than an attraction to the promised results of a particular innovation: it implies a willingness to change, to take risks, to apply
oneself to a long-term programme of hard work with no guaranteed reward; to exchange roles based on power and authority for roles arising out of co-operative and participative situations; to accept responsibility.

Most aspects of the new curriculum require hard and continuous work on the part of the learner, the teacher, the head of the school and other administrators such as inspectors, consultants, curriculum planners and policy-makers. Partnership and co-operative work require the relinquishing of authority and the acceptance of the idea of accountability not only to one's superiors, but also to the clients, they also imply a need for alertness to all changes that effect conditions of work and to all sources of information and ideas. Many qualities, skills and above all commitment are needed, on the part of those involved in the curriculum process. There is no way of predicting to what extent recruits to teacher-training will be prepared to give themselves over to such a demanding commitment: the gap between our ideals and the efforts we are prepared to make to materialize them appears to be a common human phenomenon.

In addition to these aspects, Yemen is still largely reliant on Arab input in terms of ideas and personnel. She lacks human and material resources sufficient for initiating an educational revolution that would consolidate the effects of the political revolution that took place twenty-five years ago. In order to avoid the problems that follow too sudden a change which often leads as suddenly to failure, a long term, gradual plan appears to be essential in which certain phases may be introduced, each of which prepares for the next, with all phases leading to the achievement of the ultimate goal: that of creating a flexible programme and an efficient institutional machine capable of continuous adaptation to changing
circumstances. Bearing the above considerations in mind, implementation could be planned in the following three phases:

Phase One: Mainly preoccupied with conscientization and awareness raising and the training of innovators and teachers. This may take at least five years, which may cover the third Five Year Plan 1986-1990.

Phase Two: Action stage - an overall plan to be implemented during the next period 1990-1995.

Phase Three: institutionalization and consolidation of new ideas and the required institutions and channels and methods of communication.
## Appendix I

Growth of Primary Education during the last twenty years 1962/63-1982/83.

<table>
<thead>
<tr>
<th>Year</th>
<th>Schools</th>
<th>Classes</th>
<th>Students</th>
<th>% of Female Teachers</th>
<th>Teachers</th>
<th>T/S ratio</th>
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Figures between brackets appeared only in 1982 referring to the Kuttub traditional schools.

* the available sources have different figures
** corrected from the 1981/82 Statistical Yearbook
*** from the 1982/83 Statistical Yearbook, p.32
## Appendix 2

Growth of Preparatory education in the last twenty years
1962/63-1982/83

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### Appendix 3

**Growth of Secondary Education in the last twenty years 1962/63-1982/83**

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## Appendix 4: Expansion of Teacher Education between 1963/64 and 1982/83

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Sources: The Statistical Yearbook, 1976/77, 1982/3, MOE
Appendix 5. Development of enrolment at Sana'a University in ten years by specialization and sex

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<th>Year</th>
<th>Total number of students</th>
<th>Sharia and Law</th>
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<th>Science</th>
<th>Eco-Commerce</th>
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Sources: Statistical Yearbook, MOE, 1980, 1982; CPO, 1984

Note: During 1973-75 students enrolled in the Faculty of Education studied in other faculties.
Appendix 6: Expansion of vocational education between 1969 and 1984

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<tr>
<th>Year</th>
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### Appendix 7: Distribution of schools population by province and sex in 1981/82

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<th>Secondary</th>
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<th>Technical &amp; Vocational</th>
<th>% of general Education</th>
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Sources: Compiled from the Statistical Yearbook for 1982/83, MOE, and CPO, 1984
Appendix B: Examination Results at all levels and sectors below university

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Appendix 9

The History Syllabus for the Sixth Grade at the Primary Level.

1. Revision of the previous year's lessons

2. The pre-Islamic period:
   a) Arab life in the pre-Islamic era
   b) Mekka
   c) The Koreish tribe

3. The Prophet's time:
   a) His upbringing and childhood
   b) His marriage
   c) His intelligence and honesty
   d) Revelation
   e) Beginning of the Islamic mission
   f) Koreish aggressive reaction to the Muslims
   g) Koreish attack on the Prophet
   h) People of Yatrib (now Medina) ask the Prophet to migrate
   i) The Prophet's migration to Medina
   j) Al-Ansar: the people of Medina who followed and defended the Prophet
   k) The first Islamic state in Medina
   l) People of Mekka enter Islam
   m) The death of the Prophet
   n) Effects of Islam on life in the Arabian peninsula

4. The Caliphs era:
   a) Introduction to the time of the great Caliphs
   b) Abu Bakr: his life and his activities
   c) Omar: his life and his part in organizing the Islamic state
   d) Othman: his life and works
   e) Ali: his life and works

5. The Ommiyad state:
   a) The rise of the Ommiyad and the changes brought about in the system
   b) Their oppositions
   c) The Ommiyad caliphs, (especially Omar bin Abdul Aziz)
   d) Islamic conquests during the Ommiyad period
   e) The causes of the decline and fall of the Ommiyad state
6 The Abbasid state:
   a) The rise of the Abbasids
   b) The Abbasid caliphs
   c) The causes of the decline of the Abbasid state.
7 The Yemeni states between the Abbasids and the Ottoman invasion:
   a) The State of Bani Ziad
   b) The State of Bani Yafur
   c) The State of Bani Najah
   d) The Solihid state
   e) The State of Bani Zori'a
   f) The State of Bani Hatim
   g) The State of Bani Mahdi
   h) The State of Bani Ayoob
   i) The State of Bani Rasool
   j) The State of Bani Tahir.
8 Competition of foreign powers over Yemen in modern times:
   a) The Portuguese
   b) The Ottomans: first expedition, second expedition and third expedition
   c) The French
   d) The British
9 Colonisation and the Arab World
   a) The French colonialism: Egypt, North Africa (Magrib), Syria and Lebanon
   b) The British colonialism: the Arabian Gulf, Egypt and the Sudan
   c) The Italian colonization of Libya
10 The Imamate and its developments in Yemen
   a) The beginning of the Imamate rule in Yemen
   b) The misdeeds of the imams and their rule
   c) The Yemeni revolutions against the Imamate: 1948, 1955 and 1962
11 Yemen and the revolution
   a) The 26 September Yemeni Revolution 1962: the events of the revolution, the peoples' response, the aims of the revolution and the success of the revolution
   b) The 14 October 1963 revolution in the south: YAR support and its success
Appendix 10

The Questionnaire

GENERAL
- Name (for who wishes): Nationality:
- Age: .... years. Sex: Male [ ] Female [ ]
- Qualification and Specialization:
- Date and Place of obtaining it:
- Occupation: Agency: Place of Work:
- Education experience: .... years.

If Student, please state:
- Year of study:
- School or College:

This section explores the opinions of some people involved in education about a number of suggested curriculum objectives at the general school level, that is, grades 1 - 9. This level is regarded as a general preparation for either more specialized studies or for various conditions and styles of working and living.

The suggested objectives are organized around five central categories of major importance: religion and good citizenship; development issues and work; the individual personality; intellectual and scientific abilities; and practical habits and skills.

In each category there are a number of statements of objectives. Please read them carefully and indicate your opinion of the degree of importance of each statement by choosing one of the answers offered in the opposite columns. Put a tick (✔) in the appropriate column in front of the statement being considered.

In the field of Islamic religion and good citizenship, the school curricula and activities should achieve the following objectives:

(1) Implant Islamic faith and its spiritual and ethical values, in each student

(2) Train students to perform the rituals of worship and to conform to the Islamic concept of good behaviour.

(3) Develop love for the country and loyalty to the principles of its political system

(4) Develop a spirit of co-operation, democratic interaction, and a sense of collective responsibility.

(5) Raise national Arab consciousness, belief in Arab unity and concern for Arab issues.

(6) Develop interest in the Arabic language and its development and in Yemeni-Arab-Islamic culture.
(7) Nurture a concern for human cultures and a conscious opening of the student’s mind to other cultures, in order to enrich the native culture and participate in the development of human civilization.

In the field of economic development and work, the school and its curricula should help the student to:

(8) Understand the importance of food, shelter, health-care, education and family planning — their contribution to the quality of life and the importance of acquiring skills that would provide them.

(9) Respect the natural environment and realize its importance as the fundamental resource for human needs; understand its features and resources, be aware of methods of interaction and protection from pollution and destruction.

(10) Understanding the needs, material and human resources of the society, and knowing its productive and co-operative institutions and their role in serving the individual and the society.

(11) Develop respect for manual work and for those who engage in it; interest in agriculture, crafts and the economic, social and cultural development of rural areas.

(12) Develop esteem for a simple and frugal lifestyle; for moderate consumption, saving and investment.

(13) Realize the interdependent nature of the major issues that affect the human community; the most serious problems of development so as to benefit from other countries’ experience and to prepare adequately for the dangers that threaten the future.

(14) Develop useful vocational abilities and attitudes; understand the nature of the work that may be expected, the abilities and skills that will help to perform the work effectively and honestly.

In the field of individual personality, the school curricula should help the student to develop:

(15) Self-confidence and initiative;

(16) Self-respect and self-reliance;

(17) Sensitivity and emotional balance;

(18) Respect for truth, creativity and inventiveness;

(19) Sense of enjoyment in the performance and perfection of work;

(20) Benevolence, empathy and tolerance towards others, regardless of sex, colour or creed.

In the field of intellectual and scientific abilities, the school curricula
should help the student to:

(21) Understand the nature of scientific and technological development, its effect on human life; the ability to adapt consciously to the rapidly changing aspects of modern life and to benefit from it in accordance with the society's needs and possibilities;

(22) Understand the basic principles and concepts of different areas of knowledge, be acquainted with research methods and techniques of observation, discrimination, selection, analysis, synthesis and prediction;

(23) Develop skills and abilities of scientific thinking, objective criticism, logical contemplation and problem-solving;

(24) Develop skills and abilities for self-teaching and the continuous pursuit of knowledge;

(25) Develop skills in communication and master the skills of reading, writing, listening, understanding, expression of feeling, of thought and dialogue;

(26) Develop mathematical abilities, skills and their practical application.

With regard to everyday life, the school should help the student to develop skills in the following areas:

(27) Health, nutrition, physical education, sources and purification of water, hygiene, preventive care and first aid skills;

(28) Art and Literature: Music, drawing, painting, acting, writing and poetry, stories and folklore;

(29) Crafts: Carpentry, metal work, construction, ceramic and pottery;

(30) Agriculture: Ploughing, use of fertilizer, soil protection, irrigation and the technology of farming;

(31) Learning skills: the use of scientific instruments, the collection of information from books, from direct observation and contact with the environment, media and people; its organization, analysis and presentation.

(32) Technical skills: the use and maintenance of electric and electronic household and public appliances and means of transport;

(33) Home economics: household organization, family care and management, child care, food preparation and needle work and crafts.
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<th>Officials (21)</th>
<th>Headmasters (19)</th>
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VI: very important  
I: important    
NC: not certain  
NI: not important  
at all: not important at all  

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Appendix 11.


Contents
Section A: THEORY
Ch.I Introduction to Educational Theory
- Aims and Objectives of the Yemeni Curriculum: Areas of experience to be covered by the Yemeni Curriculum.
- Introduction to theory of Needs; Learning Needs.
- Note on prerequisites to formal learning, communication, literacy and numeracy.

Ch.II Introduction to the integrated curriculum: Learning theory and the integrated curriculum.
- Suggestions for the organization of the integrated curriculum, themes, topics and projects.

Ch.III On classroom methods: traditional and new
- Lectures, discussions, demonstrations, projects, process and discovery-oriented learning; inquiry and problem-solving, experiments, games, role-play and simulation, individual and group projects.

Section B: THE PRACTICAL CURRICULUM
Introduction: Areas of Learning Experience.
First level of Needs: Physical/Material

Topic One:

Health

- Food
  - Nutrition
- Hygiene
- Physical Development
- Mental Development
- Illness
- Preventive Measures

Learning needs in each of these broken down into components suitable for each Grade/Level/Age group.
Specific objectives of each learning area.
Suggestions for classifications of knowledge/subject areas, that will contribute to each of these.
Syllabus.
Sample schemes of work; sample lesson plans.
Suggestions for Assessment.
**Topic Two:**

Farm/Business and Home [Management]

- The Home  The Farm/Family/Business
- The Family  Who works there
- Income  Who does what/
- Work  Divisions of labour/role of women

Work as organized human activity

- Work as earning a living
- Literacy objectives for each learning area

Specific objectives for each learning area.
Syllabus.
Sample schemes of work; sample lesson plans.
Suggestions for Assessment.

**Topic Three:**

Earning a Living - Practical/Vocational

Examination of local occupations
[Varies according to region (urban/rural),
terrain, distribution of resources,
facilities, occupation of parents, relatives]
Discussion of Migration: advantages and disadvantages
The Role of Women

Syllabus.
Sample schemes of work; sample lesson plans.
Suggestions for Assessment.
Topic Four:

People

Myself

Who am I?

Who are the people around me?

What are we to each other?

How do I live?

How do we get on together?
Do we work together/help/need each other?
Dependency, self-reliance, interdependence, co-operation.
Relationships/interpersonal attitudes and behaviour.
Social and political attitudes and behaviour.

How do they live?
Our faith gives us inspiration for life and productive/creative work.
Study of the values that underlie the practices of religion.

The idea of fulfilment: living well: examples from literature and art: from my own life.
Talents: the qualities required to develop talents.
Other peoples’ talents: the qualities needed to appreciate and help to develop the talents of others.
All human beings can be involved in doing, making, writing, singing, dancing, communicating, playing, thinking, working.
How other people in other cultures go about these other peoples’ values.

Syllabus.
Sample schemes of work; sample lesson plans.
Suggestions for Assessment.
Section C: RESOURCES AND MATERIALS

An outline guide for the teacher on the use of local resources and on the development of his/her own teaching/learning materials.

List of local areas of interest suitable for school visits.

List of addresses of local government and other institutions of interest for the collection of information for various topics.

Suggestions for the collection and use of materials available locally.

Guide for the development of materials in different subject-areas: charts, maps, drawings, models, tape-recordings.

Section D

A note on evaluation, oriented towards self-evaluation.
BIBLIOGRAPHY

Adiseshiah, M.S. (1972) It is time to begin. Unesco, Paris.


<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Year</th>
<th>Title and Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Al-Kumim, A.A.</td>
<td>1960</td>
<td>Al-Ihder fi Attalim, MOE, Sana'a.</td>
</tr>
<tr>
<td>Al-Maktab Al-Qanoni</td>
<td>1982</td>
<td>Qarar Jomhuri No.40 1982. (For the establishment of the Centre of Research and Educational Development) CRED, Sana'a.</td>
</tr>
</tbody>
</table>


APEID (1975) *Science in Basic Functional Education: Philosophy, Approaches, Methods and Materials*. Unesco Regional Office for Education in Asia and Oceania, Bangkok.


APEID (1984) *Futures and Education*. Unesco Regional Office for Education in Asia and Oceania, Bangkok.


Arrahumy, A. et al. (1978) 
Ashibani, Abdullah (1964) 
Ashibani, Ali (1964) 


Blaug, Mark (1972) *Economics and Educa
tional planning in developing countries*, 
*Prospects*, vol. II, no. 4, 

Blaug, Mark (1974) *Education and employment in developing 
countries*, ILO, Geneva.


Bono de, Edward (1983) *The Direct Teaching of Thinking as a Skill*. 
*Phi Delta Kappan*, June 1983.

Ohio University Press.

Botkin, J.W. et al (1979) *No Limits to Learning: Bridging the human gap*. A report to the Club of Rome, 
Pergamon Press.

Routledge & Kegan Paul.

pp. 205-231.


<table>
<thead>
<tr>
<th>Author</th>
<th>Year</th>
<th>Title</th>
<th>Publisher/Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central Planning Organization</td>
<td>1976a</td>
<td>Assessment of Manpower Development</td>
<td>CPO, Sana'a.</td>
</tr>
<tr>
<td>Central Planning Organization</td>
<td>1976c</td>
<td>Al-Khuttah Al-Khamsiya Al-Ula</td>
<td>CPO Sana'a.</td>
</tr>
<tr>
<td>Central Planning Organization</td>
<td>1981</td>
<td>Demographic Case Study</td>
<td>CPO, Sana'a.</td>
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<tr>
<td>Author</td>
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</tbody>
</table>
Coombs, P.H. and
Manzoor Ahmed
(1973) New Paths to Learning for rural Children
and young, ICED.

Coombs, P.H. and
Manzoor Ahmed
Education can help? John Hopkins
University Press.

Coombs, P.H.
(1975) Education for Rural Development: Some
Implications for Planning. A seminar
paper 20, IIEP, Unesco, Paris.

Coombs, P.H.
(1981) Future Critical World Issues in Education:
A professional report of findings. ICED.

Coombs, P.H.
(1985) The World Crisis in Education: the view
from the Eighties. Oxford University
Press.

Cown, R.
(1972) The Utilitarian University. The World

Crabtree, W.B.
(1971) An Age of Irrelevancy. Educational
Theory, no.21, pp.33-41.

Craft, M.
(1982) Education for Diversity, the Challenge of
Cultural Pluralism. University of
Nottingham.

Crossley, Michael
Curriculum Change and Pilot Projects: A
Coactionary Note. International Journal
of Educational Development, vol.4, no.3,
pp.245-50.

Cuba, Egon G. &
Yvonna S. Lincoln
(1982) The Place of Values in Needs
Assessment. Educational Evaluation and
Policy Analysis. vol.4, no.3, Autumn
1982.

Curle, Adam
(1963) Educational Strategy for Developing
Countries: A study of Educational and
Social Factors in Relation to Economic
Growth. Tavistock Publications London.

Curle, Adam
(1973) Education for Liberation. Tavistock

Dadzie, K.K.S.
America, vol.343, no.3, Sept.1980
pp.55-61.

Dag Hammarskjold
Foundation
(1975) What now — Another Development.


<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Year</th>
<th>Title</th>
<th>Publisher/Editor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fanon, Franz</td>
<td>1963</td>
<td>The Wretched of the Earth</td>
<td>Penguin Books.</td>
</tr>
<tr>
<td>Firebrace, James</td>
<td>1981</td>
<td>Infant Feeding in the Yemen Arab Republic</td>
<td>Catholic Institute for International Relations.</td>
</tr>
<tr>
<td>First Conference on Muslim Education</td>
<td>1977</td>
<td>Conference Book</td>
<td>King Abdul Aziz University, Jeddah, Saudi Arabia.</td>
</tr>
<tr>
<td>Foster P.</td>
<td>1965</td>
<td>The Vocational School Fallacy in Development Planning</td>
<td>Anderson and Bowman (ed), 1966.</td>
</tr>
</tbody>
</table>
Freire, Paulo  

Freire, Paulo  

Freire, Paulo  

Fromm, Erich  

Fromm, Erich  

Fromm, Erich  

Fromm, Erich  

Fromm, Erich  

Fromm, Erich  
(1976) To Have and To Be? Jonathan Cape.

Future  

Gable, Richard  

Gagne, Robert M.  

Gagne, R.M.  

Galbraith, J.K.  

Galbraith, J.K.  

Galbraith, J.K.  

Galtung, J. et al  

Galtung, J.  


George, Susan (1976) How the other half dies: the real reasons for world hunger.


Green, Maxine (1971) Curriculum and Consciousness. Teachers College Record, vol. 73, no. 2, December.


<table>
<thead>
<tr>
<th>Author</th>
<th>Year</th>
<th>Title</th>
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<tbody>
<tr>
<td>Harvey, Nigel</td>
<td>1965</td>
<td>Consumption in the Yemen Arab Republic, in Pridham (edt) 1965</td>
</tr>
<tr>
<td>Havelock, R.G. &amp;</td>
<td>1977</td>
<td>Solving educational problems: the theory and reality of innovation in developing countries, Unesco, IBE.</td>
</tr>
<tr>
<td>A.M. Huberman</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hawes, H.</td>
<td>1972</td>
<td>Planning the Primary School Curriculum in Developing Countries, Unesco, IIEP.</td>
</tr>
<tr>
<td>Hawes, H.</td>
<td>1975</td>
<td>Lifelong Education, Schools and Curricula in Developing Countries, Unesco Institute for Education, Hamburg.</td>
</tr>
<tr>
<td>Hawes, H.</td>
<td>1979</td>
<td>Curriculum and Reality in African Primary Schools, Longman.</td>
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<tbody>
<tr>
<td>Macro, Eric</td>
<td>1966</td>
<td>Yemen and the Western World</td>
<td>C. Hurst &amp; Co., London</td>
</tr>
<tr>
<td>Makhlouf, Carla</td>
<td>1979</td>
<td>Changing Veils: Women and Modernization in North Yemen</td>
<td>Croom Helm, London</td>
</tr>
<tr>
<td>Marcel, G.</td>
<td>1965</td>
<td>Being and Having</td>
<td>Collins The Fontana Library</td>
</tr>
<tr>
<td>Marcuse, H.</td>
<td>1964</td>
<td>One Dimensional Man</td>
<td>ABACUS</td>
</tr>
<tr>
<td>Martin, Rich J. (ed)</td>
<td>1975</td>
<td>Innovations in Education: Reformers and their Critics</td>
<td>Allen &amp; Bacon Inc</td>
</tr>
<tr>
<td>Mary James</td>
<td>1983</td>
<td>Curriculum Evaluation in Schools</td>
<td>Croom Helm</td>
</tr>
<tr>
<td>Maslow, A.H.</td>
<td>1959</td>
<td>New Knowledge in Human Values</td>
<td>Regnery/Gateway, Inc</td>
</tr>
<tr>
<td>Maslow, A.H.</td>
<td>1966</td>
<td>The Psychology of Science</td>
<td>Henry Regnery Company, Chicago</td>
</tr>
<tr>
<td>Maslow, A.H.</td>
<td>1977</td>
<td>Goals and Implications of Humanistic Education (abridgement from the Farther Researches of Human Nature)</td>
<td>Entwistle and Hounsell (eds), How Students Learn.</td>
</tr>
<tr>
<td>Massey, Robert F.</td>
<td>1981</td>
<td>Personality Theories: Comparisons and Syntheses</td>
<td>D. van Nostrand Company</td>
</tr>
</tbody>
</table>

467


Ministry of Education (1976) *Al-Khutteh Al-Khamsiya Al-Ula* (the educational sector) MOE, Sana'a.


Ministry of Education (1978c) Tagrir khas an al-marhala Athanawiya, MOE, Sana'a.


Ministry of Education (1980c) *Qrar Al-Wazir* No. 169 for specifying allowances for those who revise the curriculum.


Ministry of Education (1982a) *Al-Khuttah Al-Khamsiya Athaniya* (the educational sector) MOE, Sana'a.


Ministry of Education (1962e) *Attarikh Al-Arabi-Al-Islami*, a school text for the sixth grade of primary level, MOE, Sana'a.

Ministry of Education (1962f) *Attarikh Al-Arabi-Al-Islami*, a school text for the second grade of preparatory level, MOE, Sana'a.

Ministry of Education (1962g) *Attarbiyah Al-Wataniyah*, a school text for the third grade of preparatory level, MOE, Sana'a.


Ministry of Education (1962i) *Geographiyt Al Watan Al-Arabi* (Geography of the Arab World), a school text for the sixth grade of primary level, MOE, Sana'a.

Ministry of Education (1962j) *Geographiyt Al Watan Al-Arabi* (Geography of the Arab World), a school text for the second grade of preparatory level, MOE, Sana'a.


Ministry of Education


<table>
<thead>
<tr>
<th>Author</th>
<th>Year</th>
<th>Title and Details</th>
</tr>
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<tbody>
<tr>
<td>Peters, R.S.</td>
<td>1973</td>
<td>Authority, Responsibility and Education. (3rd ed), George Allen &amp; Unwin Ltd.</td>
</tr>
<tr>
<td>Postman, N. &amp; C. Weingartner</td>
<td>1969</td>
<td>Teaching as a Subversive Activity. Penguin Education.</td>
</tr>
<tr>
<td>Author(s)</td>
<td>Year</td>
<td>Title</td>
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<tr>
<td>Reid, Collin (ed)</td>
<td>1984</td>
<td>Issues in Peace Education. The United World College of the Atlantic.</td>
</tr>
<tr>
<td>Author/Editor</td>
<td>Year(s)</td>
<td>Title/Reference</td>
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<td>---------------------------------------------------------------------------------</td>
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<tr>
<td>Sana'a University</td>
<td>1982</td>
<td>Tagrir an Tataw-r Jami'at Sana'a, 1970-82.</td>
</tr>
<tr>
<td>Author</td>
<td>Year</td>
<td>Title</td>
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<td>------------------------</td>
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<tr>
<td>Slaughter, R.A.</td>
<td>1983</td>
<td>Futures Education: Why we need to teach for tomorrow.</td>
</tr>
<tr>
<td>Author(s)</td>
<td>Year</td>
<td>Title</td>
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<tr>
<td>Smith, S.</td>
<td>1979</td>
<td><em>Ideas of the Great Educators</em></td>
</tr>
<tr>
<td>Smith, W.O.L.</td>
<td>1966</td>
<td><em>Education</em></td>
</tr>
<tr>
<td>Stenhouse, L.</td>
<td>1975</td>
<td><em>An Introduction to Curriculum Research and Development</em></td>
</tr>
<tr>
<td>Stohr, W.B.</td>
<td>1981</td>
<td><em>Development from Above or Below?: the dialectics of regional planning in Developing Countries</em></td>
</tr>
<tr>
<td>Stookey, R.</td>
<td>1981</td>
<td><em>First Things First: Meeting Basic Human Needs in Developing Countries</em></td>
</tr>
<tr>
<td>Streeten, P. et al</td>
<td>1981</td>
<td><em>Education between being and having</em></td>
</tr>
<tr>
<td>Suchodolski, B.</td>
<td>1963a</td>
<td><em>Modern Civilization at the Crossroads and how to face the Future in Education</em></td>
</tr>
<tr>
<td>Suchodolski, B.</td>
<td>1963b</td>
<td><em>Essence of Man</em></td>
</tr>
<tr>
<td>Suchodolski, B.</td>
<td>1963c</td>
<td><em>Areas of Learning in a World of Fear and Hope</em></td>
</tr>
<tr>
<td>Author(s)</td>
<td>Year</td>
<td>Title</td>
</tr>
<tr>
<td>------------------------</td>
<td>------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>The General Conference</td>
<td>1982</td>
<td>Al-Mithag Al-Watani (the National Charter), Sana’a, YAR.</td>
</tr>
<tr>
<td>The Middle East</td>
<td>1983</td>
<td>Yemen Earthquake: Why the Arab World is unprepared.</td>
</tr>
</tbody>
</table>

477


Williams, R. (1976) *Keywords: A vocabulary of culture and society.* Fontana Paperbacks.


