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FULFILMENT OF BASIC NEEDS: CONCEPT, MEASUREMENT, AND MUSLIM COUNTRIES' PERFORMANCE*

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Abstract

This paper adopts a 'relative' approach to the fulfilment of basic needs. It uses a basic needs gap index (BNGI) to measure the performance of selected Muslim countries – Bangladesh, Egypt, Indonesia, Malaysia, Morocco, Pakistan and Turkey at three points in time – 1987, 1990, and 1994.

The index takes into account five basic needs: food, clothing, shelter, medicare, and education. It measures the extent of shortfalls in poor people's expenditure (taken as equal to their income) on these needs from the national mean expenditure on them as a ratio of the latter in each year on a 0-1 scale.

No correlation seems to exist between the BNGI and the GNP per capita or its rate of growth at any point in time chosen for the study. The BNF performance as measured by BNGI varies considerably over time and among the countries covered. In general, the BNF is found to vary inversely (BNGI directly) with the pace of growth between time segments 1987-90 and 1990-94. Success on the BNF front demands a sustained, multi-dimensional effort, especially of political will and action.

*This work draws freely on an earlier paper which the author co-wrote with Muhammad Arif under the title, "The Basic Needs Fulfilment Guarantee in Islam and a Measure of its Financial Dimension in Selected Muslim Countries," presented at the Third International Conference on Islamic Economics held at Kuala Lumpur in 1992. It focused only on the year 1987, and remains unpublished.

1. Introduction

It had become amply clear by the 1970s that development policies imbued with notions of growth could rarely be the instrument for mass amelioration in the Third World countries.¹ Taken as a whole, the Gross National Product or the GNP of these countries did expand at a more than satisfactory rate for decades after the Second World War,² but poverty and distributional inequalities only increased in most cases.³ The disenchantment brought into prominence the basic needs fulfilment (BNF) as an alternative strategy to foster economic development. This approach was hailed as revolutionary, for poverty was its *direct* target. The literature soon became replete with writings on the subject.⁴

The BNF was not opposed to an expansion in GNP: it sought to 'minimize poverty with growth.'⁵ Yet, once the first wave of elation ebbed, doubts were raised about the efficacy of the programme. Stated briefly, the argument ran as follows: Even if the BNF did not conflict with growth, it is not likely to remain totally innocuous. The programme may require *inter alia* a revision of development priorities, stringent redistributive measures, reallocation of resources, relocation of production units, shift in technological choices, and intricate readjustments in the structure of the economy. Changes of this sort are interlinked, but are not always concurrent. To integrate all of them into a unified development pattern may be hazardous and challenging. Their net outcome need not always or entirely be welcome to the powerful and entrenched interests. Thus, a BNF programme is of necessity fragile, beset as it is with numerous complexities. Political expediency may often bring about greater hesitation in implementing a BNF programme than the initial compulsion to undertake it.

This argument largely explains the reluctance policy makers

have recently shown in developing countries to make BNF central to development planning. The collapse of Socialism in the former USSR and Eastern Europe, as well as the wave of privatisation now sweeping across the world, may have added to this reluctance. It is no accident that the BNF has become obsolete in no time and has almost made its exit from the literature.⁶ What one hears of it occasionally in corridors of power is largely meant for public consumption. Real concern is exceptional.

In fact, priority for growth is intrinsic to capitalistic development models. But from the Islamic perspective, growth cannot override the BNF, a *Sharī'ah* imperative. The Qur'ān reminds us time and again that all people are equal in the *right* to have sustenance from Allah's inexhaustible treasures of the Earth (and the heavens) though the quantum granted to each may differ.⁷ It should be noted that the BNF is already a constitutional obligation of the state in the Islamic Republic of Iran as well as a recognized civil right in Libya.⁸ However, Islamic economists have generally confined their discussions on the BNF to juridical aspects of the issue with little attention to its operational side. Even at the theoretical plane they have not been very clear on the concept and content of basic needs as well as regarding their linkage with the notion of poverty. Furthermore, the literature is devoid of efforts to forge measures for estimating the financial dimension of the BNF to assess the performance of Muslim countries. Both are closely related aspects of a BNF-oriented strategy for development, and the present paper seeks to examine the issue from these two angles.

The scheme of the paper is as follows. Section 2 presents an overview of the literature with a view to highlighting the conceptual aspects of a BNF programme from an Islamic perspective. Here we shall give reasons for our reservations about an 'absolute' concept concerning basic needs and shall argue that a relative version is more logical and helpful both for intertemporal and international

comparisons. Such a version, we shall maintain, is also more realistic and convenient for analysing the financial dimension of the programme in various Muslim countries.

Section 3 is devoted to the making of measurement tools and links the process of BNF to notions of poverty. A 'roll up' approach for monitoring the performance of the selected Muslim countries which include Bangladesh, Egypt, Indonesia, Malaysia, Morocco, Pakistan and Turkey is developed. Some of the advantages of this approach are also highlighted. The countries which are well spread all over the globe have not been selected randomly. They have very diverse historical backgrounds, resource endowments, population sizes and political systems, and are at quite different milestones on the development road. Taken as a whole, their population is well over half a billion. They make up more than 50% of all Muslims in the world, and about 70% of those living in the Muslim majority countries where, given the political will, a BNF-oriented Islamic development programme can be put into operation. It must be mentioned that both in the matter of selecting the countries and the designing of tools for analysis, the nature, limitations, and form of the available data have played a role.

Section 4 presents a summary of the results of BNF performance of the countries covered at three points in time –1987, 1990 and 1994. The results may not strictly be comparable, especially between countries, due to data variations. Still, the direction of change they indicate is unmistakable. The paper closes with a few concluding remarks. Only main findings are incorporated in the text to keep the argument smooth and flowing. Readers interested in knowing the details of the data and their sources as well as the processes of derivation may find the Appendices useful.

2. Literature Overview

Major religions of the world including Islam insist on the fulfilment of basic needs of everyone before the less essential needs of a few can be met. A recent example is Shapiro's elaboration on how the Jewish scripture, Talmud spanning almost eight centuries, attempts to raise the standards of living of the poor to a well defined objective level without ignoring their subjective needs.⁹ In Islamic economics, cursory references to basic needs fulfilment have not been infrequent but formal treatment of the subject is perhaps provided only in the works of Siddiqi and Ahmad.

In mainstream economics, though one finds references to basic needs of the workers in Adam Smith,¹⁰ comprehensive discussions on the subject, especially as a strategy for economic development, are only of recent origin.¹¹ Srinivasan and Dell take a critical view of the matter. While Srinivasan emphasises the political and institutional inhibitions, Dell highlights the difficulties of concept, measurement and interpretation in using the BNF as an operational tool of planning development. *First Things First* by Paul Streeten *et. al.* has been an influential work. It provides a detailed bibliography on the subject of basic needs upto 1980, containing slightly less than a hundred titles. Some of the major works since 1981 appear as references in Hasan and Arif. Useful material has occasionally been published on the issue in the World Development and UNDP Reports.¹² Still, many questions remain unsettled, both in Islamic and mainstream economic disciplines.

2.1 Basic Needs Concept

From the viewpoint of Islam, and other religions as well, the issue of spiritual poverty of the believers in today's world is no less

important than the problem of material deprivations which afflict the vast majority.¹³ Still, we can presumably separate the two for purposes of analysis with advantage, more so because the *Shari'ah* sees an intimate relationship between them.¹⁴ Promotion of the mundane well-being of the poor through BNF is expected to improve not only their ethical performance but of the rich as well,¹⁵ depending on the content and range of the programme. The following discussion on basic needs rests *ceteris paribus* on the assumption of this linkage.

Deriving extensively from the text, the Sunnah, Caliphal precedents and juridical writings, Siddiqi demonstrates that Islam *guarantees* the fulfilment of basic needs of all members of the community. But the need-income relationship in Siddiqi's discussion is not very clear. He erects a strong *Shari'ah* edifice for his notion of 'needs' which he *then* terms as 'basic' to everyone in society. In that, he tends to break the link so common in mainstream literature between the basic needs and the concept of 'poverty' marked on an income scale. In the process, his list becomes too large. Its focus shifts from the 'basic needs' to an unquantifiable Islamically *decent* living which is oblivious to resource constraint at the micro and macro levels in contemporary Muslim societies. Ziauddin Ahmad adopts a similar approach in formulating his views on the subject. He starts with a narrow version of basic needs – "adequate food, clothing and shelter, and etc., for living comfortably," (p. 53) but lands himself in a state of inconsistency when he adds, "Needs, however, include not only the necessities for sustaining life, but also comforts for making life more pleasant and less difficult," (p. 55). Things become more complicated when Ahmad introduces another dimension that "The desired welfare in an Islamic society can be achieved, also by the fulfilment of basic needs that are necessary for the spiritual upliftment Islam stands for," (p. 57). The writer eventually provides us with his final version of basic needs as including "food, clothing, shelter,

medical aid, education, marriage, employment opportunities, and transportation facilities," (p. 57) with some qualifications.

Although both Siddiqi and Ahmad mention explicitly the stage of economic development and income levels as affecting the Islamic needs fulfilment guarantee, the thrust of the argument in each case tends to lessen the weight of these constraints. Fortunately, there is a succinct recognition in the Islamic economics literature that the concept of basic needs can have a narrower connotation related to poverty expressed in terms of income levels as opposed to the global view of the essential requirements for a decent Islamic living as identified in the Siddiqi/Ahmad formulations. It is also generally agreed in the writings on the subject – mainstream and Islamic – that the concept of basic needs has to be a flexible one. Their range and standard in a particular society would have to be periodically spelled out in accordance with the level of economic development it has reached.

Even as we detach the concept of 'basic needs' from the stated *Shari'ah* requirements for a comfortable living and take a restricted view of them so as to consider their non-fulfilment the result of the income insufficiency of an appropriate category of the 'poor',¹⁶ two types of issues still remain unsettled. First, what are, or should be, the contents of a 'basic needs' basket and whether the concept of this basket would be 'absolute' or 'relative'? Second, will the basket be made available to the deprived by a scheme of income transfers, through a direct provision of goods and services, or by raising their earning capacities, and what agencies or institutions would perform these functions?¹⁷

Time and space constraints do not permit a detailed discussion of all such questions. However, we shall take up the first of these at some length and touch upon a few others in a cursory way.

2.2 Absolute Versus Relative Version

As alluded to earlier, the concept of a 'basic needs' approach to development emerged as a consequence of the failure of the standard growth approach to check the spread of poverty and destitution in the developing economies. Removal of poverty, through a reversal of priorities, became an issue of serious concern in many countries for a variety of reasons – social, economic, and political.¹⁸ To formulate meaningful programmes for the purpose, 'poverty' had to be defined in precise terms, and the 'poor' had to be identified accordingly. This was attempted through specifying a basket of goods and services which could fulfill at the minimum, the 'basic needs' of food, clothing, shelter, medicare, and education to grant the recipients a living standard which society could accept as tolerable, if not decent. The contents of the basket varied according to the dictates of the local requirements, but the 'needs' it was meant to fulfill were virtually the same in each case. A money equivalent of the basket was then defined as the 'poverty line' and those having incomes below this minimal were identified as the 'poor'.¹⁹

The idea of a physical basket of goods and services is considered to be an absolute version of the 'basic needs' concept. According to Streeten *et. al.*, "Removing malnutrition in children, eradicating disease, or educating girls are concrete specific achievements that meet the basic human needs of the deprived groups, whereas reducing inequality is abstract. There is of course nothing wrong with an abstract moral objective, but if policies are judged by evident reduction of suffering, meeting basic needs scores better than reducing inequality."²⁰ Another objection to a 'relative' notion is that it defines poverty only in such a way that it may never be erased, despite any rise in the absolute income levels, unless the measure of inequality is itself changed. As an economy develops and the production of material goods and services increases we must push

up “the socially agreed minimum” to ensure the presence of the poor in every society. Thus by definition, a class of poor is created in all historical formations unless we are in a regime of perfect equality.²¹ The absolute version, on the other hand, envisages a list of items of consumption, regarded as an irreducible minimum, and material prosperity may then lead to an elimination of the class of the needy and the poor. The apprehension seems to be that while an absolute version of poverty would allow us to get rid of the curse after some time once and for all, the relative version would burden our conscience perpetually by maintaining poverty as a socio-historical category. Last but not least, an interesting observation against relative poverty is that the notion is not justified from the *Shari‘ah* viewpoint “as this type of subjective poverty may increase one’s unhappiness and greed with an associated urge for exploitation of the less fortunate people.”²²

In sum, a relative version of basic needs is generally criticised on three main grounds: (i) it is abstract, (ii) it makes poverty eradication a perennial problem, and (iii) it may tend to promote certain trends in social psychology unwelcome to the *Shari‘ah*. We shall argue that these grounds are extremely infirm, if not redundant, and that a relative concept of basic needs is factual, more purposive, and operable compared to its ‘absolute’ version.

First, it is inappropriate to conceive of ‘absolute’ poverty as some level of income not sufficient to meet the specific basic needs, and only consider income inequalities beyond that as an issue concerning ‘relative’ poverty. The dichotomy is arbitrary. More than that, it carries an air of relativity around it. Simply put, the content and quality of a basic needs basket cannot be determined in isolation of the per capita income of the community.²³ According to the *World Development Report*, “In general, as countries become wealthier, their perceptions of the acceptable minimum level of consumption – the poverty line – changes.”²⁴ Thus, the line of demarcation between the

absolute and *relative* components of poverty is related to and must shift with time, within and between nations, according to the level of income reached and the state of its distribution.

In fact, we should consider the relativity issue initially in the context of basic needs themselves – not of incomes – if we wish to avoid the confusion the discussion so often tends to lead to. We believe that it is extremely difficult, if not impossible, to quantify basic needs in some absolute sense without being arbitrary.

To begin with, take the case of food requirements. Literature on the subject is full of controversies as to what constitutes malnutrition or more importantly, how to ascertain the relative degrees of under-nourishment. The empirical research conducted by individuals, institutions, and international organisations on the issue poses perplexing interpretive problems.²⁵ One simple reason is that, “we do not know how many calories are needed for people to live their daily lives.”²⁶ It has also not been settled if protein deficiency is a distinct problem from the inadequacy of calories in a diet. Again calories requirements in the diet would not be the same for people engaged in occupations needing different energy levels to do their work.²⁷ The choice of source – meat or cereals, for example – would bring in the question of habits, climate, religion, and relative prices. These difficulties impart an element of relativity, even in physical terms, to the food component in a basic needs basket.

Since human stomachs do not differ much in size, the possible differences in the calories intake between the rich and the poor has a limit. Here, one may probably stretch the argument to accommodate an ‘absolute’ view of the requirement. But that clearly cannot be the case with the other basic needs. For example, the size and quality of a shelter, and the range and level of the accompanying services relating to water, electricity, sewerage, transportation etc. can only be thought of meaningfully in some ‘relative’ terms. Provision of services concerning health and education – their quantum and standard – is all

the more difficult to conceive of on an 'absolute' basis. So is the case with clothing and footwear. In any case, when we aggregate all the basic needs in our list, as we must, using a money measure, we are but transported to the realm of poverty indicated on an income scale. And poverty in this sense cannot be divided into 'absolute' and 'relative' components without being predilective.

Poverty by its very nature is a relative concept. Whatever others may say about the objective conditions of deprivation, how the poor themselves perceive their deprivation is no less important. "The perception . . . has evolved historically and varies tremendously from culture to culture. Criteria for distinguishing the poor from the non-poor tend to reflect specific national priorities and normative concept of welfare and right."²⁸ And this brings us to our second point. The perception of relative poverty need not be expressive of the envy considered distasteful to the *Sharī'ah*. If the living standards of the reference group are improving distinctively, the desire of the poor as a group that their lot should also improve a little is almost a biological basic need devoid of grudge or envy. It is in line with the Islamic norm of justice. Finally, the relative view, of course, defines poverty in a way that it can never be eliminated, however much the absolute levels of income rise. But what is alarming about that? Which society, and at what point in time has been, or is, without its poor or free of a perception of poverty? Not even the most affluent ones can claim to be entirely devoid of the malady.

3. Measurement

We are talking of the absolute and relative versions of poverty *within* the framework of a BNF programme as distinct from that related to the question of distributional equity in general. The former deals with the fixing of a norm for measuring departures, while the latter is concerned with the tolerance limit of income differentials

between the richer and the poorer.²⁹ The concept of basic needs in an absolute sense is indeterminate in that it insists on detaching the biological aspects of poverty from its psychological elements. In contrast, the relative view of BNF is realistic and workable. The concept may vary between climates, cultures, and locations, yet comparisons over time and space can be made. The essential requirement is to specify the basic needs and express their fulfilment norm in monetary terms so as to measure shortfalls, if any, in specific cases.

Clearly, the basic needs basket will not be the same in quantum and quality for each country. Same also will not be the mean national expenditures on them. Still, it is more efficacious to measure the departures from a norm *internal* to a country rather than use for the purpose some remote international standard based on compromises not always relevant to a specific situation. The problem of equalizing the purchasing power of national currencies also does not arise. The norm that we have prescribed is different from the ones used to measure relative poverty. The latter rises with any norm one may arbitrarily choose, for example, the mean national income, the bottom of the top eighty percent incomes on the scale, the minimum wages etc., and the focus on BNF is blurred. In contrast, our norm moves up with a rise in the national per capita expenditure on *basic needs*. Thus, it signifies a 'roll up' approach to BNF as opposed to the 'once and for all' attempt conceived by the 'absolute' poverty eradication schemes.

To concretise, let us suppose that in a given country, \bar{Y}_t is the mean national income for year t , \bar{E}_{bt} is the mean national expenditure on the specified basic needs, and on them \bar{E}_{pt} is the minimum desired per head expenditure for the poor identified as those whose mean income \bar{Y}_{pt} is less than \bar{E}_{pt} . Then,

$$\bar{Y}_{pt} < \bar{E}_{pt} < \bar{E}_{bt} < \bar{Y}_t$$

In an 'absolute' BNF scheme \bar{E}_{pt} is defined as the poverty line, and if after a number of years' efforts, the incomes of all those below the line are raised upto \bar{E}_{pt} or beyond ($\bar{Y}_{pt} \geq \bar{E}_{pt}$) such that there are no fresh entrants to the category, poverty could be claimed to have been removed lock, stock, and barrel, even if the gap between \bar{Y}_t and \bar{E}_{pt} or between \bar{E}_{pt} and \bar{E}_{bt} grows with the passage of time! In contrast, our version of BNF would insist on closing the gap between \bar{Y}_{pt} and \bar{E}_{bt} , and on narrowing it down between \bar{Y}_{pt} and \bar{Y}_t in the long run. While remaining focused on BNF, it does not lose sight of the overall problem of distributional equity.

The 'roll up' approach is in line with the Islamic norms of distributive justice. People below the poverty line \bar{E}_{pt} may be described as 'hard-core' poor or *fuqarā'* to use the Islamic categorisation. However, the opinion prevalent in some quarters that the system of *niṣāb* for collecting *zakāt* automatically fixes the poverty line for an Islamic economy requires examination. *Niṣāb* is defined not for the overall asset/income position of a person but with reference to individual items. Probably, this may create serious computational problems for fixing the line. Even if it does not, there is a further question. Islam requires that the BNF is guaranteed for all citizens of a country irrespective of their religion. If the number of non-Muslims living in a Muslim country is substantial, as in Malaysia, how can *niṣāb* be the poverty line in general? The problems must be looked into with greater care before pronouncing a final verdict on the issue.

Lastly, it is important to state that the choice of a 'relative' approach to BNF is a principle of preference, not of exclusion. All absolute measures are relative in some way and the reverse is also true. The two can even be used together, as we shall presently do, in a single measurement scheme, but they still remain distinct.

3.1 Basic Needs Gap Index

The idea of a basic needs gap index is quite simple. It measures the extent by which the mean consumption level of the poor which equals their mean income \bar{Y}_{pt} falls short of the mean national expenditure on basic needs (\bar{E}_{bt}). Thus,

$$\text{BNG} = \bar{E}_{bt} - \bar{Y}_{pt} \quad (1)$$

The difference when expressed as a ratio of \bar{E}_{bt} gives us the index,

$$\begin{aligned} \text{BNGI} &= [\bar{E}_{bt} - \bar{Y}_{pt}] / \bar{E}_{bt} \\ &= 1 - \bar{Y}_{pt} / \bar{E}_{bt} \end{aligned} \quad (2)$$

Since $\bar{Y}_{pt} < \bar{E}_{bt}$, the index measures on a 0 - 1 scale the shortfall in the BNF's financial requirement. The smaller the index, the better is the performance of the country and vice-versa.

However, one may have to face difficulties in the actual construction of the index. The information on \bar{Y}_{pt} and \bar{E}_{bt} , is not directly available. Their values have to be deduced from the data as one finds them in various sources. Naturally, some compromises have to be made. The main questions to start with are:

1. How to identify the poor, and estimate their mean income \bar{Y}_{pt} which is assumed to equal their expenditure on basic needs?
2. How to ascertain the mean national expenditure \bar{E}_{bt} on basic needs?

The *Human Development Report* (HDR) 1996 identifies the poor with reference to "an 'absolute' poverty line expressed in monetary terms: the income or expenditure level below which a minimum nutritionally adequate diet plus essential non-food requirements are not affordable. . . . Poverty estimates are based on data from an actual

household budget income or expenditure survey.”³⁰ The information is available only for 1990 in the form of headcount indices given separately for urban and rural populations of the countries covered. A combined index is obtained by using the urban-rural population proportions as weights. The procedure is explained in Appendix IV. The same proportions (λ s) have been used for the 1987, 1990 and 1994 BNGI construction due to lack of information for each year. The fixity of the proportions implies that the number of the poor grew at about the same rate yearly as did the population of the countries during the 1987-1994 period.³¹

Since we have the headcount index of people living in poverty, we could make use of it for interpolating, like the median in grouped data, to estimate the income share (α) going to a proportion (λ) of population (P) from the income distribution tables provided in the *World Development Reports* (WDRs). Thus, we have $\alpha P \bar{Y}_t / \lambda P$ as the mean income of the poor. In other words, we may write,

$$\bar{Y}_{pt} = \frac{\alpha}{\lambda} \bar{Y}_t$$

and putting $\alpha / \lambda = Pp$, we get,

$$\bar{Y}_{pt} = Pp \bar{Y}_t \quad (3)$$

For calculating the value of E_{bt} , the norm, we find for a given year; (i) the proportion (a) of aggregate consumption C to GNP or Y , i.e., $a = C/Y$ and (ii) the proportion (b) of expenditure on basic needs (B) to aggregate consumption C or $b = B/C$. It is easy to see that,

$$E_{bt} = ab \bar{Y}_t \quad (4)$$

We have taken C as being equal to general government

consumption plus private consumption but minus expenditure on defence.³² Likewise, for estimating B we have taken proportions of expenditure on food, clothing and shelter to household consumption as being the same for 1987, 1990 and 1994 due to information constraints but expenditure on health plus education is estimated for each of the years using some algebraic manipulations. Some proportions in the available data were expressed in terms of GDP while others were ratios of GNP. The former have been multiplied by GDP/GNP to make them consistent with the latter. The GDP/GNP ratio is greater than one in each of the years for countries included in our sample with some exceptions: net factor income outflows make their GNPs mostly smaller than the corresponding GDPs.³³ The conversion has, therefore, enlarged, in general, the ratios we use in this analysis. But that reveals the true picture. Appendix III throws ample light on the estimation process leading to the construction of the BNGI.

Combining equations (3) and (4) we obtain another expression for the basic needs gap index,

$$\text{BNGI} = [ab \bar{Y}_t - Pp \bar{Y}_t] / ab \bar{Y}_t$$

which reduces to,

$$\text{BNGI} = 1 - Pp/ab \tag{5}$$

In this form BNGI appears as a decreasing function of Pp , the slope of the line being $1/ab$. Notice that the index rests exclusively on proportions: no absolute values are involved. The implication is that BNF is not so much a function of income levels or rates of growth as of *how* and for *whom* growth takes place: it essentially is a question of resource allocation and income distribution. More than economic considerations, it is political will and choice that rules supreme in the matter.

4. Performance

Shortfalls in BNF are in some measure related to distributive inequities. In Muslim countries income distributions are, in general, less skewed towards the rich than in other free market economies of the developing world.³⁴ For this reason, BNF shortfalls too might be smaller in their case. But we may leave investigation on this point in abeyance for some other occasion.

Table 1: Macro Level Results

Aggregated variables	Compound Rates of Change Per Unit		
	1987-1990	1990-1994	1987-1994
1. GNP per capita	+ 0.079	+ 0.090	+ 0.085
2. Poor's share of GNP	+ 0.026	- 0.031	+ 0.015
3. Proportion of per capita GNP with the poor	+ 0.080	- 0.036	+ 0.012
4. Per capita National Expenditure on Basic Needs Fulfilment	+ 0.158	+ 0.051	+ 0.098
5. Shortfalls in BNF for the poor	- 0.085	+ 0.095	+ 0.017
6. BNGI	- 0.121	+ 0.021	- 0.038

Here we may start with an interesting, albeit controversial, proposition in the mainstream economics literature: higher per capita

GNP levels are in general associated with larger income disparities until an economy reaches full development, but thereafter the relationship is reversed.³⁵ Studies in this area mostly correlate income levels and inequality indices in a static frame relying, as they do, on cross sectional data. In real dynamic situations it is probably no less important to know as to how the rate of income growth is related to income disparities irrespective of income levels. Our study focuses on this aspect of the issue.

The GNP per capita for the sample countries grew on the whole at 8.5% per annum during 1987-1994. However, 1990 marks a clear watershed. The GNP growth has been distinctly slower (7.9%) for the earlier years as compared with the later ones (9.0%). For the first period (1987-1990), the proportion of the poor's share in the GNP, both aggregate and per capita, rose handsomely. And even as the mean national expenditures on basic needs, serving as our norm, rose at a high rate of 15.8% per year, the shortfall in the expenditure (income) of the poor on these needs declined; the BNGI fell at 12.1% a year. However, these trends reversed as growth spurted after 1990. The proportion of the poor's share in the aggregate as well as per capita GNP took a nose dive. Consequently, the BNGI climbed up at the rate of 2.1% per year. Thus, the period of slower growth is found to be associated with improvements in the BNF performance and distribution of incomes, while in the faster growth era destitution increased, distribution deteriorated and fulfilment of basic needs suffered in relative terms.

At the micro-level, one is not able to discern for the period as a whole any clear relationship patterns between relevant variables presented in Table 2. Neither are there any firm trends in them visible over time, except the expected fall in the national expenditures on basic needs as a ratio of the expanding GNPs. We find no significant

correlation between the BNGIs and corresponding income levels or their growth rates. This fortifies the postulate, stated earlier, that BNF is primarily an issue of distribution, not of growth.

Table 2: Micro Level Results

Countries	National Expenditure on Basic Needs as Proportion of GNP (<i>ab</i>)			Proportion of Per Capita GNP with People in Poverty (<i>Pp</i>)			Basic Needs Gap Index (BNGI) ($1-Pp/ab$)		
	1987	1990	1994	1987	1990	1994	1987	1990	1994
1. Bangladesh	0.91	0.79	0.77	0.37	0.48	0.49	0.598	0.392	0.361
2. Egypt	0.53	0.72	0.70	0.27	0.33	0.34	0.492	0.542	0.514
3. Indonesia	0.41	0.43	0.46	0.33	0.38	0.39	0.196	0.116	0.152
4. Malaysia	0.30	0.29	0.30	0.23	0.23	0.22	0.232	0.178	0.276
5. Morocco	0.76	0.54	0.55	0.38	0.29	0.29	0.496	0.463	0.472
6. Pakistan	0.53	0.41	0.41	0.31	0.32	0.32	0.415	0.219	0.219
7. Turkey	0.75	0.52	0.49	0.17	0.29	0.29	0.766	0.462	0.428
Weighted Mean	0.56	0.49	0.46	0.23	0.29	0.26	0.588	0.408	0.434

However, the period of the eighties was a turbulent one for the world from the viewpoint of economic fundamentals – many important variables lurched back and forth over the years. Thus, if we leave out the 1987-1990 segment of our study and concentrate on the later period (1990-1994) when things were again on their normal

course, a few interesting results are discernible also at the micro-level in the area of basic needs fulfilment. Table 3 reveals that the mean income of the poor (\bar{Y}_{pt}) rose with growth in the mean national income (\bar{Y}_t) in all cases. Indonesia, Malaysia, and Turkey being the fast movers with Bangladesh and Pakistan coming in last. However, \bar{Y}_t grew at a faster rate than did \bar{Y}_{pt} in the case of Indonesia, Malaysia, and Morocco. The reverse is true for Bangladesh and Egypt, while for Pakistan and Turkey the two rates almost evened up. The relative changes in \bar{Y}_t and \bar{Y}_{pt} over the period naturally had their impact on the state of BNF in these countries. The BNGI declined moderately for Turkey, Egypt, and Bangladesh while remaining unchanged for Pakistan. In contrast, the index climbed up for the remaining three countries. Significantly, even though the *level* of BNGI remained the lowest for the higher income and growth countries – Indonesia and Malaysia – both registered deterioration in BNF performance, the shortfall being wider in the latter case. What lies behind these results, especially the inter-country differences?

Table 3: Annual Compound Rates of Growth Per Unit (1990-1994)

Countries	GNP Per Capita \bar{Y}	Per Capita Income of Poor \bar{Y}_{pt}	Basic Needs Gap Index (BNGI)
Bangladesh	0.012	0.017	-0.019
Egypt	0.047	0.051	-0.014
Indonesia	0.115	0.114	0.009
Malaysia	0.107	0.095	0.117
Morocco	0.047	0.048	0.005
Pakistan	0.031	0.031	0.001
Turkey	0.113	0.113	-0.011

Notes: Calculations are based on data of Appendix I. The annual rate of change per unit r for any variable V is estimated by using the following formula: $V_{1994} = V_{1990} (1+r)^4$. Minor discrepancies arise due to approximations.

Providing precise answers to such questions is hazardous. For one thing, we had no option but to rely on information contained in the UN publications for our study. The available data was obviously not tailored to our requirements in terms of definitions and coverage. In particular, the information about income distribution, and on the proportions of people living in poverty was scanty and left much to be desired. Several adjustments had to be made. These are apparent from the detailed Appendices provided to explain our estimation processes. Their column headings, including symbolic expressions, read with 'Technical notes' in the relevant reports throw ample light on the computational limitations of our estimates. The adjustments have obviously detracted from the accuracy of our results in some measure but do not render them entirely barren. The exercise brings to light certain facts which are both interesting and explicable.

Table 4 records the two factors that impact, among others, the BNF position of the sample countries, albeit in opposite direction: the

Table 4: Net Workers' Remittances from Abroad and Defence Expenditure as Percentage of GNP

Countries	Remittances ¹		Defense Expenditure ²	
	1990	1994	1990	1994
Bangladesh	0.87	3.89	1.4	1.8
Egypt	8.64	12.37	3.5	5.6
Indonesia	-	0.27	1.6	1.3
Malaysia	-	-	3.1	3.4
Morocco	4.16	7.21	4.5	4.1
Pakistan	4.16	2.39	7.8	8.0
Turkey	2.67	1.70	3.9	3.2
Weighted Mean	2.16	2.33	3.45	3.35

- Notes: 1. Figures for Net Workers' remittances in WDR 1996 T.16 have been divided by corresponding GNP = $\bar{Y}P$ figures in Appendix I.
 2. Defence Expenditure as percent of GDP in column 4 of Appendix III has been divided by relevant GNP/GDP ratios given in the same Appendix.

remittances of their workers from abroad and their expenditures on defence. Bulk of the remittances go to boost the living standards of nationals at home on the lower rungs of income, having a mitigating effect on the BNGI. Expenditure on defence diverts resources away from civil consumption and detracts from the BNF, thus pushing up the index. Among the slow movers, Bangladesh, apart from the ameliorating impact of the pro-poor policies of the *grameen* banks network, seems to have benefited on the BNF from an acceleration in remittances and low levels of defence expenditure though it crept up slightly.

In Pakistan where agricultural structure largely remains feudalistic in character and military expenditure is high and rising, remittances have probably been a redeeming feature in an even larger measure. Military expenditure has also been high in Egypt, but remittances have been the highest in the group and rose sharply in 1994, thus more than compensating for the rise in the former. Hence the BNGI declined. The same is true for Morocco, but with a difference. Here, the rise in remittances could not overcome the impact of military spending, and the BNGI rose, albeit marginally. For Turkey, per capita income and its rates of growth have both been high but so has also been the defence expenditure. However, a large part of the latter is met by foreign aid. Thus despite a fall in remittances, the impact on BNF has not been adverse.

More interesting are the cases of Indonesia and Malaysia where remittances hardly play any role and defence expenditures have been on the lower side. Both are fast movers, but unlike Turkey, BNF deteriorated in both cases during 1990-94, with BNGI rising even at a faster rate in Malaysia. That Malaysia's per capita income is four times that of Indonesia does not matter so long as both remain on the left hand side of the inverted-U hump. Rather, their relative positions

concerning income inequalities are in line with the hypothesis. But we need not be side-tracked by this. Our concern is why faster growth in these economies tends to push up the BNIGI, a manifestation of aggravating (relative) poverty. A full scale discussion of the issue is not possible. However, a few observations may be in order. According to the WDR 1996 T. 5, the Gini index for Indonesia was 31.7 for 1993 while it stood at 48.4 for Malaysia in 1989. Again, the ratio of the highest to the lowest 20% of income was 4.7 and 11.7 respectively for them in the same years of survey. If these estimates are correct, one can assume that the two countries started in 1990 with quite different income inequality scenarios: the reporting time interval can hardly account for the difference. Our BNIGI estimates show that the divergence continued in 1994. Probably, the gap widened because of faster growth in Malaysia. As growth picks up pace, inequalities tend to rise because of increasing levels of profits and rent-fed accumulation, while wage rates are held down. Also, there is a shift in the centre of activity from the 'more equal' to the 'less equal' sectors, i.e., from agriculture to industry. It may be noted that compared to Indonesia, this shift has been sharper over the 1990-94 period in Malaysia when measured by the share of agriculture in the GNP and employment. Urban bias in public policies tends to aggravate the situation further.

Thus, the micro-level analysis restricted to 1990-94, seems to support our macro conclusions. It seems to us that people tend to remain less unequal in poverty than in affluence in the Third World countries. The inverted-U hypothesis may still be valid in a static cross-sectional mould but in a dynamic fast development scenario it seems to hold little water. From an Islamic perspective, there is perhaps a case for slowing down the pace of development if that alone can better carry along the weaker sections of the community.

5. Summary and Concluding Remarks

The euphoria raised during 1980s by the BNF approach to development took little time to ebb as the sort of shakeup it demanded in the structure of developing economies could rarely find favour with policy makers for reasons both internal and external. Development strategies remained in essence, geared to GNP expansion, a priority which the BNF was, and still is, supposed to subjugate. Whether such subjugation did take place, and if so, to what extent, may or may not be of interest to non-Muslims. However, since the BNF is a *Shari'ah* requirement, the performance of Muslim countries in the matter needs constant vigil.

For this purpose we have selected Bangladesh, Egypt, Indonesia, Malaysia, Morocco, Pakistan, and Turkey. These countries are well spread across the globe and are all members (except Morocco) of the recently formed D-8 Muslim grouping. The study has in a comparative static mould, focused on three time points: 1987, 1990 and 1994. We have preferred a 'relative' view of the BNF to its 'absolute' version, for the dichotomy between them is purely arbitrary. The line of demarcation to identify the poor from the nonpoor that we have adopted is the same as that used in the *Human Development Reports*. The quintile data on income distributions is used to interpolate the poor's share in the GNP. Assuming that they spend their entire income on BNF, the shortfall is measured from a norm: the mean national expenditure on basic needs. The upward movement of the norm with rising GNP must be followed by a faster rise in the per capita income of the poor as evidence of the effectiveness of the BNF policies in a 'roll up' approach: the basic needs gap index (BNGI) measuring the shortfalls must decline.

A comparison of the BNGI at three time points shows: (i) there is no correlation between the BNGI and the level or the growth rates of the GNP per capita; BNF is essentially a function of income

distribution, (ii) during the period (1987-90) of relatively slower rates of GNP expansion, the BNGI generally declined – in some cases quite sharply – showing a laudable BNF performance of the sample countries, (iii) the trend reversed during 1990-94, i.e., during the faster growth era, the BNGI tended to rise in general, the rate being quite high in some cases, and (iv) the foregoing results seem to defy the celebrated inverted-U hypothesis with reference to the *pace* of expansion of incomes irrespective of their *levels*. If there is a positive correlation between BNF performance and better income distributions, the record of the Muslim countries in the matter need not perhaps be comparatively dismal; for they are found to have, in general, less distributive inequality than others. But the presumption needs further scrutiny.

The successful designing and implementation of a BNF programme requires some bold policy decisions concerning education and training of the masses, arrangements for minimum health care, and affordable housing, provision of finance to small producers, empowerment of women, provision of infrastructural facilities in depressed areas, to name a few. Development has to be taken to where the poor live and efforts have to be made for what Sen calls 'capability improvement' of the deprived. If it is difficult to relocate investment, new projects may target these objectives. Islamic institutions, NGOs, and the state all have to play their roles. And it is results that matter, not words.

Finally, it is well to state that no Muslim country has so far designed a concrete BNF policy, and made it the fulcrum of its development planning. As such, the contribution of this paper lies primarily in conceptual clarifications, and the measurement design it provides. It is more correct to say that the BNGI here highlights the *position* rather than the *performance* of the sample countries with reference to BNF.

Endnotes

1. For elaboration of the limitations of GNP in the matter see Box 2.5 "GNP-navigating with a faulty instrument" of the *Human Development Report* (HDR, 1996), p. 57.
2. The GNP per capita of the developing countries grew at an average rate of 3.4% per annum during 1950-75, or at 3.5% if China were to be excluded. This rate was faster than that of either the developed or developing nations' growth rate for any comparative period prior to 1950 (Meier 1986, p. 45).
3. The global growth in income has been spread very unevenly and the inequality has been increasing within and among nations. For details, see HDR (1996), p.13.
4. See bibliography in Paul Streeten *et. al.* which records a slightly less than a hundred titles on the subject up to 1980.
5. Basic Needs Approach (BNA) emphasizes "poverty minimizing growth, its strategy of direct attack on poverty has better potential for LDCs' development and fulfilment of their populations' basic needs than the trickle down mechanism of the Growth Approach," (Farooq: abstract). Nevertheless, while the benefits derived from the operation of BNF policies are not to be discounted, in the long term the success of the approach may inevitably require an improvement in the rate of economic growth (Kumar: abstract).
6. For example, index of the Fourth Edition (1986) of Meier's work lists basic needs for pp. 26-30, 48-9, 114-5 and 568, but the entry no longer appears in the index to the Sixth Edition (1995).
7. See Hifz-ur-Rahman who provided one of the earliest elaborations on the point in Islamic economics primarily based on quotations from the Qur'ān pp. 40-8.
8. See Articles 28-29 of the Iranian constitution and Part III of the Green Book.
9. The distinction between the biological (objective) and psychological (subjective) needs is difficult to make and may, in many cases, look arbitrary.
10. See Oser and Bruce, p. 74 where they quote Adam Smith on wages.

11. For a brief but compact account of the reasons for the rise and fall of the Basic Needs Approach to development, see HDR (1996), pp. 47-9.
12. See for example, *World Development Report* (WDR, 1990), and HDR (1996).
13. The point has been raised, for example, both by Ahmad and Mannan. While the latter deals only with material poverty, the former includes the spiritual poverty in the basket but does not suggest its objective dimensions or the concrete policy measures to reduce it, save some general remarks.
14. A tradition says: "Sometimes poverty turns into disbelief," (al-Sayuti Jami-al-Saghar). The Prophet (peace be upon him) is reported to have sought God's protection from poverty (Abū Dawūd).
15. Evidently, an Islamic economy must have the environment where believers really heed the Qur'ānic advice "But seek with the wealth which Allah has bestowed on thee, the Home of the hereafter and forget not thy portion of this world," (Qur'ān 28:77). Thus, Islam seeks to convert the material ambitions of people into the means for attaining spiritual heights.
16. One finds a comprehensive and modern categorisation of the poor in Erfan Shafey: To the traditional poor or the landless, the old, aged, sick, orphans, divorcees, widows, and migrants, one ought to perhaps add contemporary types – victims of unemployment, runaway inflation, relative geographical isolation, and of random calamities such as fire, floods, and etc. (p. 66). But the hard-core of the category are the insufficiently paid 'working poor', whose number runs into millions. On this see Streeten, p. 13 and WDR (1995), Ch. 6.
17. These institutions and agencies are well-defined in Islamic economics. Siddiqi, Mannan, Ahmad, Rehman, and Hasan refer to them and explain their respective roles. These are: the individual himself, his relatives, the neighbourhood, the community, certain institutions and the state in that order. In today's circumstances, the *guarantee* of BNF can be provided only by the state.
18. This reversal perhaps was first advocated in recent years by Mahboob-ul-Haque: "We were taught to take care of our GNP because it would take care

of poverty. Let us reverse this, and take care of poverty because it will take care of GNP. In other words, let us worry about the contents of GNP even more than its rate of increase," (p. 6). This shift in emphasis has been the central theme of the *Human Development Reports* of which he has been the main author until recently.

19. For the drawing of such a line – rather two, the low and high – standardized for international comparisons, see WDR (1990). The relevant pages of the report are reproduced in Meier (1995), pp. 25-8. In fact, the concept was first adopted in some Indian studies towards the late sixties. (See for example, Dandekar, V.M. and Nilakantha R., 1970). For the basic needs related concept of absolute poverty line see also Meier (1986), p. 43.

20. Paul Streeten *et. al.* (pp. 17-8).

21. See Naqvi, p. 344.

22. See Mannan (p. 308). He not only believes that a perception of relative poverty is unwelcome to the *Shari'ah*, but also insists: "*Shari'ah* demands that we must attack absolute poverty rather than relative poverty as a matter of priority." To this, Naqvi's rider is interesting: "Consistency demands that one should deny any consideration to relative poverty, if it is not justified. The language employed by the author gives the impression that higher priority is to be given to the removal of absolute poverty and thus by implication relative poverty also deserves attention," (p. 345). The *faux pas* in Mannan deepens when he further observes later in his argument that the "guarantee of a minimum level of living is both conditional and relative at the same time." In support of the *relative* nature of the guarantee he quotes two traditions (from Bukhari) but fails to see that the reference base for his "relative concept of minimum living" is not the same in the two cases: in the first tradition it is measured by the 'prevalent customs' while in the second by the 'consumption level of the employer'. Also, one may presumably ask: Why should a perception of relative poverty only prompt the rich to exploit the poor? Why could it not lead the poor to rise in revolt against the rich or force the state to take corrective measures? History tells us that people may not always starve in silence.

23. See Hasan (1988), p. 30 n. 11.

24. See WDR (1990) in Meier (1995), p. 26.
25. "It is not at all certain just how many people in the world are malnourished. In the late 1960s and early 1970s (for example) the FAO estimated that approximately 1.5 billion people were undernourished, but in 1974 the FAO estimated that around 1970 less than half a billion people were suffering from inadequate diets . . . Unfortunately, the greatly reduced estimate of the number does not reflect improved diets – merely changed definitions . . . In 1977, the FAO once again estimated the number of undernourished in the LDCs at somewhere over 400 million people . . . The calculations were based on a more conservative estimate of nutritional requirements than in 1974," (Murdoch, pp. 95-6).
26. Paul Streeten observes: ". . . a nutritionally adequate diet is difficult to define since caloric needs vary widely with climate, body weight, activity, height, age and other factors, and even for the same conditions between persons and for the same person in the same conditions from day to day," (p. 74). In case of their earlier estimates of the malnourished, the FAO maintained that the protein deficiency was a distinct problem affecting hundreds of millions who had sufficient calories. In 1974, however, it concluded that protein deficiency is not a separate additional problem, except in regions where the main staple is cassava or some other starchy crop (Murdoch, p. 95).
27. The 1977 estimate of FAO quoted above is based on a caloric requirement that takes no account of the energy needed for activities such as farming, and Serimshaw and Young have the evidence that even when allowance is made for such activities, the FAO requirements may still be understated (Murdock, pp. 96-7).
28. WDR (1990), p. 26.
29. Meier (1995), p. 28.
30. HDR (1996), pp. 222-3.
31. See WDR (1996), p. 28 on the assumption.
32. Even when defence expenditures were excluded from general government consumption, the GNP of some countries fell at times short of aggregate consumption. Notice, for example, the values of $a = C/Y$ for Bangladesh,

Morocco, and Turkey for 1987 in Appendix II.

33. See explanatory note 4 to Appendix III. While the ratio behaviour over the period varies in magnitude and direction from country to country, it is to be noted that the average for the group has steadily declined 'though there still is a net outflow of factor incomes, mostly because of interest and dividend payments or insurance/transportation services'. Workers' remittances (net) are mostly positive.

34. The observation is based on the derivations given below for the Muslim and non-Muslim countries.

	Number of Countries	Mean Population	Weighted Mean of Gini Indices
1. Muslim	9	76.8 million	33.2%
2. Non-Muslim			
a. Including India	20	79.6 million	44.1%
b. Excluding India	19	35.7 million	50.6%

Population figures have been used as weights and data in WDR 1996 T.4 and T.5 have been combined to obtain the weighted means. The difference between the Muslim and non-Muslim countries is quite marked. It is even larger if simple mean were used. The difference is accounted for presumably by the cultural legacy of Islam whose undercurrent is a sense of brotherhood and social equality. This trait of the legacy could not be entirely obliterated even by the centuries of colonial rule over Muslim lands!

35. This is the famous inverted-U hypothesis that originated in Kuznets and has since been an issue of debate among the economists. See Meier (1995), pp. 20-2 for a brief literature review.

References

Ahmad, Ziauddin. "Islam and Fulfilment of Basic Needs." *Islamic Order*

- 9, no. 2 (1987).
- Berry, Albert. "The Social Change of the New Economic Era in Latin America." *FOCAL/CIS Discussion Paper*, Toronto: Centre for International Studies, 1995.
- Burki, Shahid Javed. "Sectoral Priorities for Meeting Basic Need." *Financial Development* 17, no. 1 (1990).
- Curry, Robert L. Jr. "The Basic Needs Strategy, the Congressional Mandate and US Foreign Aid Policy." *Journal of Economic Issues* 23, no. 4 (1984).
- Dandekar, V.M. and Nilkantha R. *Poverty in India*. New Delhi: Ford Foundation, 1970.
- . "Is There Trade-off Between Growth and Basic Needs?" *Finance and Development* 17, no. 2 (1980).
- Dell, Sidney. Ed. "Policies for Development." *Essays in Honour of Gumanj Conea*. Basingstoke: Macmillan, 1988.
- Dixon, William J. "Progress in Provision of Basic Human Needs: Latin America (1960-80)." *Journal of Development Areas* 21, no. 2 (1987).
- Farooq, Muhammad Omar. *Basic Needs, Rural Financial Markets, and Appropriate Technology: Towards a Solution of Analytical and Policy Issues (Bangladesh)*. Ph.D dissertation, The University of Tennessee, 1988.
- Haque, Mahboob-ul. "Employment and Income Distribution in the 1970s: A New Perspective." *Development Digest* (October, 1971).
- Hasan, Zubair. "Distributive Equity in Islam." In Munawar Iqbal. Ed. *Distributive Justice and Need Fulfilment in an Islamic Economy*. Leicester, London: The Islamic Foundation, 1988.
- and Arif, Muhammad. "The Basic Needs Fulfilment Guarantee in Islam and a Measure of Its Financial Dimension in Selected Muslim Countries." Paper presented at the *Third International Conference on Islamic Economics*, Kuala Lumpur, Malaysia, 1992.
- Hosni, Djehane A. and al-Qudsi, Sulayman S. "Basic Needs and the

Manpower Dilemma of Kuwait." *International Journal of Manpower* 7, no. 4 (1986).

Iqbal, Munnawar. Ed. *Distributive Justice and Need Fulfilment in an Islamic Economy*. Leicester: The Islamic Foundation, 1988.

Kumar, Bhaskar Gopala Krishna. *Poverty and Public Policy: Government Intervention and Levels of Living in Kerala, India*. D.Phil Thesis, University of Oxford, 1987.

Malaysia, Government of. *Sixth Malaysia Plan 1991-1995*, Kuala Lumpur: Government Printers, 1991.

Mannan, M.A. "The Economics of Poverty in Islam with Special Reference to Muslim Countries." In Munawar Iqbal. Ed. *Distributive Justice and Need Fulfilment in an Islamic Economy*. Leicester, London: The Islamic Foundation, 1988.

Meier, Gerald M. Ed. *Leading Issues in Economic Development*. Fourth Edition. Oxford, Delhi, 1986.

———. *Leading Issues in Economic Development*. Sixth Edition. Oxford, New York, 1995.

Misiolek, Walter S. and Elder, Harold W. "Cost-Effective Redistribution: Implications of a Basic Needs Approach to Public Assistance." *Public Finance Quarterly* 15, no.1 (1987).

Murdock, William W. *The Poverty of Nations: The Political Economy of Hunger and Population*. Baltimore: Johns Hopkin University Press, 1980.

Naqvi K.A. "Comments on Mannan." In Munawar Iqbal. Ed. *Distributive Justice and Need Fulfilment in an Islamic Economy*. Leicester, London: The Islamic Foundation, 1988.

Pant Pitambar. "Perspective of Development in India 1960-61 to 1975-76: Implications of Planning for a Minimum Level of Living." In T.N. Srinivasan and P.K. Bardhan. Eds. *Poverty and Income Distribution in India*. Calcutta Statistical Publishing Society, 1974.

Oser J. and Bruce S. *The Evolution of Economic Thought*. New York:

- Harcourt Brace Jovanovich, 1990.
- Rahman, Hifz-ur. *Islam-Ka-Iqtisadi Nizam*. (Urdu) Sixth Edition. Delhi: Nadwatul Mussanifin, 1969.
- Sen, A.K. "Development as Capability Expansion." *Journal of Development Planning*, no. 19 (1989).
- Shafey, Erfan. "Comments on Zubair Hasan." In Munawar Iqbal. Ed. *Distributive Justice and Need Fulfilment in an Islamic Economy*. Leicester, London: The Islamic Foundation, 1988.
- Shapiro, Aharon. "The Treatment of Poverty in the Talmud." *International Journal of Social Economics* 13, no. 6 (1986).
- Siddiqi, M. N. "Guarantee of a Minimum Level of Living in Islamic State." In Munawar Iqbal. Ed. *Distributive Justice and Need Fulfilment in an Islamic Economy*. Leicester, London: The Islamic Foundation, 1988.
- Srinivasan, T. N. "Development Poverty and Basic Human Needs: Some Issues." *Food Research Institute Studies* 16 no. 2 (1977).
- Streeten, Paul et. al. *First Things First: Meeting Basic Needs in the Developing Countries*. New York: Oxford University Press, 1981.
- Tabatabai, Hamid. "Poverty and Inequality in Developing Countries: Review of Evidence." In Gerry Rogers and Rolph Vander Hoeven. Eds. *The Poverty Agenda: Trends and Policy Options*. Geneva: ILO, 1995.
- Todaro, M. P. *Economic Development in the Third World*. New York: Longman, 1985.
- UNDP. *Human Development Report*. 1994, 1995 and 1996.
World Development Report. 1989, 1990, 1992, 1995 and 1996.

APPENDIX I

Comparative Data and Measurement of Basic Needs Fulfilment in Selected Muslim Countries for the Years 1990 and 1994

Countries	Population (million)		GNP per capita (US\$)		GNP US\$ (billion)		Consumption as % of GNP (Private + Government - Military) $a = C / Y$		Expenditure on Basic Needs as % of Consumption $b = B / C$		Expenditure on Basic Needs as % of GNP ab		Proportion of Population in Poverty (%) λ
	1990	1994	1990	1994	1990	1994	1990	1994	1990	1994	1990	1994	1990 1994
1. Bangladesh	107	118	210	220	22.5	26.0	98	90	81	85	79	77	51.8
2. Egypt	52	57	600	720	31.2	41.0	98	93	73	75	72	70	34.0
3. Indonesia	178	190	570	880	101.5	167.2	65	71	66	65	43	46	17.3
4. Malaysia	18	20	2320	3480	41.8	69.6	65	60	43	50	28	30	16.6
5. Morocco	25	26	950	1140	23.8	29.6	80	84	67	65	54	55	30.1
6. Pakistan	112	126	380	430	42.6	60.5	68	65	60	63	41	41	27.3
7. Turkey	56	61	1630	2500	91.3	152.5	80	74	65	66	52	49	21.8
Mean	78	85	647	914	50.7	78.0	76	70	65	66	49	46	28.5
Annual Change per unit	0.0217		0.090		0.1136		-0.020		0.0038		-0.0157		0.00

Countries	Proportion of GNP with the Proportion of Population in Poverty (%) α		Proportion of per capita GNP with People in Poverty $Pp = \alpha/\lambda$		Per capita Expenditure on Basic Needs (US\$) $ab\bar{Y}$		Per capita GNP of People in Poverty (US\$) $Pp\bar{Y}$		Per capita Basic Needs Gap for People in Poverty (US\$) $ab\bar{Y}, Pp\bar{Y}$		Basic Needs Gap Index (BNGI) $1-Pp/ab$	
	1990	1994	1990	1994	1990	1994	1990	1994	1990	1994	1990	1994
1. Bangladesh	25.0	25.1	0.48	0.49	166	169	101	108	65	61	0.392	0.361
2. Egypt	11.4	11.2	0.33	0.34	432	504	198	245	234	259	0.542	0.514
3. Indonesia	6.6	8.7	0.38	0.39	245	405	217	343	28	62	0.116	0.152
4. Malaysia	3.8	3.7	0.23	0.22	650	1044	534	766	116	288	0.178	0.276
5. Morocco	8.6	8.6	0.29	0.29	513	627	276	331	237	296	0.463	0.472
6. Pakistan	10.0	10.0	0.32	0.32	156	176	122	138	34	38	0.219	0.219
7. Turkey	6.3	6.3	0.28	0.28	848	1225	456	700	392	525	0.462	0.428
Mean	8.2	7.2	0.29	0.26	318	421	185	230	130	183	0.408	0.434
Annual Change per unit	-0.032		-0.0364		0.0727		0.056		0.095		0.0209	

Notes:

- Figures on population and per capita income are from the *World Development Report* (WDR, 1992) Table T. 27 and WDR (1996) T.4 and T.1, respectively.
- To obtain consumption as % of GNP, data in WDR (1992) T.9 and WDR (1996) T.13 have been adjusted for Military Expenditure. See Appendix III for details on the calculation of Expenditure on Basic Needs as % of consumption and of consumption as % of GNP.
- The procedure of obtaining the proportion of population in poverty (λ) and its share in GNP (α) is outlined in Appendix IV.
- Annual change per unit has been calculated on compound interest principle.
- Some discrepancies in results arise due to approximations.
- Means are all weighted except for P and $P\bar{Y}$

APPENDIX II

Summary Data and Derivations for 1987

Countries	P (million)	\bar{Y} (US\$)	$P\bar{Y}$ (billion US\$)	GDP/GNP	$a = B/C$ (%)	$b = B/C$ (%)	ab (%)	λ (%)	α (%)	Pp (per unit)	$ab\bar{Y}$ (US\$)	$Pp\bar{Y}$ (US\$)	$ab\bar{Y} - Pp\bar{Y}$ (US\$)	BNGI
1. Bangladesh	106.0	106	17.0	1.165	111.5	82	91.3	51.8	18.9	0.365	97	39	58	0.598
2. Egypt	50.1	680	34.1	0.990	81.2	66	53.3	34.0	9.2	0.271	362	184	178	0.492
3. Indonesia	171.4	450	77.1	0.909	62.4	66	41.0	17.3	5.7	0.329	185	148	37	0.196
4. Malaysia	16.5	1810	29.9	1.117	65.5	46	30.0	16.7	3.6	0.230	543	416	127	0.232
5. Morocco	23.3	610	14.2	1.570	129.9	58	75.8	30.1	11.5	0.382	462	233	229	0.496
6. Pakistan	102.5	350	35.9	0.822	67.7	79	53.2	27.3	8.5	0.311	186	109	77	0.415
7. Turkey	56.6	1210	63.6	1.381	102.3	73	74.7	21.8	3.5	0.175	904	212	692	0.766
Mean	75.1	516.2	38.8	1.092	81.7	68.42	56.0	28.5	6.5	0.230	289	119	170	0.588

Notes:

1. The sources of data are the *World Development Report 1989* and Appendix III.
2. Symbol explanations are the same as in Appendix I.
3. The bottom row gives weighted means except for P and $P\bar{Y}$.

APPENDIX III

Calculation of Expenditure on Basic Needs as a Percentage of Consumption Expenditure, 1990/1994

Countries	Expenditure on Food, Clothes and Shelter as % of Household Consumption	Household Consumption as % of Gross Domestic Product (GDP)	Expenditure on Food, Clothes and Shelter as % of GDP	Military Expenditure as % of GDP	Military Expenditure as % of Combined Expenditure on Health and Education	Expenditure on Health and Education as % of GDP	Expenditure on Basic Needs as % of GDP	General Government Consumption as % of GDP	General Government Consumption minus Military Expenditure as % of GDP	Consumption (Govt. + Household - Military) as % of GDP	Consumption Expenditure as % of GNP (C/GDP x GDP/ GNP)	Expenditure on Basic Needs as % of Consumption
	FCS/Ch	Ch/GDP	FCS/GDP	M/GDP	M/HE	HE/GDP	B/GDP	G/GDP	(G-M)/GDP	C/GDP	a = C/Y	b = B/C
	1	2	3 (1x2)	4	5	6 (4+5)	7 (3+6)	8	9 (8-4)	10 (2+9)	11	12 (7+10)
	1980-85	1990 1994	1990 1994	1990 1994	1990 1994	1990-94	1990 1994	1990 1994	1990 1994	1990 1994	1990 1994	1990 1994
1. Bangladesh	84	89 85	75 71	1.4 1.8	41	3.4 4.4	78.4 75.4	9 6	7.6 4.2	96.6 89.2	98 90	81 85
2. Egypt	69	80 81	55 56	4.0 5.9	52	7.7 11.3	62.7 67.3	10 14	6.0 8.1	86.0 89.1	98 93	73 75
3. Indonesia	68	54 61	37 41	1.7 1.4	49	3.5 3.0	40.5 44.0	9 8	7.3 6.6	61.3 67.6	65 71	66 65
4. Malaysia	36	54 53	19 19	3.1 3.9	38	8.2 10.3	27.2 29.3	13 10	9.9 6.1	63.9 59.1	65 60	43 50
5. Morocco	68	65 68	44 46	4.6 4.3	72	6.4 6.0	50.4 52.0	16 17	11.4 12.7	76.4 80.7	80 84	67 65
6. Pakistan	59	73 71	43 42	6.5 6.9	125	5.2 5.5	48.2 47.5	15 12	8.5 5.1	81.5 76.1	68 65	60 63
7. Turkey	68	68 67	46 46	4.0 3.2	87	4.6 3.7	50.6 49.7	14 11	10.0 7.8	78.0 74.8	80 74	65 66

Notes:

- Expenditure on food, clothing, and shelter is obtained from the WDR (1993), T.10 and is a fixed component in the basic needs % expenditure for 1990 and 1994.
- The proportion of expenditure on the remaining basic needs - health plus education is derived from data provided on Military Expenditure in HDR (1994), T.21 and HDR (1996), T.19.
- Figures for General Government Consumption and Private Consumption are taken from WDR (1992), T.9 and WDR (1996), T.13.
- Proportions to GDP in column 10 have been converted into proportions to GNP in column 11 by multiplying the former by the corresponding ratios of GDP to GNP as given below:

	Bangladesh	Egypt	Indonesia	Malaysia	Morocco	Pakistan	Turkey	Average
1987	1.165	0.990	0.909	1.117	1.570	0.822	1.381	1.092
1990	1.018	1.138	1.057	1.014	1.059	0.833	1.027	1.028
1994	1.010	1.046	1.044	1.014	1.041	0.860	0.989	0.967

APPENDIX IV

Estimation of Proportion of People in Poverty and Their Corresponding Share in Income

Countries	Percentage of Urban/Rural Population in Poverty		Urban/Rural Division of Population (%)		People in Poverty as % of Population		People in Poverty as % of Total Population λ	Limits of GNP (%) for % of Population in Poverty (Based on Relevant Quintile/Decile Values)		Estimated % of GNP with Corresponding % of People in Poverty α		
	1990		1993									
	Urban	Rural	Urban	Rural	Urban	Rural	1990/93		1990	1994	1990	1994
	U	R	U'	R'	UU'/100 (1)	RR'/100 (2)	(1)+(2)					
1. Bangladesh	56	51	16	84	8.96	42.84	51.80	22.9 - 26.6	22.9-26.6	25	25.1	
2. Egypt	34	34	47	53	15.98	18.02	34.00	8.7-12.5	8.7-12.3	11.4	11.2	
3. Indonesia	20	16	31	69	6.20	11.04	17.24	0.0-7.7	3.9-7.8*	6.6	6.7	
4. Malaysia	8	23	43	57	3.44	13.11	16.55	0.0-4.6	1.9-4.6*	3.8	3.7	
5. Morocco	28	32	48	52	13.44	16.64	30.08	6.6-10.5	6.6-10.5	8.6	8.6	
6. Pakistan	20	31	32	68	6.4	21.08	27.48	8.4-12.9	8.4-12.9	10.0	10.0	
7. Turkey	16	31	61	39	9.76	12.09	21.85	5.9-10.4	5.9-10.4	6.3	6.3	

Sources: WDR (1992), T. 30, WDR (1994), T.30, WDR (1996), T.5, and HDR (1996), T.8 and T.17. A few estimates are from unindicated sources.

Notes: * Class limits are consecutive deciles for 1994.

$\alpha = L_1 + [(L_2 - L_1)(\lambda - x)/a]$ where L_1 and L_2 are lower and upper class limits respectively, and $a = 20$ if limits are quintiles or $a = 10$ if limits are deciles. n is 40 for Bangladesh, 0 for Malaysia and Indonesia in 1990 and 10 for 1994. For all other cases, $n = 20$.