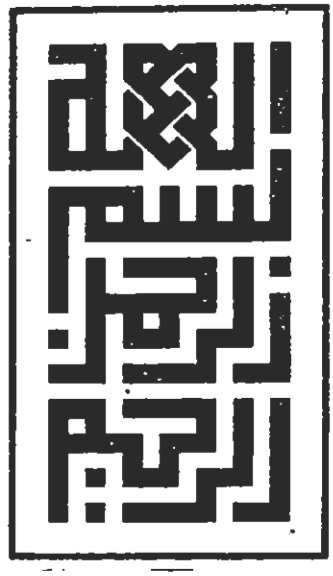

AN ANALYSIS OF PAKISTAN'S POVERTY PROBLEM AND ITS ALLEVIATION THROUGH INFAQ

BY

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TO

MY PARENTS,

MY BROTHERS,

MY WIFE,

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MY SONS,

ASIM AND HAMZA

ABSTRACT

The objective of this undertaking is to determine the incidence of poverty and to identify socioeconomic profiles of the poor in Pakistan. In addition to exploring the possibility of alleviation of poverty through the 'Infaq' an attempt has been made in this study to ascertain the prospects of bridging the poverty gap through the official 'zakat' and 'ushr' collections. The role of different characteristics, that determine poverty status of a household, has also been investigated in the present study.

The nutrition based poverty lines both in terms of expenditures and income were estimated using Household Income and Expenditure Survey 1987-88 micro data. For the purpose of determining poverty lines in terms of expenditures the relationship between daily calorie intake per adult equivalent and monthly total consumption expenditure per adult equivalent were estimated. The expenditure based poverty lines were converted into income based poverty lines by regressing the total expenditure per adult equivalent per month on income per adult equivalent per month.

Headcount (P_0), poverty gap (P_1) and Foster, Greer and Thorbecke (FGT) poverty measure (P_2), which are widely used in the recent research done on poverty, were utilised for estimating the incidence of poverty in the present study. The FGT measures are additively decomposable by households (population) sub-groups, as a result the aggregate poverty can be represented as an appropriately weighted sum of poverty levels in the component-sub-groups of households (population).

To ascertain the role of 'infaq', in alleviation of poverty the amount of 'infaq' income received by the households was deducted from their total income and the P_0, P_1 and P_2 indices were re-estimated. Thus the difference between both the results (with and without 'infaq') showed the impact of 'infaq' on poverty alleviation.

The Logit model was used in this study for evaluation of the role of different characteristics that determine poverty status of a household.

The incidence of poverty was estimated both at the population and the household levels. our findings are that the incidence of poverty is sensitive to the poverty line selected. The incidence of poverty in terms of persons is higher than that of households. This could be due to the fact that incidence of poverty is relatively higher among the larger households, which are likely to represent a larger proportion of the population.

Another finding of the study is that the incidence of poverty in terms of income poverty lines is higher than that estimated in terms of expenditure based poverty lines. Our estimates suggest that poor households are disproportionately located in the rural areas of pakistan. More than 85 percent of the total poor households are residing in the rural areas of Pakistan. Punjab contributes 72.71 percent of poor households, followed by Sind (12.75 percent) to all the poor households of the country. The share of NWFP in the poor households is 12.08 percent, while Baluchistan has the lowest share (2.45 percent). Malik's index to ascertain the locational concentration of the poor households was also estimated. These estimates suggest that the rural areas of Pakistan have the relatively higher proportion of the poor households than their share in the total population.

The decomposition of the poor households according to the socioeconomic characteristics of the heads of the households was also carried out in the study. Our findings in this regard are:

- The majority of the male headed poor households fall in the age group of 40 - 49, while the majority of female headed poor households fall in the age group of 30-39.
- Classification of the poor according to the marital status shows that about 95 percent of the male heads of the poor households are married and 70 percent of the female heads of the poor households are married. It implies that household headed by the married persons are more exposed to poverty risk.

- The proportion of poor households having highly educated heads is extremely low. Majority of the educated heads of the poor households falls in the primary or below matric category of education.
- Our results indicate that more than 90 percent of the male heads of the poor households fall in the working class category, while about 80 percent of the female heads of the poor households fall in the non-working class category.
- The occupational classification of the heads of the poor households shows that the majority of the male heads of the poor households are in the 'agricultural, animal husbandry and forestry', followed by 'production and related workers, transport equipment operators and labourers' categories.
- The proportion of female heads of the poor households belonging to the category of 'professional, clerical and related workers' is the highest (81.0 percent in over all Pakistan).
- The decomposition of the households according to the industrial activities suggests that most of the male heads of the poor households are engaged in the agriculture, forestry, hunting and fishing, followed by construction. While most of the female heads of the poor households fall in the category of activities not adequately defined.
- The breakdown of employment status of the heads shows that most of the male or female heads of the poor households are classified as self employed, and they are followed by the category of employees.
- The earning status of the households reveals that the proportion of the households with single earner is the highest in case of male headed households, while in case of female headed poor households, the majority falls in the category of no earner.
- The proportion of poor households is relatively high in case of large sized households. The highest proportion of the male headed poor households is found in case of households having 7 to 8 members and in case of female headed households, those having 5 to 6 members.

The Results of the Logit model show:

- that the households living in Punjab have the highest probability of being poor as compared to the other provinces;
- that as the educational level of the head of the household increases the probability of that household being poor decreases.
- that as 'Infaq' increases the probability of a household being poor declines.
- that the probability of a household being poor declines, when the number of earners in that household increases.
- that the probability of a household being poor increases with the increase in the size of the household.

The effects of 'Infaq, on poverty alleviation, in Pakistan, suggest that 'Infaq, could help in reducing poverty level in Pakistan in terms of head count (P_0) by 2.16 percent overall, 3.78 percent in urban areas and 2.06 percent in rural areas. The most important impact of 'infaq' is on the reduction in poverty gap (P_1) and severity of poverty index (P_2). The poverty gap was reduced by 4.16 percent in overall Pakistan under the impact of 'infaq'. The 'infaq' helped in decreasing the severity of poverty by 8.62 percent in overall Pakistan. We also estimated the funds required to bring the poverty gap to zero and explored the possibilities of filling this gap by the official zakat collections. Our findings are that the present zakat collections can fill the poverty gap completely of the extremely poor and partially that of the very poor. But in the present form it is not capable of eradicating total poverty. If zakat is collected to its full potential, it could not only result in complete eradication of poverty from the country but also can generate surplus funds.

CHAPTER 1

INTRODUCTION

Poverty is a wide spread global problem that afflicts particularly the third world countries. According to the World Development Report (1990), 1,116 million people of developing countries in 1985, were poor and 633 million were extremely poor[1]. Thus the extremely poor were 18 percent of the total population of the developing world, while the poor were 33 percent. Pakistan being a developing country has about 20 percent of its population living in poverty. In Pakistan, in 1950s and 1960s emphasis was on economic growth as a way to eradicate poverty. But the fruits of the economic growth did not reach the poor, because of the slow trickle down effect. Different policies were adopted in the past to alleviate poverty. Besides land reforms and special rural development programmes, a system of 'zakat' was also introduced in 1980 for this purpose.

The general picture that emerges from the previous studies on poverty (see chapter-3) is that although poverty is widespread in Pakistan, yet it is more prevalent in rural areas than in the urban ones. Poverty increased during the 1960s, but it has been declining ever since 1970. Change in agrarian structure during the 1960s contributed toward rural poverty. A respectable rate of economic growth and increase in foreign remittances can be mentioned among other factors responsible for the decline in poverty ever since 1970. The introduction of 'zakat' and 'ushr' system in 1980 also played its role in this regard. However, poverty still remains one of the most serious problems in the country.

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[1] In this report the poor were those, who had annual income below US $ 370. The extremely poor were those, who had annual income below US $ 270.

A number of studies such as Naseem (1973, 1977), Allaudin (1975), Mujahid (1978), Irfan and Amjad (1984), Kruijk and Leeuwan (1985), Cheema (1985), Malik, M.H. (1988), Akhtar (1988), Ercelawn (1988, 1989, 1990), Ahmad and Ludlow (1990), Havinga, et al. (1990), Malik, S.J. (1991, 1992) Zaidi (1992) and Zaidi and De.Vos (1993) have been made to analyse the phenomena of poverty (see chapter-3 for details). However, most of the existing literature on the subject relating to Pakistan is either limited in its scope or suffers from various methodological shortcomings. Specifically, one can identify the following shortcomings in the existing literature.

1. Most of the studies on poverty restrict themselves to measurement of poverty without providing socioeconomic profile of the poor. Such a profile is important for a proper direction and targeting of antipoverty programmes and policies. Moreover, such a profile of the poor can be used to identify the causes of poverty.

2. Some of these studies have focused on rural poverty and ignored the urban sector. Similarly very little analysis of the regional dimension of poverty is available.

3. Many of the studies arbitrarily set the poverty lines and thus ignore the effects of prices and consumer tastes across the regions. Only a few studies took into consideration the nutritional requirements of the people, and hence were able to take into account of the prices and actual consumption behaviour. These studies cover different time periods and use different methodologies. Therefore, poverty estimates are not comparable across the regions and over time. Further more, most of the studies on poverty in Pakistan are limited to estimating the head - count ratio, while a very limited number of studies have used the measures that take into account not only the incidence but also the intensity of poverty. Several studies used the grouped data, which give imprecise poverty line and thus bias the poverty estimates. Some used micro

alleviation through the system of 'Infaq' and to study the role of 'zakat' and 'ushr' collection in bridging the poverty gap using scientifically established measures.

5. Perhaps, the most neglected aspect in the previous studies is that they do not deal with the characteristics of households that determine poverty. Only Hussain (1992) and Zaidi and De. Vos (1993) have dealt with this aspect. But Zaidi based these households' characteristics on the arbitrarily chosen poverty lines, while Hussain used the updated poverty lines estimated by Malik, S.J. (1991). So there is also a need to develop a detailed socioeconomic profile based on the poverty lines after determining them with the help of actual data. Only then the characteristics of households that determine poverty can be identified.

Objectives of the Study

The main objective of the present study is to determine the extent of poverty and to identify a detailed socioeconomic profile of the poor. Additionally the possibility of poverty alleviation through the 'Infaq' is explored utilizing the latest available HIES 1987-88 micro data. The objectives of the study can be further broken down in the following way:

1. Estimating the poverty line.
2. Determining the extent of poverty at disaggregated levels.
3. Identifying a detailed socioeconomic profile of the poor.
4. Exploring the possibility of poverty alleviation through 'infaq'.
5. Exploring the possibility of bridging the poverty gap through 'zakat' and 'ushr' collection.
6. Establishing the characteristics of households that determine poverty.

For the measurement of poverty, a class of additively decomposable measures proposed by Foster, Greer and Thorbecke (FGT-1984) is utilized in the present study. The FGT measure

is additively decomposable by population sub-groups, as a result the aggregate poverty can be represented as an appropriately weighted sum of poverty levels in the component sub-groups of a population. This property facilitates the construction of poverty profiles that show the variation of poverty across sub groups of a population. The FGT class contains a number of other commonly used poverty measures as special cases. Additionally we have used the Logit econometrics Model to estimate the determinants of poverty in our study (see chapter - 4).

A Brief Plan of the Study

The thesis is organized as follows:

In Chapter-2 the perception of poverty is presented. We have discussed in this chapter the traditional as well as Islamic view on poverty.

Chapter-3 deals with the review of literature.

Chapter-4 discusses the methodology used in this study. In this connection the data sets that are used in the study, are also introduced.

Chapter-5 is concerned with the determination of poverty lines. These lines are estimated on the bases of the per adult equivalent expenditure and income of the households.

Chapter-6 deals with the numerical estimates of poverty and socioeconomic profile of the poor.

Chapter-7 deals with the concept of 'infaq'. Its aims and importance in the light of Qu'ran and Sunnah are brought out in this chapter. This chapter also deals with the empirical results related to the impact of 'infaq' on poverty. The possibility of bridging the poverty gap with the 'zakat' and 'ushr' collections is also discussed in the same chapter.

Chapter-8 examines the characteristics of the household that determine poverty. For determining the role of these characteristics Logit Model is estimated and results are reported in the chapter.

Chapter-9 deals with the conclusions of the study.

CHAPTER 2

PERCEPTION OF POVERTY

Poverty is a multidimensional concept and can not be conclusively defined. The World Development Report (1982) defines poverty as "a condition of life so characterized by malnutrition, illiteracy and disease as to be beneath any reasonable definition of human decency. Yet within a particular society at a particular time, poverty is often defined relative to average living standard".

Altimir (1982) writes that poverty is a situation which includes "under consumption, malnutrition, precarious housing conditions, low educational levels, bad sanitary conditions, either unstable participation in the production system or restriction to its more primitive strata, attitudes of discouragement and anomie, little participation in the mechanisms of social integration and possible adherence to a particular scale of values different to some extent from that held by the rest of the society". Wolfson, et al. (1990) pointed out that poverty is an imprecise term. It is typically used to refer to a situation where individuals do not have sufficient resources to cover their needs. He explains that these "needs" may be of a variety of types, not only economic but also social and psychological - even spiritual. Thus, aspects such as social isolation, deprivation and inability to cope are all involved. Determination of general level of poverty in a society requires information on mortality and morbidity, malnutrition, literacy and educational levels, housing and neighbourhood conditions. Certainly it is impossible to capture the wealth of meaning inherent in the term 'poverty' by using a single or even multiple statistical series.

On the other hand Townsend (1987) defined poverty in terms of the concept of multiple deprivation. According to him "people can be said to be deprived if they lack the material

standards of diet, clothing, housing, household facilities, working, environmental and locational conditions and facilities which are ordinarily available in their society and do not participate in or have access to the forms of employment , occupation, education, recreation and family and social activities and relationships which are commonly experienced or accepted".

The perception of poverty and its conceptualization are, nevertheless, greatly influenced by the social and economic environment and the general goals of the social projects of which the prevailing anti-poverty policies form part.

Hagenaars (1986) viewed poverty in general "as a situation in which needs are not sufficiently satisfied". What needs are to be considered? Are material needs more worthy of attention by economists than the immaterial ones? Robbins (1935) view is that "the economist is not concerned with ends as such. He is concerned with the way in which the attainment of ends is limited. The ends may be noble or they may be base. They may be "material" or 'immaterial'- if ends can be so described. But if the attainment of one set of ends involves the sacrifice of others, then it has an economic aspect". The Commission of European Communities (EC) (1981) defined the poor as "persons beset by poverty: individuals or families whose resources are so small as to exclude them from the minimum acceptable way of life of the member state in which they live". This definition implies the lack of command over resources, which are needed to satisfy needs. The term 'way of life ' in this definition refers to the actual living conditions of households, and their relative evaluation by the community as a whole. Individual objective feelings of deprivation do not constitute poverty, nor does the absence of such feelings prove that there is no poverty. Townsend (1979) proposed a similar definition like that of the European Community (EC). It follows that poverty is gradual, relative and multidimensional, and therefore, it is rather an ambiguous concept.

Many researchers emphasize that the concept of poverty is flexible and it is not objectively and culturally determined. For example, Orshansky, (1969), maintains that "counting the poor is an exercise in the art of the possible. For deciding who is poor, prayers are more relevant than calculation because poverty, like beauty, lies in the eye of the beholder". Despite the prevalence of this attitude, it seems both necessary and feasible to arrive at an objective concept of poverty. Subjective poverty is a valid field for social research, but for policy purposes objective facts are required.

Wolfson (1990) gave another concept of poverty and that is that of 'underclass' which particularly appears in the developed countries. This concept refers to the subset of the population, who lives in neighbourhoods or communities with a particularly high proportion of poor people. These poor people often live in urban areas and tend to suffer enduring disadvantages, which prevent them from participating in ordinary social and economic life.

Osmani (1982) as cited in Rein (1974) distinguished among three different concepts of poverty. Some researchers view poverty as a lack of resources in an absolute sense. According to this view, the poor are those, who are unable to maintain a minimum subsistence level of living. This is known as the absolute or subsistence concept of poverty. Second, there is the inequality concept of poverty, which views it as essentially a phenomenon of relative deprivation. Finally, poverty may be viewed as an externality. According to this view, what a measure of poverty should reflect is not the needs of the poor as such, but society's loss of welfare owing to the existence of poverty. There could be some oddities if the poverty was viewed as an externality. Rein (1974) attributed this concept to Smolensky (1966), who wanted his poverty measure to serve as an index of disutility to the community because of the persistence of poverty, but Rein himself defined externality as being concerned with the social consequences for the rest of the society. Thus, in Rein's view, poverty gives disutility to the

rest of the society, where as Smolensky's definition refers to the society as a whole. They are certainly not saying the same thing, and if Smolensky's view is accepted then the term externality, would appear to be a misnomer.

More importantly, externality cannot be claimed to be a concept of poverty in the same sense as subsistence or inequality can be. The social significance of poverty may lie (at least partially) in the disutility it gives to the community, but it seems odd to suggest that poverty arises out of this disutility. In fact, poverty may be thought to arise from either inequality or lack of subsistence, and may still exert an external effect on the welfare of the society.

Absolute and Relative Poverty

There is debate over the concept of poverty, which has overwhelmingly focused on the issue of an absolute versus a relative concept of poverty and consequently that the poverty line needs to be based on an absolute or relative concept of poverty. Nevertheless, both the absolute and relative concepts are essential ingredients of the common understanding of poverty.

Earlier and more influential studies were concerned with absolute poverty. Rowntree (1901) in his pioneering study defined a family to be poor if its "total earnings are insufficient to obtain the minimum necessities for the maintenance of merely physical efficiency". Biological considerations related to nutritional requirements of survival and work efficiency are the main basis of the definition of poverty in the absolute sense. Broadly speaking, those, who do not have the minimum requirements of food, shelter, fuel, clothing etc. are regarded as poor in the absolute sense. This nature of poverty is wide-spread in the developing countries.

Poverty should refer to the society's predominant style of living, which creates the desires and imposes the expectations that give rise to needs. In this sense, the concept of

poverty is always relative. It is dynamic and specific to each society. Its contents vary over time, to the degree that basic needs change historically in the same society with alterations in its lifestyle and with economic development. However, there is an absolute dimension to poverty which cannot be defined only in terms of that context. One has to go beyond that. We believe that there exists an absolute deprivation and associated level of malnutrition. Accordingly to the view presented by Sen (1978) "there is an irreducible core of absolute deprivation in our idea of poverty, which translates reports of starvation, malnutrition and visible hardship into a diagnosis of poverty without having to ascertain first the relative picture. The approach of relative deprivation supplements rather than competes with this irreducible core of absolute dispossession". At another place Sen (1980), points out that "there is, however, a danger in being too "modern" about the notion of poverty, since economic progress has 2/en rather uneven internationally, and for many countries in the developing world, the standards used by Rowntree (1901), and Booth (1889) still remain depressingly relevant. In studying poverty in the so called Third world, the older notions of absolute deprivation still have much to contribute". And again Sen (1985) emphasizes "that poverty is not just a matter of being relatively poor than others in the society, but of not having some basic opportunities of material well being - the failure to have certain minimum 'capabilities'. The criteria of minimum capabilities are 'absolute' not in the sense that they must not vary from society to society or overtime but that people's deprivations are judged absolutely, and not simply in comparison with the deprivation of others in the society".

Definitions of poverty in absolute terms attempt to pinpoint the absolute deprivation levels that may result from prevailing inequalities, on the basis of norms regarding the minimum requirements considered adequate for the satisfaction of basic needs. On the other hand, definitions of poverty in relative terms are based on norms that attempt to take expressed account of actual deprivation with respect to average level of needs satisfaction in the society in question

and at the same time also attempt to reflect the average availability of resources in the society. These norms may indicate conditions of relative deprivation with reference to each of the resources that determine the level of living; though it need not be the same thing as inequality. If all the individual incomes in a community increase or decrease four-fold, measures of relative poverty tied to inequality would be (more or less) unchanged, but absolute poverty would change significantly .

A number of researchers [Rein (1974), Townsend (1962), Rainwater (1974), Kaspar (1968), Miller and Roby (1974) and O'Higgins and Jenkins (1990)] view poverty in relative terms. This view of relative poverty has the advantage of making an unmistakable reference to the prevailing social inequalities. Moreover, it allows comparability and the data requirements for making its estimates are much less than for other definitions. The definitions of absolute poverty can make it easier to isolate the problem of poverty by diverting attention from the broader debate on the most appropriate income distribution. However, there is some justification for taking the relativist view in the context of developed nations, where with the increasing material wealth, absolute poverty has lost a good deal of its significance. The spectre of hunger and poverty has been, more or less, banished from most of these economies. Poverty, in most advanced industrial nations, is, now a matter of deviation from social and economic norms. In other words, as the threat of starvation has receded from the scene, poverty is being interpreted in developed countries in relative terms. In the less developed countries, it is indeed the physical manifestation of poverty that appears as the most agonizing human problem and it is the main reason behind the current political concern with absolute poverty in third world countries.

Pakistan being a developing country, our concern will thus be with the absolute concept of poverty, and therefore, our poverty line will be based on absolute notion of poverty.

Islamic Concept of Poverty

The words 'fuqara' and 'masakin' appear in the Qur'an for the poor and the needy. The Qur'an mentions a number of times that alms or 'sadaqat' or 'zakat' are meant for 'fuqara' and 'masakin' and also for some other purposes and the use of 'Sadaqat' for satisfying the needs of poor and the needy is given priority over the other uses. Qur'an says that "Alms are for the poor And the needy, and those Employed to administer the (funds): For those whose hearts Have been (recently) reconciled (To Truth); For those in bondage And in debt; in the cause Of Allah; and for the wayfarers: (Thus is it) ordained by Allah. And Allah is full of knowledge And wisdom."(9:60).

We can better understand the Islamic Concept of poverty, if we keep in mind the definition of the poor, the needy and the non-poor (rich) as given by the Muslim Jurists (Fuqaha). The Jurists' (Fuqaha) opinion in this regard enables us to understand the concept.

Definition of the Poor

The Jurists differ regarding the definition of 'faqir' (the poor) and 'miskeen' (the needy). According to Shafi'ites and Hanbalites a man is poor (Faqir) if he has no wealth and presently he is not an earning hand. If he is presently earning something but that is not sufficient for meeting his needs (Kifalat) even then that person is considered to be a 'faqir' (poor). These Jurists have even specified that if a person possesses the wealth (Mal), which can satisfy less than fifty percent of his needs, even then he will be considered poor. For instance if ten Dinars are sufficient for meeting his needs and he possesses four or less, he will be considered poor by these Fuqaha. Similarly according to them a person is a 'miskeen' (needy), if he is an earning hand, but his earning may not be sufficient for meeting his needs. A person is considered a 'miskeen' (needy) if his earnings or wealth or both can satisfy more than 50 percent of his needs

but not upto 100 percent. The limit of 'miskeen' (needy) is the level where he possesses the resources for more than 50 percent of his needs. For example if he requires 10 dinars to satisfy all his needs, but he possess or is in a position to earn only Six dinars he will be considered as 'miskeen'.

According to these Fuqaha, a 'faqir's ' (poor's) condition is worse than that of a 'miskeen' (a needy). One of the arguments given by them in favour of their view is the following verse of the Qur'an.

> "As for the boat, it belonged to certain Men in dire want: They plied on the water: I but wished to render it Unserviceable, for there was After them a certain king Who seized on every boat By force"(18:79).

This verse provides ample proof that a 'miskeen' can be owner of something, (like boat) and might have some earning sources.

However, Hanafite and Malikite opinion is opposite to what we have referred to above. According to these jurists, economic conditions of 'miskeen' are worse than those of a 'faqir'. However, for the practical point of view, the difference in the definition of 'faqir' and 'miskeen' is not of much significance because both are not in a position to meet their basic needs with out the provision of assistance to them. (See Qardavi 1982 P.16-17 and usman P .12-13.)

Before we explain the Islamic definition of non-poor let us specify the basic needs that should be satisfied.

Siddiqui (1983) points out that minimum basic needs that must be fulfilled include food, clothing, shelter, medical care and education. Depending on social circumstances and availability

of financial resources other needs such as fuel, electricity, transportation, marriage allowance, repayment of debt etc. may also be included. He has provided precedents that earlier Islamic states used to ensure the provision of all the items included in his list of basic needs to all the people.

Mchale, et al. (1975) of the Aspen institute categorized basic needs as follows:

1. Deficiency Needs, which are required to augment provisions to some minimum defined level for physiological adequacy;
2. Sufficiency Needs, which go beyond deficiency needs and maintain standards at a slightly more desirable level, and
3. Growth Needs, which go beyond sufficiency needs to allow development above material requirements.

UNO (1954), Ghai, et al. (1977) and many others mention the items that are included in the basic needs. The items proposed as basic needs by different organizations and authors are different. But all agree that basic needs can vary depending upon the income of the specific country, climatic, geographical, cultural and socioeconomic conditions.

Definition of Richness (Ghina)

Literal meaning of Arabic word 'Ghina' is richness or prosperity. The Arabic word 'Ghina' means that the person is rich and he is not in need of anybody else's financial help. The richness results in satisfying one's basic needs with one's own resources without resorting to anybody else's help. According to Fuqaha the richness (Ghina) is of three kinds:

1. The richness which puts the person under obligation to pay 'zakat'. In this case, the person owns a surplus wealth after meeting his basic needs.

2. The richness that disallows a person to accept 'zakat'. Such a richness means that person has a wealth, which only enables him to meet his and his dependents' basic needs like food, clothing etc.

3. The richness that prohibits begging, but allows to accept 'zakat' if provided. Fuqaha differ in their opinion regarding this type of richness. However, they all agree that the rich cannot get, according to the Islamic 'fiqh', what is meant for the poor and the needy. If rich get something from the share of the poor, it means that 'zakat' is not reaching the deserving persons and it negates its main purpose.

According to some of the Fuqaha the stage of richness - that prohibits begging - is reached, when one is in possession of fifty dirhams. While others are of the view that this stage is reached when one is in possession of money enough to meet his debts. According to some others, richness is the stage, where one has sufficient means for the morning and the evening meals. If a person's economic condition is such that he is living below the stage of richness (Ghina), his needs can be fulfilled by the assistance of 'zakat'.

According to Hasan Basri and Abu Ubaid, the limit of ghina is an 'Oqia' (i.e. 40 Dirhams). Their argument is based on the Hadith of Prophet Muhammad (PBUH) as narrated by Abu Saeed that "who so ever indulges in begging while he possesses wealth equivalent to one 'Oqia', he is begging importunately" (see Alshoakani, 1952). Abu Ubaid has further explained the Hadith and has said that one 'Oqia' is the additional money that a person possesses in addition to owing a house and for his dependents and having their clothes and a servant if needed. Thus if a person has a house for living, besides having necessary clothes and after meeting his basic needs, he possess wealth equivalent to one 'Oqia', he is not entitled to receive 'zakat'. Shafi'i (1321 AH) points out that "according to the Malikites, the question of deciding

whether a man is rich or poor, is left to the discretion of the state; but as guiding principle, it may be taken that a man who lacks sufficient means to provide for necessities for one year, even if he possess a trade, is poor. However, the Shafites hold that one is rich not only by possessing wealth, but also by being able bodied and the latter are not given any assistance unless they need it in order to make the living".

Most of the Fuqaha agree that the stage of richness is reached when one is capable of supporting 'Kafalat' himself and his family with out the help of any body else. [(See Qardavi (1982) pages, 19-24, part 3, Usman Shabir, page 8-11 and Siddiqi (1977) page 156)].

As 'zakat' is taken from the rich and distributed among the poor, therefore, it is necessary to differentiate between the poor and the non-poor (the rich). According to most of the Fuqaha a person and his family's possessing such an amount of money, which enables him to fulfil his and his family's basic needs, will be considered rich and if he is unable to fulfil these needs, he will be considered poor and needy.

We conclude that in general a person who possesses resources, which are not sufficient to meet his minimum basic needs (necessaries), is poor and needy, while a person possessing resources, which are sufficient for fulfilling his basic needs, will be considered non-poor(rich).

Thus keeping in view the concept of poverty in traditional and Islamic frameworks, we do not find substantial differences. In both the frameworks a person is poor and needy if he is unable to get enough resources to meet his legitimate basic needs.

CHAPTER 3

REVIEW OF LITERATURE

The researchers started studying the problem of poverty in Pakistan about two decades ago. A reasonable number of studies based on different threshold income and expenditure levels have been carried out so far and they have arrived at different results. The first study on the subject was made by Naseem (1973), who arbitrarily fixed two poverty lines in terms of per capita annual expenditures of Rs.250 and Rs.300 at 1959-60 prices for rural areas, and Rs.300 and Rs.375 for urban areas. On the basis of threshold expenditure, he estimated the incidence of poverty in Pakistan for the period 1963-64 to 1969-70. He found that the incidence of poverty was higher (54.8 percent) in urban areas as compared to rural areas (43.1) in 1963/64. When he used the higher poverty lines then he came to the conclusion that 60.5 percent of the rural households were poor while this percentage was 70.0 in case of urban households during the same year. However, according to the lower poverty line 26.0 percent of the rural households were poor and with the upper poverty line 59.7 percent were poor in the year 1969-70, while the corresponding figures for urban areas were 25.0 percent and 58.7 percent respectively during the same year. The results proved to be sensitive to the poverty line selected. His estimates are presented in Table 3.1. Naseem's study showed that the percentage of poor population decreased significantly from 1963-64 to 1969-70 in urban areas in case of both the poverty lines, while in rural areas the decrease in poverty percentage was not significant, when the higher poverty line (Rs.300) was used because it only decreased from 60.5 percent to 59.7 percent during 1963-64 to 1969-70. The decrease in the incidence of poverty was significant in terms of the lower poverty line (Rs.250) where it decreased from 43.1 percent to 26.0 percent during the same period. He concluded that "even though abysmal poverty has to some extent been reduced by the process of growth and by some sharing of the fruits of growth, the number and proportion of people with a sustainable expenditure level has not been appreciably affected".

Allaudin (1975) extended Naseem's work from 1969-70 to 1971-72. She unlike Naseem, estimated the threshold level not only on the basis of per capita expenditures but also on the basis of per capita annual income. She estimated four different poverty lines for rural and urban areas separately. Again the threshold level was arbitrarily fixed. The estimates of her study show that the incidence of poverty was more severe when poverty line defined in terms of per capita income was used as compared to the situation when the poverty line defined in terms of per capita expenditure was used (see Table 3.1). Her results were in line with the conclusion arrived at by Naseem. She also found that poverty declined overtime in Pakistan. Nevertheless, she found that the poverty increased from 83.0 percent to 87.4 percent during the 1963-64 to 1971-72 when higher poverty line was defined in terms of per capita expenditure (Rs.350) in rural areas. But when higher poverty line was defined in terms of per capita Income (Rs.350) the poverty in rural areas increased from 80.0 percent to 87.0 percent during the same period.

Wasay (1977) attempted to estimate a poverty line for urban areas while using the data from Rawalpindi city only. He assumed a family size of five, consisting of two adults and three children of age under 9. He estimated minimum income (Rs.346) including 10 percent saving allowance, per month for a family of five. He estimated poverty line of Rs.115.00 for a single male, Rs.183.00 for a childless couple and Rs.284.00 for a couple with two children. He concluded 34 percent of the working heads of the households were earning income less than poverty threshold of Rs.346 in Rawalpindi city. However, he did not measure the incidence of poverty for other poverty lines. Scope of his work is very limited. The other drawback of his study is that he prefixes the household size at five, and he does not take into account the actual family size. Later studies related to poverty have tried to define poverty in terms of minimum nutritional requirements.

Naseem's (1977) study was the first major work which took into account the nutritional

requirements of households for defining poverty line. He estimated the poverty line in terms of per capita expenditure in constant prices (1959-60) that allows a consumption basket yielding 2100 calories. Based on these calorie requirements, he found that a monthly per capita consumption of Rs.31.41 (at constant prices of 1959-60) would be necessary for a rural household to be a non-poor. But he considers this poverty line to be quite high. He states that "It would be a little absurd, however, to use such a high poverty line. In 1963-64, the first of the years for which we have information on the distribution of consumption and calories, over 85 percent of the rural households in Pakistan (or 80 percent of the population) were below this norm. Thus it was concluded that for Pakistan a level of income that ensures adequate calories consumption, and almost certainly implies serious deficiency in non-calorie nutritional requirements, is too high to be used as a realistic poverty line".

He estimated three poverty lines of Rs.27.53, Rs.25.35 and Rs.23.95 in terms of monthly per capita income, keeping in view the intake of 95 percent, 92 percent and 90 percent of the minimum calories required per capita respectively. The incidence of poverty slightly increased for the poverty line of Rs.27.53 from 79 percent to 82 percent in terms of households and 72 percent to 74 percent in terms of population respectively during 1963-64 to 1971-72. He concluded that "when poverty is defined in more extreme and intolerable terms, it appears to have remained roughly unchanged in percentage terms over the years".

Mujahid (1978) criticized Allaudin's and Naseem's work on the ground that the estimates of poverty based on average per capita expenditure could be misleading when for given income groups variations in household size were ignored. He stated that all individuals belonging to households in a given income bracket, with average monthly expenditure below a certain predetermined level, could not be considered as poor. There could be some households at the upper end of the income bracket consisting of only a few members and having per capita

expenditure much above the average per capita expenditure for that income group as a whole. Similarly all individuals belonging to households with average expenditure above the poverty line may not necessarily be non-poor. There could be certain households, towards the lower end of the income bracket consisting of larger number of members, and having the per capita expenditure below the poverty line.

Estimates of Naseem (1973) and Allaudin (1975), therefore, include households as poor which are actually not poor and vice versa. Mujahid pointed out that "this fundamental shortcoming of methodology leaves the estimates of poverty virtually without meaning". Mujahid suggests a methodology that takes into account the household size and thus excludes the possibility of treating non-poor individuals belonging to households in a given income group as poor and vice versa. Based on Naseem's (1973) poverty lines, Mujahid showed that, in fact population-wise, rural poverty in terms of population increased significantly from 29.2 percent in 1963-64 to 39.5 percent in 1969-70 in terms of the lower poverty line (Rs.250) and from 41.6 percent in 1963-64 to 52.6 in 1969-70 respectively in terms of higher poverty line (Rs.300). However, urban poverty household wise as well as population wise declined during 1963-64 to 1969-70 in terms of both the poverty lines (see Table 3.1). The drawback of this study is that he assumed poverty lines arbitrarily and carried out the analysis on grouped data rather than on actual individual observations. This drawback was common in all the studies mentioned above.

Irfan and Amjad (1984) using the Nutritional Survey (1977) data and the HIES (1979) attempted to determine the rural poverty. In case of HIES (1979) the authors estimated income based poverty lines of Rs.109 (higher) and Rs.95.00 (lower) per capita per month in 1979 prices consistent with the 2550 calories intake per day per adult equivalent. For the years 1963-64, 1966-67 and 1969-70 they adjusted the per capita poverty lines by using the consumer price indices. The resulting higher poverty lines in current prices came up to be Rs.27.56, Rs.31.85

and Rs.35.79 respectively and lower poverty lines Rs.24.0, Rs.27.76 and Rs.31.19 respectively. The authors ranked the population below the higher poverty lines as poor and below the lower poverty lines as very poor. Their estimates showed that the percentage of poor households increased from 40.5 percent to 51.5 percent from 1963-64 to 1969-70, but declined to 39.8 percent in 1979 a level that was close to the percentage of 1963-64. The same trend was observed by them for very poor households during the same period. They observed the same trend for the period under study when they analyzed poverty on population basis. They pointed out that the increase in the rural poverty in 1960s was due to the eviction of tenant farmers. In their view "there took place during this period significant changes in the agrarian structure, especially the size distribution of holdings, which had important implications for the rural occupational distribution of households. These changes were basically the result of the new technology, first introduced in the sixties, which increased profitability in the agricultural sector and led to large landowners resuming formerly rented-out land for self cultivation. This led to eviction of tenant farmers, who now cultivated either much smaller sized holdings or joined the ranks of the landless labourers and non-agricultural households". The decline in poverty in the seventies was due to the overseas emigration and the consequent effects of foreign remittances in the rural economy. In case of the Nutritional Survey (1977) data, results obtained by authors were weak. According to the authors "the results are weak (to some extent due to the narrow base of the data) and do not stand up well when subjected to detailed analysis".

The authors concentrated their analysis of poverty in the rural areas of Pakistan. They used the consumption patterns of 1971-72 to calculate the average food cost for 1979 consistent with 2550 calories intake, and thus ignored the actual consumption, tastes etc. However, this was a deficiency due to the nature of available data.

Kruijik and Leeuwan (1985) assumed poverty line of Rs.700 per month per household

at current prices. Using the HIES 1969-70 and 1979 data, they estimated incidence of poverty for the year 1969-70 and 1979. They calculated the head count, poverty gap, poverty gap ratio and Sen's index. Their estimates revealed that the percentage of poor households declined by 34 percent from 1969-70 to 1979 for overall Pakistan, while the percentage decline in the poor households in the urban and rural areas was 40 percent and 30 percent respectively during the same period. Their estimates showed that the poverty gap declined by 64 percent, the poverty gap ratio declined by 49 percent and sen's index declined by 48 percent in over all Pakistan, and corresponding percentage of decline for these measures were 67 percent, 54 percent and 52 percent respectively for the urban areas, while 62 percent, 48 percent and 46 percent respectively for the rural areas during 1969-70 to 1979. The decline in urban poverty is slightly higher than that of the rural areas. The problem with this study is that the authors did not take into account the household size and the nutritional requirements of the households. Further, they used an arbitrary poverty line rather than calculating the actual poverty line based on some nutritional requirements of the different households.

Cheema (1985) computed absolute poverty by using HIES grouped data of 1971-72 and 1979. He determined poverty lines in terms of per capita income (in current prices) consistent with 2054 calorie per day. He assumed urban food prices to be 10 percent higher than the rural ones. He calculated Rs.33.51 and Rs.38.06 per month for rural and urban areas respectively as a threshold level for 1971-72, and Rs.95.0 and Rs.122.0 per month respectively for 1979. Based on these lines, he found 40.7 percent of households in 1971-72 and 26.6 percent in 1979 to be poor in the rural areas. During the same years 25.7 percent and 27.4 percent respectively of the urban households were classified as poor. Further, the study found that 43.3 percent 29.5 percent of the total rural population were poor in 1971-72 and 1979 respectively, while the percentages of urban people below the poverty line in 1971-72 and 1979 were 28.9 and 29.9 respectively. For overall poverty, he got weighted average of the poor households of urban and

rural areas. The weights used were the household proportions in these areas. Similarly he got the weighted average for overall poverty in terms of population. For this he used population weights. His estimates showed a decline in rural poverty, coupled with an increase in urban poverty both in terms of households and population during 1971-72 to 1979. The decrease in rural poverty was because of a significant increase in the job opportunities in the rural areas due to agricultural development and the resultant increase in the real wages in rural areas. His results confirmed findings of Irfan and Amjad (1984). However, they were not in line with the findings of Kruijik (1985) for the urban areas. He concluded that the incidence of poverty was higher among large households as compared to small households. He found that more than 70 percent of the poor households in the country had six or more members. He further pointed out that to bridge the poverty gap prevalent in the year 1979 there was need to transfer 4.4 percent of the total income in urban areas and 4.8 percent of the total income in the rural areas.

There are certain deficiencies in his study. Firstly, he assumed urban prices as 10 percent higher than rural ones. This does not appear to be true. He did not calculate the actual food cost, perhaps due to non-availability of the data on prices of food items. Secondly, he calculated the weighted average of the rural and urban poor for overall poverty and did not calculate a national poverty line.

Malik, M. H. (1988) determined the poverty lines for different years on the basis of nutritional requirements of the households and also allowed for non-food expenditures in his estimation. In addition to some selected previous years he also utilized the HIES data of 1984-85. Different poverty lines that he estimated are presented in Table 3.1. The lowest poverty lines are based on the consumption pattern of the three lowest income brackets, while higher poverty lines are based on the consumption pattern of the fourth and fifth income brackets. According to his estimates rural poverty increased during 1960s and declined in 1970s confirming the findings of

Irfan and Amjad (1984). However, the urban poverty in poor and very poor categories declined during 1960s and 1970s. He concluded that overall growth and foreign remittances were responsible for this decline in poverty. The main drawback of the study is that he analyzed grouped data and did not work with the individual observations.

Akhtar (1988) used the 1979 HIES data to determine the absolute and relative poverty lines. She determined the relative poverty line by cutting-off the per capita expenditure of the bottom 30 percent of households. She observed that poverty threshold level, in other studies, ranges between Rs.25 to Rs.31 per capita expenditure/income (at constant prices of 1959/60) for urban areas and Rs.21 to Rs.25 per month per capita for rural areas. For determination of absolute poverty she selected the lower range of the threshold levels and converted them to 1979 prices. On the basis of these lines (see Table 3.1), she estimated the incidence of poverty using head count index, poverty gap and Sen's index etc. She found that 19.8 percent of the population was absolutely poor in 1979 in urban areas and 12.4 percent in rural areas; while the relatively poor population was 35.5 percent for overall Pakistan and 35.2 percent in urban and 36.1 percent in the rural areas of Pakistan. Among the provinces, she found the higher poverty percentage (38.2) in Sind followed by Punjab (35.1).

Ercelawn (1988) computed the poverty line on the basis of per capita annual expenditures consistent with 2550 calories intake per day per adult equivalent. These poverty lines were based on the assumption that 3/4 of the annual expenditure was required for the consumption of 2550 calories per day per adult equivalent. He found higher incidence of poverty in urban areas, though declining overtime. The proportion of poor households decline from 38 percent in 1971-72 to 32 percent in 1978-79. He found that the incidence of poverty was lower in rural areas as compared urban ones and it was also declining over time confirming the trends shown by earlier studies. Another study by Ercelawn (1989), also found the same declining trend (see Table-3.1).

Ahmad and Ludlow (1990) took four arbitrary poverty lines called low, medium, medium high and high, and estimated the incidence of poverty by using headcount and Sen's index based on the data given in Micronutrient Survey of 1976-77 and the HIES for 1979 and 1984-85. Their poverty lines were in terms of total per capita expenditures per month. These were Rs.80, Rs.90, Rs.100 and Rs.110 respectively for rural areas for the 1979. For urban areas of Pakistan, they took the corresponding poverty lines at Rs.10 higher than for the rural ones. The authors adjusted those poverty lines for 1976-77 and 1984-85 by using the GDP deflator. Thus rural poverty lines for 1984-85 were, Rs.126.24, Rs.142.01, Rs.157.80 and Rs.173.51 respectively and the corresponding urban poverty lines were Rs.142.02, Rs.157.80, Rs.173.57 and 189.35 respectively.

Their findings were that the incidence of poverty, in terms of both the households and population, measured on the basis of these four poverty lines, declined during 1976-77 and 1984-85. They also found that the severity of poverty declined during the same period as shown by Sen's index.

The authors of the World Development Report (1990), by using country specific poverty lines in terms of income, concluded that the percentage of poor households in Pakistan declined from 54 percent in 1962-63 to 23 percent in 1984-85, while the average income poverty gap declined from 39 percent to 26 percent over the same period. Measuring poverty incidence in terms of expenditures, they found that the proportion of poor population declined from 21 percent to 20 percent during the period from 1979 to 1984 and the corresponding average income short-fall remained at 19 percent during this period. They were of the view that growth in the national income was the main cause of this declining trend in poverty. However, the report did not mention explicitly as to which cut-off point was used to determine the incidence of poverty. As we have noted in our survey of literature, that different studies arrived at different results and it

is not possible to compare their results over time. The same opinion expressed is by Malik, S.J. (1991), when he says "these estimates ..... are difficult to compare across regions or overtime, since it is not possible to assign any statistical significance to the estimates or to test for differences."

An important and useful study is done by Ercelawn (1990) which is based on HIES data for 1984-85. He computed the incidence of absolute poverty by using the national, rural, urban, locational, and provincial specific poverty lines. In other words, he estimated the incidence of poverty in Pakistan at the provincial, rural, urban, town and city levels. He took 2550 calories per adult equivalent per day as suggested by the Planning Commission of Pakistan (1980) as a minimum requirement and he estimated the calories-expenditure function for different areas. Thus he determined per capita expenditure of Rs.150, Rs.200 and Rs.290 per month as poverty lines for rural areas, towns and cities respectively.

Estimating calories expenditure functions for provinces, he found that per capita expenditures of Rs.150, Rs.170, Rs.145 and Rs.160 per month for Punjab, Sind, NWFP and Baluchistan respectively were consistent with 2550 calories norm He came to conclusion that in Pakistan incidence of poverty varied from 17 percent to 24 percent in 1984-85. This variation was due to different poverty lines used by him. He further found that 20 percent and 10 percent of the households were poor in the rural and urban areas of Pakistan respectively. Using the province specific poverty lines, the highest incidence of poverty was found by him in rural Punjab and Sind (21 percent each) followed by urban Baluchistan (19 percent). He concluded that Pakistan is "quite fortunate particularly as regards acute poverty with the risk of starvation and malnourishment; ... poverty comparison between rural and urban areas, or as between provinces, do not yield unambiguous rankings. It all depends upon the poverty line chosen, which in turn reflects perspectives on poverty."

Two studies of poverty were made by Havinga, et al.. (1990a) and (1990b). The first one was presented in the Sixth Annual General Meeting of the Pakistan Society of Development Economists, Islamabad and the second one at the seminar on "Poverty Statistics in the European Community". These studies differ in scope and coverage, although both used the same methodology and HIES 1984-85 data. The first study covers Pakistan with rural-urban breakup, while the second covers all the provinces. The authors computed poverty lines taking into account the calorie norm between 2000 to 2550 per adult equivalent and referred to this poverty line as a high poverty line. To test the sensitivity of the results, they also measured poverty lines based on calorie intake of 1500 to 2000 per adult earner per day that they refer to as the "low" poverty line. They estimated the relationship between these calorie norms and food expenditure per adult equivalent and also the calories intake and total expenditures. They estimated the poverty lines on the bases of per adult equivalent, per capita and per household. For the purpose of comparison they used the "broad" type poverty lines. They used head count, poverty gap, Gini, and Sen's index etc., to estimate the incidence of poverty. Their results were sensitive to the different poverty lines used by them. Taking the high poverty lines they arrived at the conclusion that 38.6 percent of the households, 44.7 percent of the individuals, and 44.3 per cent of the adult earners were poor. They found that the incidence of poverty was greater in urban than in rural areas. In urban areas 42 per cent of the households, 49.1 percent of the individuals and 48.5 percent of the adult equivalents were below the poverty line as compared to 30 percent, 36 percent and 35.8 percent respectively in the rural areas. They found that same pattern emerged when poverty was estimated in terms of the low poverty lines. They came to the conclusion that when poverty incidence was estimated on the basis of per capita it was much higher than in terms of per adult equivalent. In per capita terms 53.1 percent of the households, 60.4 percent of the individuals and 59.7 percent of the adult equivalents were considered poor, while the corresponding percentages were 58.5, 66.6, and 65.8 respectively in urban areas, and 47.3, 55.1, and 54.5 respectively in the rural areas. While extending the analysis to provinces, the authors pointed out that Sind had

a higher poverty incidence (55.6 percent) on the basis of adult equivalents, followed by

Baluchistan (48.5 percent). Punjab had a poverty level of 40.4 percent while NWFP had the lowest poverty level (38.1 percent) among the provinces (see Table-3.1). The study also presents a detailed socioeconomic profile of the poor taking into account the various attributes of the heads of the household.

The poverty lines measured by Ercelawn (1990) are low as compared to Havinga, et al. The reason given by Ercelawn was "that our (regression) method of interpolation did not exclude households with low calorie intake. Such households are likely to be highly calorie-efficient in their expenditure. Our expenditure norm should thus be on the lower side."

Some of the studies reviewed earlier were based on 1984-85 HIES data and some had analyzed even older HIES data. Only a few studies have used 1987-88 HIES data.

Malik, S.J. (1991) was the only author who analyzed and compared the incidence of poverty utilizing the HIES 1984-85 and 1987-88 and using the test statistic developed by Kakwani (1990) for testing differences in the head count estimates. This analysis of poverty uses agro-climatic zones as a base for disaggregation unlike the other studies that are based on provincial disaggregation.

Following Pinckney (1989) the author grouped and classified[2] districts of Pakistan into nine agro-climatic or crop zones. Those were Rice/wheat Punjab, Mixed Punjab, Cotton/Wheat Punjab, low intensity Punjab, Barani Punjab, Cotton/Wheat Sind, Rice/Other Sind, Other NWFP

[2] Classification of districts is given in Appendix A.

and other Baluchistan. He used the rural poverty lines (per capita expenditure) for 1984-85 for the provinces and country as a whole as established by Ercelawn (1990). He found that the urban poverty lines estimated by Ercelawn (1990) were hundred percent higher than rural poverty lines, and similarly poverty lines as estimated by Havinga, et al. were 46 percent higher, while those estimated by Malik, M.H. (1988) were higher by 16 to 26 percent. He explained that these differences in urban poverty lines as compared to rural ones were due to the non-food components of the total expenditure like housing, fuel and lighting etc. He further points out that "the overall provincial poverty lines estimated by Ercelawn are only marginally different from his rural poverty lines".

The author updated 1984-85 poverty lines to 1987-88 by using a Fisher price index. Thus the updated poverty lines for 1987-88 increased about 14 percent. For example, the poverty line for Punjab (Rs.150) increased to Rs.171 and for Sind it increased from 170 in 1984-85 to 194 in 1987-88.

After having established poverty lines, he estimated the incidence of poverty, using FGT poverty measures for 1984-85 and 1987-88. His results for 1984 85 were slightly different than those of Ercelawn, and the difference may be due to Ercelawn's data cleaning, which excluded over 1100 households from the analysis. Malik's results showed an overall reduction in poverty i.e. from 18 percent to 13 percent and 21 to 15.5 percent and 11 percent to 6.8 percent respectively for overall Pakistan, and for urban and rural areas respectively during 1984-85 to 1987-88. His results are reproduced in Table-3.2. He concluded that the reduction in overall poverty was due to respectable rate of economic growth, reduction in unemployment and migration of rural workers to the Middle East etc. He further explained that the reduction in poverty was due to the "growth in private incomes, even though such growth has also been associated with increased overall income inequality".

Faiz (1991) made a study based on sample survey of local zakat committees, zakat recipients and the general population (households not receiving zakat from the official channels). He conducted the survey in 1988. In this study he explored the possibilities of poverty eradication through the existing zakat system in Pakistan. He estimated the zakat and usher potential for eradication of poverty. 'Mustahqueen-e-Zakat' (MZ) were defined to be poor by the author. According to the findings of his surveys the poor households (MZ) varied from 18.4 percent to 42.58 percent in 1988. The lowest figure (18.4 percent) indicated the most poor households while the higher figure (42.58 percent) was related to the households that were not apparently poor but they considered themselves to be poor. He concluded that in 1988 only 59 percent of the Mustahqueen-e-Zakat were receiving zakat from the official sources and to bridge the gap between their expenditures and income an amount of Rs.7.89 billion was needed, while 41 percent were not receiving zakat and for them there was a need for an additional Rs.7.69 billion. Thus the total shortfall as estimated by him for all the Mustahqueen-e-zakat was Rs.15.58 billion. It was about 130 percent higher than the zakat potential (of Rs.6.82 billion) in 1988. He pointed out some drawbacks of the present zakat system and gave some suggestions for the improvement of the system to meet the goal of eradication of poverty.

From his study one can get a notion of the poverty gap. However, his study is largely descriptive in nature. He estimated no poverty line and thus computed none of the established measures of poverty.

Ali (1985) made an assessment of the impact of anti-poverty policies in rural areas of Pakistan. He concludes that if the entire Ushr collection is used in cash payments to the needy at the rate of Rs.50 per family per month, it can benefit 1.4 million or 44 percent of the poor families. Even if it is assumed that the grant of Rs.50 per month enables only half of the poor

families to cross the poverty line, the ushr scheme alone is capable of reducing the incidence of rural poverty by 22 percent.

Mahmood, et al. (1991) estimated the incidence of food poverty, by applying FGT poverty measures to the HIES data for 1984-85. They computed poverty lines of Rs.246.0 per month for urban and Rs.149.0 per month for rural areas. Based on these poverty lines, they declared 76 percent and 46 percent of the total households as poor in urban and rural areas respectively in 1984-85. They also used an arbitrary poverty line of Rs.76.0 per month and observed that 2.0 percent of the total urban households and 3.0 percent of the rural household were "real poor" households. They maintained that a large number of dependents in a household and low level of education are some of the causes of food poverty in Pakistan. The food poverty line that they estimated is much higher as compared to the estimates carried out by other investigators. For example Ercelawn (1991) found food poverty line for rural areas as Rs.85.0 per capita and the corresponding rural poor households were 22 percent. Malik, M.H. (1991) observed that Mahmood et al. had exaggerated the incidence of poverty.

Malik, S.J. (1992) using the HIES data for 1984-85 and 1987-88 analyzed poverty incidence for rural Pakistan with the same methodology and break up among agro-climatic zones as he did in his 1991 study. The difference between these two studies is that his previous study (1991) covers whole of Pakistan with urban-rural break up, while later study (1992) covers only rural areas of Pakistan. He arrived at the same results for the rural areas as he got in his study (1991).

Zaidi (1992) introduced the concept of relative poverty in analyzing poverty in Pakistan. This concept is important where the objective is to highlight the income inequalities. He used HIES 1984-85 data for his analysis. The author took 75 percent of the average equivalent

expenditures and income as a poverty threshold and used the same poverty line for all the provinces. He found that 39 percent of the households in Pakistan were poor when poverty line was expressed in terms of average equivalent expenditures and 43 percent households were below the poverty line when poverty line was expressed in terms of average equivalent income.

Under reporting of the income by low-income households seems to be the reason for higher poverty incidence when the income based poverty line was used. While comparing the poverty incidence among the provinces, he found that Baluchistan had the highest proportion of the poor households (45.3 percent), followed by Punjab (42.8 percent) and NWFP (34.5 percent) and Sind had the lowest proportion (28.8 percent) when poverty line was expressed in terms of average equivalent expenditure.

In terms of the income based poverty line, Punjab had the largest proportion of poor households (48.4 percent) followed by Baluchistan (45.8 percent) in 1984-85 (See Table-3.1). He further explained that the incidence of poverty was higher for the households, whose size was larger or whose heads had little or no education.

In another paper Zaidi and De. Vos (1993) analyzed the 1987-88 HIES data, using the relative concept of poverty, based on a poverty threshold fixed at 50 percent, 66.7 percent and 75 percent of average equivalent expenditures (income) by applying three different equivalence scales. They used three poverty measures i.e. head count, the poverty gap, and FGT poverty index. However, detailed analysis was based on the head count measure. With a view to ascertaining the characteristics of the households, which are significant in determining their poverty status, they also estimated a Logit model.

Based on OECD (1982) equivalence scales and poverty lines fixed at 50 percent, 66.7

percent and 75 percent they estimated that 10.7, 31.2 and 41.9 percent of the households respectively were poor; while using the same cut-off threshold and using the average equivalent income, they estimated that 10.1, 29.2 and 39.0 percent of households respectively were poor. The difference in incidence was due to the existence of discrepancy between the average income and the average expenditures. By using alternative equivalence scales, they carried out a sensitivity exercise and found only marginally different poverty rates. They concluded that "given a large family size for a vast majority of the households, the level of poverty and the composition of the poor population are not much affected by the choice of the equivalence scales. The households with self-employed heads and the households, whose heads are labourers in transport and construction, households with 9 or 10 members, living in the province of Punjab, the rural households and the households with heads with less than primary education are identified as the risk groups".

Nevertheless, the authors took arbitrary poverty lines and estimated incidence of poverty. As the poverty incidence is sensitive to the line selected, one could fix any cut-off point and thus carry out such exercises. The problem in third world countries, like Pakistan, is not of a relative poverty but of an absolute poverty level. Relative poverty is more relevant to the developed countries, where the problem of absolute poverty is almost absent. Secondly, the relative poverty would remain as a problem in the future, in case of developed countries because it is related to income inequalities. Third, the relative poverty concept ignores inter-regional variation in prices and consumer tastes.

The general picture that emerges from this review, is that although poverty is wide spread in Pakistan, yet it is more prevalent in rural areas than in the urban ones. There was increase in the incidence of poverty during the 1960s, but there occurred a decline in the incidence of poverty ever since 1970. The changes occurring in agrarian structure during the 1960s, contributed toward

rural poverty. Some of the factors responsible for the decline in poverty from 1970 onward were: overall economic growth, foreign remittances and the introduction of Zakat and Ushr System in 1980.

Many of the studies arbitrarily set the poverty lines and thus ignored the effects of prices and tastes of the consumers, across the regions. Only a few studies took into consideration the nutritional requirements of the people and hence, were able to take care of the prices and actual consumption behaviour of the people. These studies cover different time periods and methodology. Therefore, poverty estimates are not comparable across regions and overtime.

Pakistan is not the only country where the poverty problem is serious. Poverty is a world wide phenomena and especially that of the third world countries. According to the World Development Report (1990), in the developing countries 1116 million people in 1985 were poor, when upper poverty line ($370) was used, and 633 million were below the lower poverty line ($275) and they were extremely poor (see Table-3.3). Thus the extremely poor were 18 percent of the total population of the developing World, while the poor were 33 percent. To bring up the poor to the upper poverty lines, the funds required were estimated to be equivalent to 3 percent of the total consumption of developing countries and to bring up the extremely poor to the lower poverty lines the funds required were estimated to be equivalent to 1.0 percent of the total consumption of the developing countries. Table-3.3 also shows that the

highest incidence of poverty was found in India (where 55 percent are poor and 33 percent are extremely poor) followed by Sub-Saharan Africa (where 47 percent are poor and 30 percent are extremely poor) and the lowest incidence of poverty was found in Eastern Europe (where 8 percent are poor and 4 percent are extremely poor).

The developing world has made significant progress during the last three decades. In Table-3.4, poverty incidence of eleven countries are reported. Indonesia, once the poorest country, managed to reduce poverty from 58 percent in 1970 to 17 percent in 1987. Malaysia and Thailand were also successful in reducing poverty. India reduced poverty by 11 percent from 1972 to 1983. Although all the developing countries showed good progress in alleviating poverty in percentage terms, yet the absolute number of poor people increased in some countries like India, Morocco and Srilanka. However, during the 1980s, the trend of poverty incidence was mixed. Except Costa-Rica, Cote d'Ivoire, India, Indonesia, Malaysia and Pakistan, all the other countries reported in Table-3.5, showed an increase in poverty incidence during 1980s.

Table 3.1: Evidence on poverty in Pakistan (some important results)

Author		Poverty Line (Rs.)	Trends in Poverty 63\64	66\67	68\69	69\70	70\71	71\72	76/77	78\79	84\85
Naseem (1973)											
	Per Capita Annual Expenditure Arbitrarily Fixed in 1959\60 prices		(Percent of households)								
	Rural	250	43.1	32.0	25.1	26.0	–	–	–	–	–
		300	60.5	59.7	61.5	59.7	–	–	–	–	–
	Urban	300	54.8	47.0	34.7	25.0	–	–	–	–	–
		375	70.0	59.3	57.9	58.7	–	–	–	–	–
Allaudin (1975)											
	Per capita Annual Income Arbitrarily fixed in 1959/60 prices		(Percent of Population)								
	Rural	225	33.5	15.6	23.2	21.0	11.6	19.3	–	–	–
		250	56.5	30.8	36.8	35.6	28.5	41.6	–	–	–
		300	67.4	48.8	64.0	61.1	60.1	64.8			
		350	80.0	67.4	76.6	81.8	79.2	87.0	–	–	–
	Urban	250	13.7	21.3	12.1	06.8	07.1	08.5	–	–	–
		300	49.6	43.8	32.5	29.6	30.8	26.9	–	–	–
		375	70.9	61.7	60.5	60.2	59.6	62.4	–	–	–
		400	77.19	68.0	68.8	67.6	67.3	69.4	–	–	–
	Per capita Annual expenditure Arbitrary fixed in 1959/69 prices										
	Rural	225	26.0	15.0	10.0	–	–	0.2	–	–	–
		250	43.1	32.0	25.1	26.0	9.3	19.2	–	–	–
		300	60.5	59.7	61.5	59.7	54.8	19.2			
		350	83.0	80.1	75.5	73.3	81.7	87.4	–	–	–
	Urban	300	54.8	47.0	34.7	25.0	27.5	24.6			
		375	70.0	59.3	57.9	58.8	59.3	62.8	–	–	–
Naseem (1977)											
	Per capita Annual monthly income in 1959/69 prices consistent with recomended 2100 Calorie			(percent of population)							
	Rural 95%	27.53	72.0	64.0	64.0	68.0	71.0	74.0	–	–	–
	92%	25.35	54.0	52.0	53.0	46.0	47.0	55.0	–	–	–
	90%	23.95	45.0	44.0	46.0	36.0	38.0	43.0	–	–	–
Mujahid (1978)	Per Capita Annual Expenditure Arbitrarily Fixed in 1959\1960 prices			(Percent of Housholds)							
	Rural	250	27.4	37.8	–	35.0	–	–	–	–	–
		300	39.5	53.1	–	47.6	–	–	–	–	–
	Urban	300	35.5	34.5	–	29.4	–	–	–	–	–
		375	51.7	50.2	–	46.2	–	–	–	–	–
				(Percent of population)							
	Rural	250	29.2	46.6	–	39.5	–	–	–	–	–
		300	41.6	55.8	–	52.6	–	–	–	–	–
	Urban	300	39.0	38.5	–	33.7	–	–	–	–	–
		375	55.0	54.0	–	51.9	–	–	–	–	–

Contd.

Author		Poverty Line (Rs.)	Trends in Poverty 63\64	66\67	68\69	69\70	70\71	71\72	76/77	78\79	84\85
					(Percent of Household)						
	95%	27.53	79.0	73.0	74.0	76.0	79.0	82.0	–	–	–
	92%	25.35	62.0	63.0	63.0	56.0	58.0	65.0	–	–	–
	90%	23.95	54.0	55.0	56.0	45.0	48.0	54.0	–	–	–
Irfan & Amjad (1984)					(Percent of Household)						
	Rural	27.56	40.5	–	–	–	–	–	–	–	–
	poor	31.85	–	46.27	–	–	–	–	–	–	–
		35.79	–	–	–	51.5	–	–	–	–	–
		109.0	–	–	–	–	–	–	–	39.8	–
	Very	24.0	30.6	–	–	–	–	–	–	–	–
	poor	27.76	–	34.96	–	–	–	–	–	–	–
		31.19	–	–	–	38.42	–	–	–	–	–
		95	–	–	–	–	–	–	–	26.5	–
					(Percent of population)						
	Rural	27.56	40.96	–	–	–	–	–	–	–	–
	poor	31.85	–	50.71	–	–	–	–	–	–	–
		35.79	–	–	–	54.52	–	–	–	–	–
		109.0	–	–	–	–	–	–	–	41.23	–
	Very	24.0	32.2	–	–	–	–	–	–	–	–
	poor	27.76	–	38.79	–	–	–	–	–	–	–
		31.19	–	–	–	43.13	–	–	–	–	–
		95	–	–	–	–	–	–	–	29.31	–
Kruijk & Leeuwen (1985)	Month per household expenditure at 1979 prices				(Percent of Household)						
	Over all	233	–	–	–	65.0	–	–	–	–	–
	Rural	233	–	–	–	73.0	–	–	–	–	–
	Urban	233	–	–	–	50.0	–	–	–	–	–
	Over all	700	–	–	–	–	–	–	–	43.0	–
	Rural	700	–	–	–	–	–	–	–	51.0	–
	Urban	700	–	–	–	–	–	–	–	30,0	–
Cheema (1985)	Per capita monthly income consistant with 2054 calorie intake per capita/ day.										
	Rural	33.51	–	–	–	–	–	43.3	–	–	–
		95.0	–	–	–	–	–	–	–	29.5	–
	Urban	38.06	–	–	–	–	–	28.9	–	–	–
		122.0	–	–	–	–	–	–	–	29.9	–
	All areas	–	–	–	–	–	–	39.8	–	29.6	–
					(Percent of Household)						
	Rural	33.51	–	–	–	–	–	40.7	–	–	
		95.0	–	–	–	–	–	–	–	26.6	
	Urban	38.06	–	–	–	–	–	25.7	–	–	
		122.0	–	–	–	–	–	–	–	27.4	
	All areas	–	–	–	–	–	37.0	–	–		
		–	–	–	–	–	–	–	26.8		

Contd.

Author		Poverty Line (Rs.)	Trends in Poverty 63\64	66\67	68\69	69\70	70\71	71\72	76/77	78\79	84\85
Malik M. H (1988)	Monthly per capita consumption at 1984–85 prices.										
	Rural (very poor)	26.05	36.79	–	–	–	–	–	–	–	–
		30.39	–	43.05	–	–	–	–	–	–	–
		33.29	–	–	–	44.24				–	–
		98.84	–	–	–	–	–	–	–	29.23	–
		159.0	–	–	–	–	–	–	–	–	24.10
	Poor	28.18	42.69	–	–	–	–	–	–	–	–
		32.88	–	49.68	–	–	–	–	–	–	–
		36.01	–	–	–	50.76	–	–	–	–	–
	Urban (very poor)	106.9	–	–	–	–	–	–	–	35.19	–
		172.0	–	–	–	–	–	–	–	–	29.21
		30.31	40.88	–	–	–	–	–	–	–	–
		35.36	–	37.41	–	–			–	–	–
		38.74	–	–	–	34.09	–	–	–	–	–
		115.0	–	–	–	–	–	–	–	23.64	–
		185.0	–	–	–	–	–	–	–	–	19.40
	Poor	33.91	48.89	–	–	–	–	–	–	–	–
		39.57	–	45.99	–	–			–	–	–
		43.34	–	–	–	42.55	–	–	–	–	–
	Monthly per capita consumption at 1984–85 prices.	128.6	–	–	–	–	–	–	–	30.95	–
		207.0	–	–	–	–	–	–	–	–	25.61
				(Percent of population)							
	Rural (very poor)	26.05	38.94	–	–	–	–	–	–	–	–
		30.39	–	45.62	–	–	–	–	–	–	–
		33.29	–	–	–	49.11	–	–	–	–	–
		98.84	–	–	–	–	–	–	–	32.51	–
		159.0	–	–	–	–	–	–	–	–	25.87
	Poor	28.18	44.97	–	–	–	–	–	–	–	–
		32.88	–	52.35	–	–	–	–	–	–	–
		36.01	–	–	–	55.66	–	–	–	–	–
		106.9	–	–	–	–	–	–	–	38.84	–
		172.0	–	–	–	–	–	–	–	–	31.45
	Urban (very poor)	30.31	44.53	–	–	–	–	–	–	–	–
		35.36	–	40.96	–	–	–	–	–	–	–
		36.74	–	–	–	38.76	–	–	–	–	–
		115.0	–	–	–	–	–	–	–	25.94	–
		185.0	–	–	–	–	–	–	–	–	21.17
	Poor	33.91	52.34	–	–	–	–	–	–	–	–
		39.57	–	49.79	–	–	–	–	–	–	–
		43.34	–	–	–	47.92	–	–	–	–	–
		128.6	–	–	–	–	–	–	–	33.70	–
		207.0	–	–	–	–	–	–	–	–	27.78
Akhtar (1988)	Monthly per capita expenditure based on 1959/60 estimates converted to 1979 prices										
	Rural	78.8	–	–	–	–	–	–	–	12.4	
	Urban	105.0	–	–	–	–	–	–	–	19.8	
	Punjab	112.6	–	–	–	–	–	–	–	35.1	
	Rural	107.5	–	–	–	–	–	–	–	35.3	
	Urban	105.3	–	–	–	–	–	–	–	35.1	

Contd.

Author	Poverty Line (Rs.)	Trends in Poverty 63\64	66\67	68\69	69\70	70\71	71\72	76/77	78\79	84\85
Sind	119.8	–	–	–	–	–	–	–	38.2	
Rural	104.8	–	–	–	–	–	–	–	40.3	
Urban	137.1	–	–	–	–	–	–	–	37.5	
NWFP	118.0	–	–	–	–	–	–	–	34.9	
Rural	115.7	–	–	–	–	–	–	–	35.1	
Urban	122.7	–	–	–	–	–	–	–	34.5	
Balouchistan	110.1	–	–	–	–	–	–	–	33.7	
Rural	100.8	–	–	–	–	–	–	–	36.3	
Urban	129.0	–	–	–	–	–	–	–	32.0	
Ercelawn (1988)										
Per capita annual expenditure for 2550 calorie/day/a.e. X .75; current prices.			(Percent of Household)							
Rural Rs.	324	–	–	–		–	25.0	–	–	–
	960	–	–	–	–	–	–	–	19.0	–
	1716	–	–	–	–	–	–	–	–	20.0
Urban Rs.	504	–	–	–		–	38.0	–	–	–
	1404	–	–	–	–	–	–	–	32.0	–
	2592	–	–	–	–	–	–	–	–	36.0
Ercelawn (1989)										
Per capita annual expenditure; current prices			(Percent of Household)							
Urban Rs. (a)	1584	–	–	–	–	–	–	–	38.0	–
	2748	–	–	–	–	–	–	–	–	37.0
Urban Rs. (b)	1524	–	–	–	–	–	–	–	36.0	–
	2436	–	–	–	–	–	–	–	–	32.0
Ercelawn (1990)										
Monthly Per capita expenditure consisitent with minimum intake of 2550 calories/day/adult equivalent; in current prices.			(Percent of Household)							
Punjab	150	–	–	–	–	–	–	–	–	21.0
Rural	150	–	–	–	–	–	–	–	–	13.0
Urban										
Sind	170	–	–	–	–	–	–	–	–	21.0
Rural	170	–	–	–	–	–	–	–	–	6.0
Urban										
NWFP	145	–	–	–	–	–	–	–	–	10.0
Rural	145	–	–	–	–	–	–	–	–	8.0
Urban										
Baluchistan	160	–	–	–	–	–	–	–	–	31.0
Rural	160	–	–	–	–	–	–	–	–	19.0
Urban										
Pakistan (average)	–	–	–	–	–	–	–	–	–	20.0
Rural	–	–	–	–	–	–	–	–	–	10.0
Urban									Contd.	

Author		Poverty Line (Rs.)	Trends in Poverty 63\64	66\67	68\69	69\70	70\71	71\72	76/77	78\79	84\85
Ahmad & Ludlow (1990)	Per capita monthly expenditure in 1979 prices.	Poverty Line (Rs.)	Trends in Povery 63\64	66\67	68\69	69\70	70\71	71\72	76/77	78\79	84\85
			(Percent of Household)								
	Rural	63.07									
		70.96	–	–	–	–	–	–	16.0	–	–
		78.84	–	–	–	–	–	–	22.0	–	–
		86.72	–	–	–	–	–	–	30.0	–	–
		80.0	–	–	–	–	–	–	37.0	–	–
		90.0	–	–	–	–	–	–	–	11.0	–
		100.0	–	–	–	–	–	–	–	17.0	–
		110.0	–	–	–	–	–	–	–	25.0	–
		126.2	–	–	–	–	–	–	–	32.0	–
		142.0	–	–	–	–	–	–	–	–	8.0
		157.8	–	–	–	–	–	–	–	–	14.0
		173.5	–	–	–	–	–	–	–	–	2.0
			–	–	–	–	–	–	–	–	26.0
	Urban	70.96	–	–	–	–	–	–	18.0	–	–
		78.84	–	–	–	–	–	–	22.0	–	–
		86.72	–	–	–	–	–	–	28.0	–	–
		94.61	–	–	–	–	–	–	34.0	–	–
		90.0	–	–	–	–	–	–	–	10.0	–
		100.0	–	–	–	–	–	–	–	14.0	–
		110.0	–	–	–	–	–	–	–	20.0	–
		120.0	–	–	–	–	–	–	–	25.0	–
		142.0	–	–	–	–	–	–	–	–	7.0
		157.8	–	–	–	–	–	–	–	–	11.0
		173.5	–	–	–	–	–	–	–	–	16.0
		189.3	–	–	–	–	–	–	–	–	20.0
			(Percent of population)								
	Rural	63.07	–	–	–	–	–	–	18.0	–	–
		70.96	–	–	–	–	–	–	25.0	–	–
		78.84	–	–	–	–	–	–	33.0	–	–
		86.72	–	–	–	–	–	–	41.0	–	–
		80.0	–	–	–	–	–	–	–	14.0	–
		90.0	–	–	–	–	–	–	–	21.0	–
		100.0	–	–	–	–	–	–	–	30.0	–
		110.0	–	–	–	–	–	–	–	38.0	–
		126.2	–	–	–	–	–	–	–	–	10.0
		142.0	–	–	–	–	–	–	–	–	16.0
		157.8	–	–	–	–	–	–	–	–	24.0
		173.5	–	–	–	–	–	–	–	–	31.0
	Urban	70.96	–	–	–	–	–	–	22.0	–	–
		78.84	–	–	–	–	–	–	27.0	–	–
		86.72	–	–	–	–	–	–	32.0	–	–
		94.61	–	–	–	–	–	–	38.0	–	–
		90.0	–	–	–	–	–	–	–	12.0	
		100.0	–	–	–	–	–	–	–	17.0	–
		110.0	–	–	–	–	–	–	–	23.0	–
		120.0	–	–	–	–	–	–	–	29.0	–
		142.0	–	–	–	–	–	–	–	–	8.0
		157.8	–	–	–	–	–	–	–	–	14.0
		173.5	–	–	–	–	–	–	–	–	20.0
		189.3	–	–	–	–	–	–	–	–	25.0

Contd.

Author		Poverty Line	Trends in Poverty							
		(Rs.)	63\64	66\67	68\69	69\70	70\71	71\72	76/77	78\79	84\85
Havinga, et al. (1990)	Monthly expenditure per adult equivalent consistent with 2000–2500 and 1500–2000 calorie per adult equivalent										
	Pakistan										
	Urban	312.6	–	–	–	–	–	–	–	–	49.1
		260.4	–	–	–	–	–	–	–	–	34.0 a
	Rural	214.4	–	–	–	–	–	–	–	–	36.2
		179.8	–	–	–	–	–	–	–	–	20.3
	Total	248.8	–	–	–	–	–	–	–	–	44.7
		241.3	–	–	–	–	–	–	–	–	31.4
			(Percent of Household)								
	Pakistan										
	Urban	312.6	–	–	–	–	–	–	–	–	42.0
		260.4	–	–	–	–	–	–	–	–	28.3
	Rural	214.4	–	–	–	–	–	–	–	–	30.2
		179.8	–	–	–	–	–	–	–	–	16.3
	Total	248.8	–	–	–	–	–	–	–	–	38.6
		241.3	–	–	–	–	–	–	–	–	26.3
			(Percent of adult equivalent)								
	Pakistan										
	Urban	312.6	–	–	–	–	–	–	–	–	48.5
		260.4	–	–	–	–	–	–	–	–	33.4
	Rural	214.4	–	–	–	–	–	–	–	–	35.8
		179.8	–	–	–	–	–	–	–	–	20.1
	Total	248.8	–	–	–	–	–	–	–	–	44.3
		241.3	–	–	–	–	–	–	–	–	31.0
	Punjab										
	Urban	269.5	–	–	–	–	–	–	–	–	42.9
		210.5	–	–	–	–	–	–	–	–	24.5
	Rural	206.2	–	–	–	–	–	–	–	–	34.4
		163.9	–	–	–	–	–	–	–	–	16.8
	Total	227.3	–	–	–	–	–	–	–	–	40.4
		181	–	–	–	–	–	–	–	–	21.0
	Sind										
	Urban	384.0	–	–	–	–	–	–	–	–	55.8
		297.4	–	–	–	–	–	–	–	–	35.1
	Rural	222.2	–	–	–	–	–	–	–	–	36.3
		210.6	–	–	–	–	–	–	–	–	30.5
	Total	307.9	–	–	–	–	–	–	–	–	55.6
		268.3	–	–	–	–	–	–	–	–	43.1
	NWFP										
	Urban	322.8	–	–	–	–	–	–	–	–	48.8
		313.2	–	–	–	–	–	–	–	–	49.9
	Rural	230.0	–	–	–	–	–	–	–	–	32.8
		213.7	–	–	–	–	–	–	–	–	25.9
	Total	244.7	–	–	–	–	–	–	–	–	38.1
		235.9	–	–	–	–	–	–	–	–	34.0

Contd.

Author		Povert Line	Trends in Poverty								
		(Rs.)	63\64	66\67	68\69	69\70	70\71	71\72	76/77	78\79	84\85
	Baluchistan										
	Urban	289.2	–	–	–	–	–	–	–	–	44.7
		228.1	–	–	–	–	–	–	–	–	29.0
	Rural	241.3	–	–	–	–	–	–	–	–	48.2
		157.7	–	–	–	–	–	–	–	–	12.2
	Total										
		247.3	–	–	–	–	–	–	–	–	48.5
		164.5	–	–	–	–	–	–	–	–	13.9
Zaidi (1992)											
	75% of the national average of equivalant expenditure				(Percent of Household)						
	Overall	255	–	–	–	–	–	–	–	–	38.7
	Punjab	255	–	–	–	–	–	–	–	–	42.8
	Sind	255	–	–	–	–	–	–	–	–	28.8
	NWFP	255	–	–	–	–	–	–	–	–	34.5
	Balouchistan	255	–	–	–	–	–	–	–	–	45.3
	75% of the national average of equivalant income										
	Overall	276	–	–	–	–	–	–	–	–	43.0
	Punjab	276	–	–	–	–	–	–	–	–	48.4
	Sind	276	–	–	–	–	–	–	–	–	36.0
	NWFP	276	–	–	–	–	–	–	–	–	40.4
	Balouchistan	276	–	–	–	–	–	–	–	–	45.9
Zaidi (1993)											
	Average equivalent expenditures (Aee) Column 1: (Aee) 2, 3, 4: poverty percentage at (50, 66.7 & 75%) cut off				(percent of population) 1987–88						
	Overall	1	2	3	4						
	Punjab	551	10.7	31.2	41.9	–	–	–	–	–	–
	Sind	544	13.2	34.4	44.2	–	–	–	–	–	–
	NWFP	577	6.0	24.9	36.8	–	–	–	–	–	–
	Balouchistan	543	9.0	30.0	41.8	–	–	–	–	–	–
		524	3.7	21.7	38.1	–	–	–	–	–	–
	Average equivalent income										
	Overall	512	10.1	29.2	39.0	–	–	–	–	–	–
	Punjab	495	12.4	33.1	42.5	–	–	–	–	–	–
	Sind	567	5.1	20.6	30.8	–	–	–	–	–	–
	NWFP	488	10.2	30.0	41.0	–	–	–	–	–	–
	Baluchistan	535	2.9	15.3	25.6	–	–	–	–	–	–

Table: 3.2–Headcount(P_0), poverty gap(P_1), Foster–Greer–Thorbecke poverty

	Measure(P_α) (1984–85 and 1987–88)						
Provinces	1984–85	1987–88	1984–85	1987–88	1984–85	1987–88	1984–85 to 1987–88
Pakistan	P_0		P_1		P_2		Kakwani's Test stat(P_α)
Overall	0.183	0.131	0.034	0.021	0.010	0.005	444.12
Rural	0.211	0.155	0.040	0.027	0.012	0.007	428.67
Urban	0.111	0.068	0.019	0.009	0.006	0.003	161.14
Punjab							
Overall	0.190	0.139	0.038	0.024	0.012	0.007	349.79
Rice/Wheat							
Rural	0.143	0.082	0.025	0.012	0.008	0.003	144.28
Urban	0.074	0.050	0.010	0.007	0.002	0.001	47.01
Mixed							
Rural	0.227	0.159	0.047	0.027	0.015	0.007	184.84
Urban	0.190	0.127	0.038	0.019	0.011	0.004	91.31
Cotton/Wheat							
Rural	0.293	0.220	0.059	0.040	0.018	0.011	249.41
Urban	0.223	0.106	0.045	0.012	0.014	0.003	130.02
Low Intensity							
Rural	0.280	0.271	0.061	0.050	0.019	0.013	91.22
Urban	0.191	0.176	0.034	0.044	0.010	0.013	12.22
Barani							
Rural	0.057	0.039	0.009	0.005	0.003	0.001	29.13
Urban	0.013	0.023	0.001	0.003	0.000	0.001	2.64
Sind							
Overall	0.153	0.126	0.026	0.017	0.007	0.004	137.34
Cotton/Wheat							
Rural	0.205	0.189	0.034	0.027	0.009	0.007	86.48
Urban	0.107	0.085	0.019	0.012	0.005	0.003	32.08
Rice/Other							
Rural	0.243	0.206	0.043	0.027	0.0012	0.005	110.94
Urban	0.059	0.029	0.085	0.004	0.002	0.001	51.72
NWFP							
Overall	0.096	0.085	0.016	0.012	0.005	0.003	58.88
Other NWFP (except D.I.Khan)							
Rural	0.091	0.082	0.015	0.012	0.005	0.003	47.85
Urban	0.070	0.070	0.011	0.008	0.003	0.001	11.25
Baluchistan							
Overall	0.275	0.073	0.049	0.011	0.014	0.003	262.94
Rural	0.185	0.080	0.051	0.012	0.015	0.003	255.04
Urban	0.170	0.23	0.030	0.001	0.007	0.001	57.76

Source: S.J. Malik (1991)

Table: 3.3 Incidence of Poverty in Developing World (1985)

Region	Extremely poor			Poor (including extremely poor)		
	Number (millions)	Headcount index (percent)	Poverty gap	Number (millions)	Headcount index (percent)	Poverty gap
Sub–Saharan Africa	120	30	4	180	47	11
East Asia	120	9	0.4	280	20	1
China	80	8	1	210	20	3
South Asia	300	29	3	520	51	10
India	250	33	4	420	55	12
Eastern Europe	3	4	0.2	6	8	0.5
Middle East & North Africa	40	21	1	60	31	2
Latin America & the Caribbean	50	12	1	70	19	1
All developing countries	633	18	1	1,116	33	3

Note: Poor were those, who had annual per capita income below US $370 and extremely poor were those, who had annual Income per capita below US $ 270.
Sources: World Bank, World Development report (1990)

Table 3.4: Changes in selected indicators of poverty in developing World

		Headcount index		Number of poor (millions)		Average income shortfall (percent)	
	Length of	First	Last	First	Last	First	Last
Country & period	Period	year	year	year	year	year	year
Brazil (1960–80)	20	50	21	36.1	25.4	46	41
Colombia (1871–88)	17	41	25	8.9	7.5	41	38
Costa Rica (1971–86)	15	45	24	0.8	0.6	40	44
India (1972–83)	11	54	43	311.4	315.0	31	28
Indonesia (1970–87)	17	58	17	67.9	30.0	37	17
Malaysia (1973–87)	14	37	15	4.1	2.2	40	24
Morocco (1970–87)	14	43	34	6.6	7.4	46	36
Pakistan (1960–84)	22	54	23	26.5	21.3	39	26
Singapore (1972–82)	10	31	10	0.7	0.2	37	33
Sri L... • . (1963–82)	19	37	27	3.9	4.1	35	29
Thailand (1962–86)	24	59	26	16.7	13.6	–	35

a. Measures for this entry use income rather than expenditure.

b. Measures for this entry are by household rather than by household member.

Source: World Bank, World Development Report (1990)

Table 3.5: Changes in poverty during 1980s in the developing world.

Country and period	Length of period (years)	Headcount index		Number of poor (millions)		Income shortfall (percent)	
		First year	Last year	First year	Last year	First year	Last year
Brazil(1981–87)	6	19	24	23.1	33.2	–	–
China(1985–88)	3	10	14	79.2	101.3	25	24
Colombia (1978–88)	10	24	25	6.0	7.5	36	38
costa Rica (1977–83)	6	29	36	0.6	0.9	44	39
Costa Rica (1983–86)	3	36	24	0.9	0.6	39	44
Cote d'Ivoire (1985–86)	1	30	31	3.1	3.3	33	26
India (1977–83)	6	50	43	324.9	315.0	29	28
Malaysia (1984–87)	3	28	17	45.4	30.0	24	17
Pakistan (1979–84)	3	15	14	2.3	2.2	26	24
Polan (1978–87)	5	21	20	17.1	18.7	19	19
Thailand (1981–86)	9	9	23	3.3	8.6	–	–
Venezuela (1982–87)	5	20	26	9.5	13.6	27	35
Yugoslavia (1978–87)	5	12	16	1.9	3.0	26	31
	9	17	25	3.8	5.7	–	–

a. Measures for this entry use income rather than expenditure.

b. Rural only.

c. Measures for this entry are by household rather than by household members

Source: World Bank, World Development Report (1990)

Chapter - 4

METHODOLOGY AND DATA

The first step towards the measurement of poverty is the setting of the poverty line. A number of ways of determining the poverty line are available. However, we shall discuss a few and then explain the one which is used in this study. As the problem of poverty in a developing country like Pakistan is that of absolute poverty, we shall be mainly concerned with the determination of the absolute poverty line in this chapter.

Determination of Absolute Poverty Line

Different methods and approaches have been used by different researchers for the determination of absolute poverty line. Some of these approaches are explained below.

i. The Basic Needs Approach

The basic needs approach has been used for the determination of poverty lines by researchers like Booth (1892), Rowntree (1901), and Orshansky (1965, 1968). Rather than determining the total consumption of a household, or accepting a proxy measure for this concept, households are defined as poor according to this approach if their food, clothing, medical, educational and other needs are not fulfilled.

The researchers have made no attempt to aggregate the various aspects of basic needs into a single welfare indicator, because such an aggregation usually complicates the classification of households as poor and non poor. The usual procedure adopted in this approach is to estimate the cost of minimum food requirements, and then to use the cost of food as the basis for the poverty line defined in income terms. However, there are certain problems which are faced when this approach is used. Some of the problems are concerned with the distinction between

the basic needs and the non-basic ones. The other problems are concerned with the correct definition of food and calculation of its appropriate cost and then transformation of this cost into an appropriate income level defined as the poverty line. Usually the cost of food is multiplied by the inverse of the average Engel Coefficient of the society concerned. The cost of food multiplied by the inverse of the average Engel Coefficient, is a number indicating the proportion of total income spent on food, which can be defined as a poverty line in terms of income. The researchers have faced serious problems, while using this approach. One of them is that the level of the poverty line, determined through this approach, is extremely sensitive to the exact value of the coefficient used. The studies of the Engel function of food expenditures show that the estimated coefficient may vary considerably over different surveys. Orshansky found values of 0.25 and 0.33 in different surveys; if the former would have been used instead of the latter, the poverty line would have increased by one third. Moreover, the estimated coefficients may vary according to season (see Brown 1954). However, the advantages of the method are: that (1) no choice has to be made of the items to be included (2) no fixed consumption pattern is imposed, apart from the initial diet. Another problem with the basic need approach is the subjectivity which is involved in determining adequate levels of health care, housing, education etc.

ii. The Food Ratio Approach

The Food ratio approach has been developed by some researchers. This approach takes food as the basis for determining absolute poverty line. The poverty line is derived from the Engel function in this approach. A certain food-income ratio is taken in this approach to be the poverty threshold. The families with an actual food-income ratio higher than this threshold are considered to be poor, and families with a lower food-income ratio are considered to be non-poor. This approach was proposed by Watts (1967). This approach is applied and discussed by a number of researchers. Among these are: love and Oja (1975), Rosenthel (1969), Deaton

and Muelbauer (1980), Grootaerts (1981), VanPraag, Spit and Van de Shadt (1982), Bardhan (1970) and Dandekar and Rath (1971). Dandekar and Rath employed a somewhat unusual variant of this approach, by drawing poverty lines as the level of total consumption expenditure at which a diet of the required calorie content is actually consumed, without specifying its cost. There are certain advantages of this approach. In this approach the problem of defining minimum nutritional needs is avoided. An appealing property of the food ratio as a welfare indicator is that there is no need to adjust for household size. Thomas (1986), as cited by Glewwe and Gaag (1990) has found that Engel's observation may not always hold for the poorest households in developing countries. In this way, in general this welfare indicator loses much of its attraction as a determinant of poverty.

iii. The Calorie Intake Approach

Food consumption data could be used to directly focus on calorie intake. Ercelawn (1990) is of the view that a food adequacy standard of welfare would be the most useful approach for determining absolute poverty. Food adequacy is identified primarily with the satisfaction of nutritional requirements, which can also be called calorie requirements. Calorie requirements are, therefore, suggested as the basis for defining a poverty criterion. Use of calories norm, as the basis for poverty line determination, is not without problems. The calories requirements not only

differ from country to country but also from person to person. These vary with age, sex and body-weight of the individual. These may also vary with work-related and other activities of the individual and with climatic conditions.

Sukhatme (1982) writes that "in tropical coastal areas like Kerala external temperatures are close to body temperature, heat dissipation is negligible and body weight can be maintained at relatively lower intakes (of dietary energy). In cold places, even with warm garments,

persons dissipate body heat through breathing and body-weight has to be maintained (by) higher intakes". Therefore, fewer food calories are needed in hot climates. Similarly hard work raises caloric needs [see Lipton (1983)]. In fact, for any single individual in a given region, the needs are hard to specify with precision. Any set of norms chosen would have to be arbitrary to some extent. However, the HIES data allow us to adjust caloric needs for age and sex. Setting up nutritional norm is basically the job of nutritional experts and they have tried to set up nutritional norms from time to time that would ensure normal health as defined by them. We have to rely on them and respect their judgements. Khan and Khan (1985) have suggested 2550 calories per day per adult equivalent as the minimum requirement for the Pakistani population.

Greer and Thorbecke (1986) developed the methodology of food poverty. They defined food poverty "generally as a condition of lacking the resources necessary to acquire a nutritionally adequate diet". The food poverty line, they adopted, is the minimum food expenditure necessary for a person with the accepted and typical regional food consumption pattern to consume a nutritionally adequate diet. According to Ercelawn (1990) a suitable definition of poverty rests on the concept of necessary minimum resources to acquire a socially acceptable food bundle that would provide the required calories (at the very least)". As calorie requirements are suggested

for defining a poverty criterion in terms of the ability to obtain these requirements, the possible poverty criterion is in the form of the typical food expenditure corresponding to average calorie requirements. This criterion does not pre-impose a researcher's subjective notion of what constitutes a palatable, but inexpensive diet. Therefore, it is more appropriate to derive the food expenditure criterion from the calorie - expenditure relationship in the population. Given information on food expenditure and calorie consumption, it is possible to estimate the cost of acquiring a given number of calories by using the cost-of-calories function.

Several factors support this approach. Low-income households' efforts are mostly concentrated on earning income for the sake of procuring necessary food. This is reflected in the fact that the share of expenditures devoted to food consumption in total expenditures may be as high as 70 percent or more in these households. Hence, if the poor can be identified by using the food consumption approach, it is highly probable that they may belong to a poverty group that could be identified using general basic needs approach.

Food poverty approach has certain advantages. It is simple to define, what constitutes food and therefore it is easy to determine the food poverty line. This approach requires less data than other approaches. The data on food expenditures are generally more reliable because of the respondents can easily recollect these as compared to data on non-food expenditures. Another advantage of this approach is that food prices are readily available in the households survey data itself. Consequently it becomes easier to make poverty comparison on the basis of reference consumption bundles. However, non food needs are not taken care of by this approach.

In order to incorporate non-food needs, the relationship between calorie intake and total consumption expenditure (food and non-food) can be used. This method has been widely used in the recent research studies on poverty. A few among those are Osmani (1982), Naseem (1977), Ercelawn (1990), Malik, S.J. (1991) and Havinga, et al. (1990). Havinga, et al. (1990) has noted that calorie intake has become an accepted methodology in case of Pakistan because data are easily available, and threshold calories intakes have already been determined.

The Poverty Determination Approach Used in this Study

In our study we have used both food and non-food needs for determining the poverty line. We have estimated the relationship between calorie intake and total consumption expenditures for arriving at absolute poverty line.The relationship between calorie intake and

total consumption expenditure is expressed in the following functional form:

$$C = \alpha + \beta \ln E$$

where C is a daily calorie intake per adult equivalent and E is monthly consumption expenditure per adult equivalent. The details regarding the determination of poverty lines used in this study are discussed in chapter 5. Prais and Houthakker (1955), while analysing family budgets of U.K., conclude that the semi-logarithmic function like the one given above, gives the best results, as far as food items are concerned. This functional form makes it possible for a commodity to appear as a luxury at low income (expenditure) levels, and as a necessity at higher income (expenditure) levels. Ercelawn (1990) used three different functional forms, and he came to the conclusion that the above mentioned semilog function fits best to HIES 1984-85 data. Other researchers, who estimated the Calorie-expenditure relationship [for example Havinga, et al. (1990), Mahmood, et al. (1991).] have also used this functional form. However, this form does not give elasticities directly, but one has to compute these indirectly.

After estimating the poverty line, the next step is to measure the incidence of poverty.

The Measurement of Poverty

After having decided the threshold expenditure (income), the next step is to see how many people are below the poverty line and how severe is poverty. The following is the most commonly measure of poverty :

$$H = \frac{q}{n}$$

where H is the proportion of persons below the poverty line and q is the number of poor and n is the total population.

This measure has been used for comparison overtime and across regions and countries. It counts the number of the poor, but it ignores the intensity of poverty. Another commonly used measure of poverty is the poverty gap. The poverty gap measures the total amount of income or expenditure which is necessary to bring the level of living of those below the poverty line upto the line concerned.

Altimir (1982) mentioned some of the poverty gap indices are discussed below. The various abbreviations used in the measures of these indices are:

n: The total population

z: The threshold income

q: The number of poor persons

m: The average income of the poor

m^*: The average income of the population

Y_i: The income of the individual i

C_i: The consumption by the individual i

The measurement of the incidence of poverty as explained earlier is given by:

$$H = \frac{q}{n}$$

The poverty gap for each individual i, g_i can be given in the following way:

$$g_i = z - Y_i$$

The aggregate poverty gap, T, can be measured in the following way:

$$T = \sum_{i=1}^{q} g_i = q(z-m)$$

This measure does not show the number of the poor persons, but it only gives the aggregate income shortfall of all the poor taken as a group.

Another poverty index, I, as used by Altimir is:

$$I = \frac{T}{qz} = \frac{Z-m}{Z}$$

This index shows the average income shortfall of the poor as a group with respect to the poverty line. Altimir combined the index H and I as P. where

$$P = H \times I = \frac{q}{n} \frac{Z-m}{Z} = \frac{T}{nz}$$

P gives the aggregate income gap of the poor and it is expressed as a fraction of the total income, which is required to maintain the entire population at the acceptable minimum level of income (expenditure) represented by the poverty line. This index takes into consideration both the proportion of the poor within the population (H) and their average income gap (I).

Altmir believes that it would be appropriate to express the poverty gap as a fraction of total household income, M, which he has given as:

$$M = \frac{T}{nm^*} = \frac{Z}{m} P$$

Fishlow (1972) computed the following, F, index to measure poverty gap:

$$F = \frac{T}{nm^* - qm}$$

This index expresses the poverty gap as a percentage of the total income of the non-poor.

The poverty gaps thus defined face the following two problems:

1. These measures are completely insensitive to the number of poor

2. These measures do not take into account the income inequality prevailing among the poor. One can conceive of a situation, where all the poor persons have incomes or expenditures close to the threshold level or a situation, where some of them have incomes (expenditures) far below the threshold.

Sen (1976) has mentioned two properties which are desirable for any poverty measure. In this connection he has mentioned the following two axioms.

1. Monotonocity axiom: This axiom points out that other things remaining the same, a reduction in the income of any poor household will increase the poverty measure and vice versa.

2. Transfer axiom: This axiom describes that other things remaining the same a transfer of income between two poor households or persons - from a poorer household to a richer one - should increase the poverty measure, and vice versa.

Sen has derived a poverty index which combines the head-count ratio, poverty gap ratio and the income inequality prevailing among the poor. This index which he calls, S, is given as follows:

$$S = F(Z)\,[Z-U^{*}(1-G^{*})]/Z$$

where

$F(Z) = H$, i.e. head count ratio.

U^{*}: is the mean income of the poor.

G^{*}: is the Gini index of the income distribution among the poor.

The index S would be zero, where no body is below the poverty line and it would be unity when every one in the population is below the poverty line and has zero income. G^{*} is zero where there is no inequality among the poor and S will be equal to the product of two poverty indices, viz; the percentage of the poor and the poverty gap. Thus S is sensitive to three factors, i.e. the head count ratio, the poverty gap and the inequality of income among the poor. These three factors are the crucial indicators of the aggregate poverty.

Kakwani (1980a) proposed an axiom as an alternative to that proposed by Sen. This index makes an individual i's sense of deprivation to depend on the actual income enjoyed by those, who are richer than i but still belong to the category of the poor. He defines this index, K, as given below:

$$K = F(Z)[Z - U^{*}/(1+G^{*})]/Z.$$

Index K has the same properties as S. But the two indices differ with respect to their characterization of the relative deprivation among the poor. K focuses on income, while S on persons (see Kakwani 1986, Ch.13).

Clark, Hemming and Ulph (1981) obtain a poverty index, P, following a welfare based approach, employing the group welfare function, which is additively separable in individual welfare.

$$P = 1-\{g/n\,[Y^{\wedge}_{EDE}\,P/z]^{\beta} + (1-g/n)^{1/\beta}$$

where $Y^{\wedge}_{EDE}$ P is equally distributed equivalent income of the poor, according to an Atkinson social evaluation function, defined over the poor only. Z is the poverty line, g is the number of poor and n stands for the number of person in population.

Sen (1973) has discussed the restrictions implied by additive separability i.e. that the relative social valuation of the incomes of two individuals is independent of the levels of any other incomes and has come to the conclusion that it reflects a shortcoming of this index.

Foster, Greer and Thorbecke (FGT) (1984) proposed a class of additively decomposable measures of poverty, which have lately been quite widely used. The FGT poverty measures can be given by the following expression:

$$P_{\alpha} = \frac{1}{n}\sum_{j=1}^{q}\left(\frac{g_j}{z}\right)^{\alpha}$$

where $g_j = z-y_j$ is poverty gap for individual j, y_j is the consumption (income) per capita for the jth person (household), where person (households) are ranked in ascending order of consumption (income) and g_j/Z is the poverty gap ratio.

FGT poverty measures vary with a "poverty aversion" parameter, α, that contains a number of other commonly used poverty measures as special cases.

For $\alpha = 0$, the FGT poverty measure simply becomes the head count index i.e.

$P_o = q/n$

If the measure for $\alpha = 1$ then the above expression shows the average poverty gap in the

population, expressed as a proportion of the poverty line i.e.

$$P_1 = \frac{1}{n}\sum_{j=1}^{q}\frac{g_j}{z}$$

If $\alpha = 2$ then the FGT measure is sensitive to the distribution of income among the poor. It satisfies the main axioms for a desirable poverty measure defined in Sen (1976).

FGT maintain that "The Monotonicity Axiom holds for $\alpha > 0$ by the fact that g_j increases as y_j falls. To verify the transfer axiom, note that any transfer from a poor household to a richer one may be viewed as some combination of the following two types of "regressive" transfer: (i) from a poor household to another poor household that stays poor, or (ii) from a poor household to a household at or above the poverty line. The strict convexity of P_α in the vector of poor incomes for $\alpha > 1$ covers (i), while transfer of the form (ii) increases P_α by inspection".

The FGT measure, P_α, is decomposable and therefore, it can be a base for developing a detailed socioeconomic profile of the poor. The decomposability procedure is given below: population is split into m subgroups ni (i = 1, ...m)
such that

$$n = \sum_{i=1}^{m} n_i$$

The FGT Class of measures can be then written as:

$$P_{\alpha} = \frac{1}{n}\sum_{i=1}^{m} \frac{P_{\alpha i} n_i}{n}$$

and it gives population weighted mean of the sub-group poverty index $P_{\alpha i}$, where

$$P_{\alpha i} = \frac{1}{n_i}\sum_{j=1}^{qi} \left(\frac{g_{ij}}{z}\right)^{\alpha}$$

In this expression $g_{ij} = Z\text{-}Y_{ij}$ and it represents the poverty gap for the jth household in subgroup i. The class of FGT measures is sub group monotonic. An increase in poverty in any group, while the rest remaining unchanged, will increase the overall poverty measure. This is, thus, the requirement of the axiom that sub group and overall poverty move in the same direction.

The FGT poverty measures have the advantage over Sen's poverty measure because of additive decomposability and sub group consistency. Therefore, Sen's measure or its variants are not well suited for poverty analysis of subgroups. Since the FGT class of measures also comprise of other measures as a special case, it has all the desirable axioms of a poverty measure and it is also additively decomposable. We will rely on this measure of poverty in our study.

The FGT measures of poverty are now extensively used in empirical studies. Malik, S.J.(1991,1992) and Zaidi (1992) have applied these measures to Pakistani data in their studies.

Infaq

After estimating the incidence of poverty and the socioeconomic profiles of the poor, our

next step will be to determine the role of 'infaq' in alleviating poverty in Pakistan. Since 'infaq' is one of the sources of income of the poor households in Pakistan, we plan to apply FGT poverty measures, before and after including this source, to their incomes. The difference in results would indicate the effect of 'infaq'.

Unit of Analysis

In our study, the unit of analysis would be the household as well as the population. However, for detailed analysis, the household would be selected as a unit of analysis. Because the households differ in size, age and sex composition, hence cross-household comparisons are difficult to make. Therefore, there is a need to convert the size of the households into adult equivalence scales.

Equivalence Scales

Atkinson (1991) points out that "Equivalence scales may be relevant even on an individual basis, if we wish to make allowance for differing needs according to age, degree of handicap, and so on".

Wasay (1977) adjusted the household composition into adult equivalence as follows:

$AF = x_1 + 0.8\, x_2 + 0.7\, x_3$. Where x_1 is the number of earners in the household, x_2 is the number of other adults and x_3 is the number of children less than ten years old.

Zaidi and De. Vos (1993) used three types of adult equivalence scales. The first one was that originally devised by OECD (1982). This scale implies that for every additional adult a household needs 0.7 times the resources of the first adult and for all children younger than 14 it needs 0.5 times the resources of the first adult, to be on the same welfare level. They modified the OECD equivalence scale as their second scale, which states that additional adults and children below 14 need 0.5 and 0.3 times the resources of the first adult to be on the same

welfare level. The third scale was that of Wasay. The authors' sensitivity analysis with respect to their different scales did not show any significant change in the results. They point out that "We may conclude that the equivalence scales in question yield marginally different poverty rates and only slightly affect the compositions of the population of poor in Pakistan".

Ercelawn (1990) used the equivalence scale based on the age and gender specific calorie requirements. The caloric requirement for a male adult between the ages of 20 and 39, engaged in moderate activity, is 2550. The coefficients for age and sex were the calorie requirements in each divided by 2550.

One can use any scale to adjust the household size because different scales only marginally affect the results as is pointed out by Zaidi and De. Vos (1993).

For our study, we would utilize the equivalence scale used by Ercelawn because for calculating calorie needs of the households such a measure of adult equivalence is directly applicable.

We can write the equivalent scale as follows:

$$\sum_{i-1}^{n} \alpha_i W_i$$

where α_i is the number of members of a household in each age group "i", w_i is the weight/coefficient based on the calorie requirements of the particular age group divided by the 2550.

Choice of Expenditure or Income as a Poverty Indicator

Most of the earlier studies, related to the analysis of poverty, used expenditure as the threshold level and only a few worked with income. The use of expenditure as a proxy for income is more reliable particularly in the developing countries, where people do not declare their true income. Therefore to find the incidence of poverty using a threshold in terms of income, does not represent the true picture. Ahmad and Ludlow (1990) point out that "identification of the poor in terms of their income is fairly nebulous concept that is poorly correlated with living standard." They further state that it is meaningful and preferable to supplement poverty estimates based on income by those based on expenditures. Havinga, et al. preferred to work with expenditure data, because the expenditure data of Pakistan were found to be more reliable as compared to incomes data.

Zaidi and De. Vos (1993) estimated the extent of poverty utilizing both income and expenditure data. However, they did not feel comfortable with the use of income data. They have stated that "despite the doubts on the reliability of the income data we will also present poverty statistics based on income as a measure of (household) resources". Some researchers have also expressed an opposite view, which favours the use of income rather than expenditure data. For example Chaudhary (1992) maintained that in Pakistan a large proportion of population was maintaining an artificially higher standard of consumption than their current income level. Consequently any estimate of poverty in terms of consumption expenditure will understate the extent of poverty. "Therefore, it may be appropriate if estimate of poverty based on consumption expenditure are supplemented by similar estimates derived from household income data".

In developed countries, most of the poverty studies are based on total income rather than on expenditure. For example, Atkinson (1991) has expressed his views that "people may choose a low level of consumption, whereas income is closer to a measure of the opportunity open to

a family and not influenced by the consumption decision made: the concern then is with the budget constraint not with consumption choices".

In our study the use of consumption expenditure as a threshold level has been preferred because of the reliability of data. Since one of the objectives is to find the impact of 'infaq' on poverty alleviation and data on 'infaq' are available in terms of income only, there was no choice except to use income as a poverty indicator along with the expenditure.

Determinants of Poverty

Since we are concerned with zero - one category of dummy variable, when we consider a household to be poor or otherwise. In case of such qualitative dependent variable, there are certain difficulties and problems in the use of standard regression procedures (see judge, et al. 1980 p.587). To overcome these problems, usually a linear probability model is used in cases like ours. However, such a model violates the properties of the disturbance term. In cases like ours the use of logit model or the probit model seems to be more appropriate.

Logit and Probit Models

Both the models are used to solve the above mentioned problems. Probit model is based on cumulative normal probability function, while the Logit model is based on the cumulative logistic probability function. For practical purposes, there is usually little difference between the results from these two models, but the Logit model is easier to work with. As pointed out by Eatwell, et al. (987), "Indeed, the inferences drawn from the two methods applied to the same data are invariably similar, and even parameter estimates from the two models will agree, approximately, up to a factor of proportionality. (Logit coefficients tend to exceed probit coefficients by a scale factor in the range 1.6 to 1.8). A choice between the two models, therefore, is not an important one and may often be ruled by convenience factor".

Keeping in view the lower computing cost of the logit model, this model has been used in our study. The specification of the Logit model is

$$p_i = F(Z_i) = F(\alpha + \beta x_i) = \frac{1}{1+e^{-Z_i}} = \frac{1}{1+e^{-(\alpha+\beta x_i)}} \quad (1)$$

Where p_i is the probability that a household will be poor given x_i, where x_i a vector of explanatory variables. e is the base of natural logarithm.

Multiplying both sides of the equation (1) by

$$(1+e^{-z_i})$$

we get

$$(1+e^{-z_i})(p_i) = 1 \qquad (2)$$

dividing by P_i, and then subtracting 1 we get

$$e^{-z_i} = \frac{1}{p_i} - 1 = \frac{1-p_i}{p_i}$$

By definition

$$e^{-z_i} = \frac{1}{e^{z_i}}$$

So that

$$e^{z_i} = \frac{p_i}{1-p_i}$$

Taking Logirthms of both the sides we obtain

$$Z_i = Log \frac{p_i}{1-p_i}$$

or from (1)

$$Log \frac{p_i}{1-p_i} = Z_i = \alpha + \beta x_i \qquad (3)$$

The ratio

$$\frac{p_i}{1-p_i}$$

is called the odd ration. And

$$Log \frac{p_i}{1-p_i}$$

is called Log-odds or Logit which acts as dependent variable. This ratio will give us the odds that the household is poor. Equation (3) has the feature that the predicted value of the probability will fall with in a (0,1) interval.

Data Source

Our results will be derived from the data given in "Household Income and Expenditure Survey (HIES)" 1987-88. These were the latest available data on tapes at the time of study. The HIES is conducted by the Federal Bureau of Statistics, Statistics Division, Government of

Pakistan, on an annual basis covering both rural and urban areas in four provinces of Pakistan except the Federally Administered Tribal Areas (FATA), Military restricted areas and districts of Kohistan, Chitral and Malakand, and protected areas of NWFP Moreover, the households entirely dependent on charity are excluded from this survey. However, households located in institutions such as hotels, hostels, hospitals, boarding houses etc. are included in the survey.

Sample Size and Allocation

In the HIES for 1987-88 a sample of 18144 households[1], called the Secondary Sampling Units (SSU), was taken. The entire sample of households (SSU), for the whole year is drawn from 1403 Primary Sampling Units (PSU), out of which 755 are rural and 648 are urban.

The PSUs are grouped into four parts, each containing 351 PSUs except the last one, which contains 350 PSUs. The sample households are allocated to the four provinces in proportion to their population as given in 1981 Population Census. The distribution of PSUs and SSUs is given below:

Province	No. of Sample PSUs			No of Sample SSUs		
	Total	Urban	Rural	Total	Urban	Rural
Punjab	756	316	440	9796	4100	5696
Sind	348	196	152	4509	2546	1963
NWFP	200	92	108	2566	1180	1386
Baluchistan	99	44	55	1273	557	716
Total	1403	648	755	18144	8383	9767

[1] Household, in the survey, may consist of a single person living alone or a group of persons who normally live and eat together while eating together implies common cooking arrangements.

Sample Design

Federal Bureau of Statistics has developed its own sampling frame in urban areas. Each city or town has been divided into blocks of approximately 200 to 250 households. These blocks are known as the enumeration blocks. The list of villages, as published by Population Census Organisation in 1981, have been taken as the sampling frame for drawing the sample from rural areas.

Two stage stratified sample design is adopted both for rural and urban areas. Cities having population of 5 lakhs and above have been treated as self-representing cities. These cities are Karachi, Lahore, Gujranwala, Faisalabad, Rawalpindi, Multan, Hyderabad, Peshawar, Islamabad and Quetta. Islamabad and Quetta are selected on the basis of being the Federal and Provincial capitals. Each of these cities is a separate stratum and it is also further stratified according to low, middle and high income groups based on the information collected in respect of each Enumeration Block.

After excluding population of Self-Representing Cities from the respective districts, the remaining urban population in each district of NWFP, Sind and Punjab Provinces and in each Division of Baluchistan province has been grouped together to form stratum, i.e. a Division in Baluchistan and a district in other three provinces constitute a stratum for urban population.

Rural population of each district in Punjab, Sind and NWFP Provinces have been grouped together to form a stratum. For Baluchistan province, Division has been treated as a stratum.

Selection of Primary Sampling Units

Enumeration Blocks of the urban sampling frame and Mouzas/Dehs/Villages of the rural sampling frame are taken as urban and rural primary sampling units (PSUs) respectively. Four interpenetrating sub-samples of equal number of PSUs, are selected from each rural and urban ultimate stratum of a province with probability proportional to size of the households in case of urban PSUs and the size of population of the 1981 Population Census in case of rural PSUs.

Selection of Secondary Sampling Units (SSUS)

Households within the entire sample have been taken as secondary sampling units (SSUs). Sample households have been selected by the method of systematic sampling technique with a random start.

Sample Covered

All enumeration blocks in urban areas were enumerated. In case of rural areas one village of Baluchistan province was dropped.

Contents of Survey

HIES data were collected using 28 page questionnaire covering detailed items of households income and expenditure.

Household income in HIES was taken as a return in cash or in kind in exchange for goods and services accruing to household earners. The income of a household is collected both on monthly and annual basis. Expenditure refers to total expenses incurred in the survey year, whether or not payment was made during the year. A comprehensive list of items of consumption (durable and non durable) are included in the questionnaire. It also includes the imputed values for house rent and housing expenditure. In addition to the expenditure items,

data on earners of a household, their employment status, major occupation groups, as well as income, savings, assets and liabilities are also collected in the Survey.

Data Limitations

The HIES 1987-88 data are subject to two types of errors, viz., (i) sampling error and (ii) non-sampling error. Federal Bureau of Statistics tried to minimize the sampling errors through intensive training of the enumerators and supervisory staff. However, due to prevalent local customs and conditions, non-sampling errors are difficult to control in such surveys because of the following factors:

(i) Illiteracy of the population in general and that of rural population in particular.

(ii) Household income and expenditure accounts are not kept by the households.

(iii) Wide variation in the mode of the purchase of consumption goods from area to area even from household to household.

(iv) Incorrect statement of expenditure on account of memory bias due to long reference period for certain items.

In addition to above mentioned errors reported by Federal Bureau of Statistics, one could also find additional problems in the data.

In rural areas, the agricultural products of the farm are not weighed after harvest and some times the standing crops are sold in advance of harvest. Similarly, most of the commodities consumed by the households are also not weighed. Similarly a substantial number of consumption goods are acquired through barter. All of these factors are a hinderance in the way of correct estimation of income and expenditure.

Another problem of the HIES data is the incomplete coverage of the very rich and very

poor in the Survey. It is pointed out by Akmal (1992) that "HIES data has relatively incomplete coverage of the poorest households. Even more important is the fact that HIES does not cover at all that section of the poor population i.e. not resident in a permanent abode".

Despite the limitations, the HIES data are quite comprehensive and representative as they are based on a very large sample size that covers almost 96 percent of the total population of the country.

CHAPTER 5

DETERMINATION OF POVERTY LINES

In this chapter an attempt is made to estimate poverty lines. But before estimating the threshold expenditure or income, there is a need to convert the households size into adult equivalents to make the household comparable across the regions. In this chapter, firstly the procedure to convert the household size into adult equivalents is explained. Secondly, the method to convert consumption expenditure items into calories is outlined. Both of them will help in determining the poverty lines. For our study, we have taken the household as defined in the household expenditure and Income Survey 1987-88 of the Federal Bureau of Statistics, Government of Pakistan.

Adult Equivalents

To convert the household size into adult equivalents, we have used the data on age, sex and their corresponding calorie requirements. The calorie requirements by age and sex are given in Table 5.1, which is based on Khan and Khan (1985) and WHO/FAO (1986) as cited in Ercelawn (1990). The recommended daily calorie intake for an adult, aged between 20 and 39, is 2550. This category is assumed to carry the weight equal to 1 (one). The calorie requirements, for different age groups and sexes were divided by 2550 to arrive at corresponding coefficients. These coefficients are given in parentheses in Table 5.1. Using these coefficients, we were able to convert household size into adult equivalents, which is the weighted sum of household members, whose respective calorie needs were used as weights. The average household size and corresponding average adult equivalents per household, for overall regions and with their rural-urban break up as estimated by us using HIES 1987-88 data, are given in Table 5.2. Table 5.2 also shows that in overall Pakistan and in different regions there are on the average about 0.80 adult equivalents per person. We have adjusted the household size in adult

Table 5.1: CALORIE REQUIREMENTS BY AGE AMD SEX

	Both	Male	Female
Up to 1 year	1010		
	(0.3960)		
2–3	1325		
	(0.5196)		
4–5	1550		
	(0.6078)		
6–7	1710		
	(0.6705)		
8–9	1875		
	(0.7352)		
10–12		2100	2200
		(0.8235)	(0.8627)
13–15		2500	2300
		(0.9803)	(0.9019)
16–19		2950	2100
		(1.1568)	(0.8235)
20–39		2550	2160
		(1.0)	(0.8470)
40–49		2420	2050
		(0.9490)	(0.8039)
50–59		2300	1940
		(0.9019)	(0.7607)
60 and above		2040	1730
		(0.8)	(0.6784)

Note: The coefficients calculated for the concerned age groups are given in parentheses.
Source for calorie requirements: Ercelawn (1990).

Table 5.2: Average household size, average adult equivalent per household and average adult equivalent per capita

Region	1 Average Household Size	2 Average adult equivalent per Household	3 Average adult equivalent Per Capita
Pakistan			
Overall	6.3	5.0	0.79
Urban	6.6	5.3	0.80
Rural	6.1	4.8	0.79
Punjab			
Overall	6.2	4.9	0.79
Urban	6.5	5.2	0.80
Rural	6.1	4.8	0.79
Rice/Wheat Punjab			
Overall	6.4	5.1	0.79
Urban	6.7	5.4	0.80
Rural	6.3	4.9	0.78
Mixed Punjab			
Overall	6.1	4.9	0.80
Urban	5.5	5.2	0.80
Rural	5.9	4.7	0.79
Cotton/Wheat Punjab			
Overall	6.2	4.9	0.79
Urban	6.4	5.1	0.80
Rural	6.1	4.8	0.79
Low Intencity Punjab			
Overall	6.2	4.9	0.79
Urban	6.3	5.1	0.80
Rural	6.1	4.8	0.78
Barani Punjab			
Overall	5.4	4.3	0.79
Urban	5.9	4.8	0.81
Rural	5.1	4.0	0.78
Sind			
Overall	6.4	5.1	0.80
Urban	6.7	5.4	0.80
Rural	6.2	4.9	0.79
Cotton/Wheat Sind			
Overall	6.1	4.9	0.80
Urban	6.9	5.5	0.80
Rural	5.9	4.7	0.79
Rice/Other Sind			
Overall	6.6	5.3	0.80
Urban	6.7	5.4	0.81
Rural	6.4	5.1	0.79
NWFP			
Overall	6.8	5.3	0.78
Urban	7.3	5.8	0.79
Rural	6.7	5.2	0.78
Other NWFP (except D. I. Khan)			
Overall	6.8	5.3	0.78
Urban	7.2	5.7	0.79
Rural	6.8	5.3	
Baluchistan			
Overall	5.9	4.7	0.79
Urban	6.9	5.5	0.80
Rural	5.7	4.5	0.79

equivalents taking into consideration the age and sex of the members. However, we have not taken into consideration the economies of scale in case of consumption in a household. In this way we might be overestimating the incidence of poverty. There are some studies which show that the economies of scale in case of consumption are almost negligible. Havinga, et al. (1990) are of the view that "the economies of scale factor for calorie intake is small, because food intake is mutually exclusive between persons in the same household. This argument, however, does not hold for the non-food expenditure, where economies of scale can be obtained". But on the other hand Zaidi and de. Vos (1993) have pointed out that economies of scale in case of-non-food items such as housing in a developing country like Pakistan, are quite small.

Calorie Estimates of a Household

The data on quantity consumed by a household and the value of these items are reported in the HIES Survey. There are certain quantity codes against which only expenditure information is available. These codes are for the quantities of 'other cereals', 'other pulses' 'other products' and baked products, etc. Besides these, there are a number of codes, where quantity or value or both for more than one food items are reported. For example, maize, barley, bajra and their flour are reported against codes 1015, and melon, water melon, gurma, sarda etc are reported against code 1085 . However, in most of the cases single food items (hereafter called named food items) and their expenditures are recorded against the quantity and value codes.

For the estimation of calorie intake per household, we have used the Food Composition Table for Pakistan (1985) and the background material for Pakistan as prepared by Ahmad and Z. R. Malik for FAO's Sixth World Food Survey (1991), to convert the food items into calories (see Appendix-B). In case of quantity codes for named food items, where quantity is available

we have multiplied the quantity with the calorie contents of that quantity. For instance, a kilogram of wheat has 3290 calories content; therefore, to convert the total consumption of wheat by a household into calories, we have multiplied 3290 with the total amount of wheat consumed reported against its code. Similarly we have converted all other named food items into calories. Where two or more items of food are reported against a single code (e.g. maize, barley, bajra), we have taken the average calories of these items as a calorie content for the quantity of this code, and converted this quantity into calories according to the above stated procedure. In case of some items, total quantity mentioned in the survey was not used for consumption purposes. Therefore, instead of taking total quantity of such items, a certain percentage of the item is assumed to be consumed, for instance, for chicken 60 percent of live weight is assumed to be consumed.

For composite food items (such as 'other cereals' other pulses' 'other meats' etc.), where expenditure information is available, we have computed the calories intake as follows. We assume that the calorie intake by a household per rupee of expenditure on say 'other pulses' is equal to the average calorie intake per rupee of expenditure on all named food items with in that group i.e. pulses group of named food items, like gram, mash, moong, masoor and arhar. In addition to this, we added up all other food expenditure groups such as baked and fried products, non-alcoholic beverages, ready-made food and miscellaneous food items into 'miscellaneous food expenditures'. We assumed that the calorie intake per rupee of expenditure on 'miscellaneous food expenditures' equals the calorie intake per rupee of expenditure on all food groups, such as cereals, pulses, milk and milk products, and edible oil etc. In this way we have converted the food consumption items into calorie intake. For converting the calorie intake per adult equivalent

per day, we have divided the monthly calorie intake by a household by 30 and then by the number of adult equivalents in the reference household.

The procedure adopted for calculating calorie intake from 'other items in named food and 'miscellaneous expenditure' has a probability of a small error. Because the 'other items in named food' and 'miscellaneous items' account for about 6 percent of the calorie intake and almost the same percentage of expenditure share, while the maximum calorie intake has been obtained directly from the named food items. It is evident from the information given in Table 5.3 that the named food items account for more than 93 percent of the calories intake for overall regions (Pakistan, all provinces and agroclimatic zones) and similarly, the expenditure share on these items was about 93 percent for the same regions. This table shows that 'other items in named food' account for expenditure share of about 2 to 3 percent while their calorie share also comes upto almost the same percentage. The share of calorie intake of the named food groups (see columns 3 and 8 of the Table 5.3) and expenditure is more than 96 percent for overall regions and for the rural areas of these regions. However, the expenditure and calorie shares for the urban areas are less than those of the overall regions and the rural areas of all the regions.

In case of the 'miscellaneous, items' contribution in the total expenditures and calorie intake is greater in the urban areas than that in the overall regions and in rural areas of all the regions. The range of expenditure and calorie share is about 2.5 to 3.5 percent in the overall regions and in the rural areas respectively. While, it is more than 6 percent in the urban areas. Ercelawn (1990) found that miscellaneous items account for around 7 percent of the expenditure

Table– 5.3: Household Expenditure and Calorie Shares for Food Items.

Region	Percentage Share of Expenditure					Percentage share of Calorie				
	Named Food 1	Other Items in named Food 2	Named Food Group 3	Miscell– aneous 4	Total 5	Named Food 6	Other Items In named Food 7	Named Food Group 8	Miscell– aneous 9	Total 10
Pakistan										
Overall	93.63	2.57	96.20	3.80	100.0	93.90	2.17	96.07	3.93	100.0
Urban	89.76	3.15	92.91	7.09	100.0	90.06	2.43	92.49	7.51	100.0
Rural	95.10	2.35	97.45	2.55	100.0	95.37	20.7	97.44	2.56	100.0
Punjab										
Overall	93.97	2.75	96.72	3.28	100.0	94.56	2.08	96.64	3.36	100.0
Urban	91.04	3.18	94.22	5.78	100.0	91.64	2.28	93.92	6.08	100.0
Rural	94.95	2.82	97.57	2.43	100.0	95.55	2.02	97.57	2.43	100.0
Rice/Wheat Punjab										
Overall	93.11	3.20	96.31	3.69	100.0	94.11	2.09	96.20	3.80	100.0
Urban	90.46	3.38	93.84	6.16	100.0	91.25	2.26	93.51	6.49	100.0
Rural	94.40	3.12	97.62	2.47	100.0	95.54	1.98	97.52	2.47	100.0
Mixed Punjab										
Overall	94.38	2.58	96.96	3.03	100.0	95.20	1.72	96.92	3.08	100.0
Urban	91.62	3.08	94.70	5.30	100.0	92.55	1.91	94.46	5.53	100.0
Rural	95.18	2.45	97.63	2.37	100.0	95.97	1.65	97.62	2.37	100.0
Cotton/Wheat Punjab										
Overall	93.98	2.50	96.48	3.52	100.0	94.20	2.17	96.37	3.62	100.0
Urban	91.94	2.78	94.72	5.27	100.0	91.76	2.39	94.15	5.85	100.0
Rural	94.42	2.43	96.85	3.15	100.0	94.71	2.13	96.84	3.15	100.0
Low Intensity Punjab										
Overall	96.09	1.70	97.79	2.21	100.0	95.59	2.09	97.78	2.21	100.0
Urban	94.00	2.23	96.23	3.76	100.0	93.85	2.38	96.23	3.76	100.0
Rural	96.40	1.63	98.03	1.97	100.0	95.97	2.06	98.03	1.97	100.0
Barani Punjab										
Overall	94.03	2.70	96.73	3.26	100.0	94.62	2.09	96.71	3.29	100.0
Urban	89.62	3.61	93.23	6.76	100.0	90.34	2.79	93.13	6.86	100.0
Rural	95.78	2.35	98.13	1.87	100.0	96.32	1.80	98.12	1.87	100.0
Sind										
Overall	91.46	2.55	94.01	5.99	100.0	91.22	2.48	93.70	6.29	100.0
Urban	87.45	3.17	90.62	9.37	100.0	87.37	2.69	90.06	9.93	100.0
Rural	94.59	2.07	96.66	3.34	100.0	94.29	2.31	96.60	3.40	100.0
Cotton/Wheat Sind										
Overall	93.36	2.31	95.67	4.33	100.0	92.80	2.71	95.51	4.48	100.0
Urban	90.24	2.45	92.69	7.31	100.0	89.08	2.99	92.07	7.93	100.0
Rural	94.29	2.26	96.55	3.45	100.0	93.93	2.62	96.55	3.40	100.0
Rice/Other Sind										
Overall	90.14	2.73	92.87	7.13	100.0	90.15	2.35	92.50	7.50	100.0
Urban	86.70	3.36	90.06	9.93	100.0	86.91	2.62	89.52	10.47	100.0
Rural	94.66	1.82	96.78	3.21	100.0	94.72	1.92	96.64	3.36	100.0
NWFP										
Overall	95.34	2.16	97.50	2.50	100.0	95.05	2.36	97.41	2.59	100.0
Urban	90.20	3.16	93.36	6.64	100.0	90.42	2.41	92.83	7.17	100.0
Rural	96.26	1.98	98.24	1.75	100.0	95.89	2.36	98.25	1.75	100.0
Other NWFP (except D.I.Khan)										
Overall	95.27	2.14	97.41	2.58	100.0	94.98	2.34	97.32	2.67	100.0
Urban	89.95	3.16	93.11	6.88	100.0	90.19	2.35	92.54	7.45	100.0
Rural	96.25	1.95	98.20	1.80	100.0	95.85	2.35	98.20	1.80	100.0
Baluchistan										
Overall	94.72	1.42	96.14	3.86	100.0	94.96	1.15	96.11	3.89	100.0
Urban	72.76	2.30	95.06	4.93	100.0	92.56	2.25	94.81	5.19	100.0
Rural	94.98	1.30	96.28	3.71	100.0	95.31	.97	96.28	3.71	100.0

Notes: (i) Column 3=1+2 and
(ii) column 8=6+7

and calorie shares in the urban areas. He was of the opinion that "food is often supplied as part of wages, particularly for rural labour. We have no way of checking for omissions of such income. However, our own experience with village surveys, suggests that this item gets left out unless specially incorporated in the questionnaire. Since the HIES questionnaire does not make any special provision to record such sources of income". However, our view is that it depends on the availability of these items and consumption habits of the consumers in different areas of the regions. Some of the items that are included in the miscellaneous group are not easily available in the far flung areas. The baked products, drinks and prepared meals etc. (which are included in the miscellaneous group) are more easily available in the urban areas and these items are mainly consumed by urban people than by the rural ones. Therefore, miscellaneous items share in the calorie and expenditure is higher in the urban areas than in the rural areas.

Determination of Poverty Threshold Expenditure and Income

After having converted the food consumption of a household into calorie intake and analyzing the data, we found some households with incomplete data information for calorie calculation and some with no information (zero calorie intake). We also found some households, where the calorie intake is very high. No doubt these were the calorie intakes and expenditures of these households, but surely, these could not be the calorie intakes of the members of the households only. We expect that these households might be hosting lunches and dinners (however, we cannot get this information from the data). Therefore, such households do not show the usual behaviour and we were forced to exclude them from our data set for estimating poverty threshold. Owing to this reason we excluded about 6 percent of the sample households for the purpose of estimating poverty lines. Nevertheless, we retained such households for

determining the incidence of poverty. We have reported some of the variables from HIES sample and the sub-sample chosen by us in the Table 5.4) for the purpose of comparison. We found that households' average income in overall Pakistan (in the sub-sample) decreased from Rs.2131 to Rs.2072 (2.7 percent), and from Rs.2031 to 1976 (2.7 percent) in overall Punjab. Average income decreased from Rs.2396 to Rs.2321 in overall Sind and from Rs.2162 to Rs.2099 (2.9 percent) in NWFP. While it decreased from Rs.2073 to Rs.2053 (1 percent) in Baluchistan. For the agroclimatic zones, we observed the same slight changes in the households' incomes in the sub-sample. The same pattern emerged for the household expenditures and calorie intake per adult equivalent for overall regions with their rural urban breakup.

The table shows that although the household size of the different regions of the sub-sample has marginally increased yet the number of adult equivalent per capita are exactly the same in both the samples (see column 14 of Table 5.4 and Table 5.2).

Under the circumstances, where we have slightly decreased income, expenditure and calorie intake and where the household size is marginally increased, it is expected a marginally biased downward poverty threshold would be obtained. As for as the percentage distribution of the sample and sub-sample households among the provinces and agroclimatic zones and their rural urban break up is concerned, there is hardly any difference (see columns 5 and 10 of Table 5.4).

We are not alone in dropping some of the observations in our sub-sample. Most of the researchers in the field have practised dropping such households with incomplete information

Barani Punjab													
Overall	2018	1899	2945	1193	6.6	2018	1900	2821	133	6.6	95.0	6.2	4.9	.79
Urban	2862	2682	2661	569	3.1	2850	2679	2595	543	3.2	95.4	6.3	5.0	.79
Rural	1683	1587	3059	624	3.4	1684	1588	2911	590	3.4	94.6	6.6	5.3	.80
Sind													
Overall	2369	2264	2842	4509	24.8	2321	2241	2724	4294	25.2	95.2	6.3	5.0	.79
Urban	3302	3025	2635	2546	14.0	3134	2979	2556	2433	14.3	95.6	6.3	5.2	.79
Rural	1678	1662	3007	1963	10.8	1667	1649	2858	1861	10.9	94.8	6.5	4.9	.80
Cotton/Wheat Sind													
Overall	1784	1773	2949	1754	9.7	1772	1758	2809	1675	9.8	95.5	6.3	4.4	.78
Urban	2413	2354	2723	778	4.3	2390	2331	2692	752	4.4	96.7	5.5	4.9	.79
Rural	1594	1597	3018	976	5.4	1579	1579	2845	923	5.4	94.8	6.0	4.9	.81
Rice/Other Sind													
Overall	2812	2599	2770	2755	15.2	2693	2569	2666	2619	15.3	95.1	6.2	4.9	.79
Urban	3542	3207	2611	1768	9.7	3339	3157	2519	1681	9.8	95.1	6.3	4.8	.78
Rural	1784	1743	2993	987	5.4	1776	1735	2874	938	5.5	95.0	7.0	5.6	.80
NWFP													
Overall	2162	2098	3316	2566	14.1	2099	2029	2898	2282	13.4	88.9	6.1	4.8	.79
Urban	2651	2479	2838	1180	6.5	2507	2355	2647	1068	6.3	90.5	6.7	5.4	.80
Rural	2073	2028	3403	1386	7.6	2020	1965	2947	1214	7.1	87.6	6.8	5.5	.81
Other NWFP (except D.I. Khan)													
Overall	2176	2108	3301	2358	13.0	2118	2043	2893	2107	12.4	89.4	6.6	5.2	.79
Urban	2597	2443	2797	1076	6.9	2491	2349	2638	976	5.8	90.7	7.0	5.5	.78
Rural	2100	2047	3392	1282	7.1	2045	1984	2942	1131	6.6	88.2	7.4	5.9	.79
Baluchistan													
Overall	2073	1839	3077	1273	7.0	2053	1832	2889	1175	6.9	92.3	7.0	5.5	.78
Urban	2968	2563	2775	557	3.0	2982	2563	2616	524	3.1	94.1			
Rural	1943	1734	3121	716	3.9	1914	1723	2930	651	3.8	90.0			

or the households, which do not represent the normally expected behaviour.

Hagenaars (1986) preferred to exclude the whole questionnaire, when any one of the relevant information (variables) was incomplete. He states that "the reason for doing this was that the sample size was large enough to start with, so there was no need to economize on the number of questionnaires". However, the respondents in his case in each country (under his study) were not greater than 3126. Ercelawn (1990) dropped about 7 percent of the households, for which either incomplete information was available or calorie intake was high in absolute terms or in relation to the given expenditures. However, he retained such households for the measurement of the poverty incidence.

Poverty Thresholds in Terms of Expenditures

In order to determine the poverty threshold, we used the calorie expenditure relations. We regressed the daily calorie intake per adult equivalent on monthly total expenditure per adult equivalent. The regression results for overall Pakistan are reported below:

$$C = -1031.50 + 652.93 \text{ Ln } E \qquad (1)$$

Using the recommended daily calorie norm of 2550 per adult equivalent, equation (1) becomes

$$2550 = -1031.50 + 652.93 \text{ Ln } E \qquad (2)$$

which gives a threshold expenditure level of Rs.241.11 per adult equivalent per month. For Pakistan as a whole the average adult equivalent per capita is 0.79. Therefore, the corresponding poverty line in terms of per capita expenditure per month comes out to be Rs.190.47.

Keeping in view the price differences and with a view to incorporating the different consumption behaviour and tastes, we estimated calorie expenditure relation separately for the rural and urban areas. Further, we assumed that the people living in rural areas generally do more physical work as compared to their urban counter-parts. Therefore, for both the inhabitants (rural and urban) we give the allowance of 10 percent calorie intake above or below (that is plus and minus) the recommended daily calorie norm of 2550. Thus the daily calorie norm for rural areas is estimated at 2805 calorie per adult equivalent and for urban areas, it becomes 2295 calorie intake per adult equivalent.

The regression equation for the urban areas of Pakistan provides the following estimates.

$$C = -936.35 + 581.50 \text{ Ln } E \qquad (3)$$

Using the daily calorie norm of 2295 per adult equivalent for urban areas the equation (3) gives:

$$(2295 = -936.35 + 581.50 \text{ Ln } E) \qquad (4)$$

Equation (4) gives the expenditure of Rs.259.02 per month per adult equivalent as poverty threshold in urban areas. The average adult equivalent per capita for urban Pakistan is 0.80, therefore, the poverty threshold comes to Rs.207.21 per capita per month in urban areas.

Following are the calorie expenditure regression estimates for the rural areas of Pakistan:

$$(c = -2643.72 + 953.37 \text{ Ln } E) \qquad (5)$$

Using 2805 daily calorie norm per adult equivalent in rural areas we get the threshold expenditure of Rs.303.40 per adult equivalent. As the average adult equivalent per capita for

rural Pakistan is 0.79 hence a threshold of Rs.239.67 per capita per month is obtained for rural areas of Pakistan. Using the same procedure, we determined the poverty thresholds for all the provinces and agroclimatic zones with their rural-urban breakup. The regression estimates for all the regions with rural-urban break up are given in Appendix C. The corresponding poverty lines are reported in Table 5.5. The overall poverty lines for different regions correspond to 2550 calorie norms, while those of the rural and urban areas of all the regions were determined using 2805 and 2295 daily calorie norms respectively. The Table 5.5 indicates that the rural poverty lines are higher than those of overall regions and the urban areas. The main cause of getting higher rural poverty lines is the higher daily calorie norm assumed for rural areas as compared to those of the urban areas and overall regions. For instance, if the daily calorie norm for the rural areas of Pakistan were 2295 (as that of urban areas of Pakistan) then the rural poverty line would have been Rs.177.73 per adult equivalent or Rs.140.40 per capita. In that case urban poverty line would have been higher by 47.5 percent. If we had kept the same 2550 daily calorie norm for all the areas (rural and urban) then the rural and urban poverty lines of Pakistan would have been Rs.183.43 and Rs.321.2 respectively. In that case the urban poverty line would have been higher by 75.10 percent. If we had used the 2805 calorie norm per adult equivalent for urban areas of Pakistan also, then the poverty line would have increased to Rs.498.10 per capita as compared to Rs.207.21 per capita (which is based on 2295 calorie norm). In that case the urban poverty line for Pakistan would have been 107 percent higher than the rural poverty line (based on 2805 calorie norm).

We note that if we had used the same calorie norm criterion, then the poverty line for urban areas would have been much higher than that for rural areas. One of the reasons for such

Table 5.5: Poverty lines in terms of expenditure

Region	Per adult equivalent	Per capita	Per capita region specific
Pakistan	1	2	3
Overall	241.11	190.47	190.47
Urban	259.02	207.21	–
Rural	303.39	239.67	–
Punjab			
Overall	235.55	186.08	186.08
Urban	228.27	182.61	–
Rural	298.55	235.85	–
Rice/Wheat Punjab			
Overall	267.6	211.40	211.40
Urban	277.68	222.14	–
Rural	328.43	256.17	–
Mixed Punjab			
Overall	225.9	180.72	180.72
Urban	216.10	172.88	–
Rural	282.62	223.26	–
Cotton/Wheat Punjab			
Overall	228.19	180.27	180.27
Urban	185.19	148.15	–
Rural	287.19	226.88	–
Low Intensity Punjab			
Overall	225.7	178.30	178.30
Urban	255.18	204.14	–
Rural	282.96	220.70	–
Barani Punjab			
Overall	282.4	223.09	223.09
Urban	329.71	267.06	–
Rural	345.5	272.94	–
Sind			
Overall	283.76	227.00	227.00
Urban	351.25	284.51	–
Rural	317.69	250.97	–
Cotton/Wheat Sind			
Overall	264.02	205.93	205.93
Urban	255.77	204.56	–
Rural	321.46	253.95	–
Rice/Other Sind			
Overall	343.6	274.88	274.88
Urban	405.66	328.58	–
Rural	311.83	246.34	–
NWFP			
Overall	234.55	182.94	182.94
Urban	208.45	164.67	–
Rural	297.32	231.90	–
Other NWFP (except D. I. Khan)			
Overall	235.17	183.43	183.43
Urban	204.33	161.42	–
Rural	300.6	234.46	–
Baluchistan			
Overall	266.53	210.55	210.55
Urban	295.35	236.28	–
Rural	329.41	260.23	–

Notes: 1. In columns 1 and 2, rural and urban poverty lines represent the expenditure required to consume 2805 and 2295 Calorie per adult equivalent per day respectively.

2. Overall poverty lines are consistent with 2550 Calorie intake per adult equivalent per day.

3. Column 3 represents region specific poverty lines, which are the same as that of overall poverty lines.

a higher poverty threshold is the existent of price differentials in both the sectors. The major cause of these differences in poverty lines is the high non-food costs in the urban areas, particularly for housing, lighting, education, health and transport. Therefore, the urban equal nutrition-based total expenditure poverty line comes up higher than the rural threshold. Many researchers have noted these differences accruing from non-food expenditures across the sectors in Pakistan [See for example Ercelawn (1990), Malik, S.J. (1991,1992), Malik. M.H (1988), Havinga, et al.(1990) etc.].

In our case the rural poverty lines are higher because of the higher calorie norms. The exception is that of urban Sind and the rice/other Sind where the urban poverty line is higher than that of the rural areas. This could be due to the fact that rice/other Sind zone is more urbanized.

As we know that the poverty incidence is sensitive to the poverty line selected, therefore, we have not confined our analysis to only the poverty lines explained above, but rather have preferred to analyse poverty incidence at other levels also. We will use region specific poverty lines which are based on the 2550 per adult equivalent calorie norm. These are reported in column 3 in the Table 5.5.

Poverty Lines in Terms of Income

We have noted earlier, that one of our objectives is to determine the affects of 'infaq' on the incidence of poverty. Since 'infaq' is in terms of incomes that are transferred to other people, therefore, there is need to determine the poverty lines in terms of income also. For this purpose we need to translate the expenditure threshold into an income threshold. To achieve this

objective we have regressed the per adult equivalent expenditure on per adult equivalent income. We have estimated such regressions for overall regions and for rural urban areas of all the regions. These regression estimates are reported in Appendix D.

Following is the estimate of regression per adult equivalent expenditure on per adult equivalent income for overall Pakistan:

$$X = -2682.19 + 524.48 \text{ Ln } y \qquad (6)$$

Where X is the monthly expenditure per adult equivalent and y is the monthly income per adult equivalent. Using per adult expenditure of Rs.241.11, we get

$$241.11 = -2682.19 + 524.48 \text{ Ln } y \qquad (7)$$

From (7) Rs.263.35 is obtained as a threshold income per adult equivalent. The average number of adult equivalent per capita is 0.79 for overall Pakistan, hence the threshold income comes to Rs.208.04 per capita per month. Using the same procedure, we translated all the poverty lines (obtained in terms of expenditure) to the income thresholds. These are given in Table 5.6. We have also estimated other poverty lines with respect to 80 percent and 70 percent of total calorie (2550 per adult equivalent) norms. The purpose of these regression estimates is explained in the next paragraph. From the already estimated regressions we can determine these poverty lines (at 80 percent and 70 percent of 2550 calorie intake) using the procedure already stated earlier. But in this case, we have estimated only region specific poverty lines in terms of expenditure and later have converted these poverty lines in terms of income. These are reported in Table 5.6 columns 4 and 5.

Table 5.6: Poverty lines in terms of income

Region	Per adult equivalent	Per capita,	Per capita region specific	Per capita region specific	Per capita region specific
Pakistan	1	2	3	4	5
Overall	263.35	208.04	208.04	162.17	151.50
Urban	316.93	253.54	–	–	–
Rural	280.86	221.87	–	–	–
Punjab					
Overall	255.42	201.78	201.78	159.31	148.86
Urban	296.19	236.95	–	–	–
Rural	274.8	217.09	–	–	–
Rice/Wheat Punjab					
Overall	299.12	236.30	236.30	191.60	180.91
Urban	343.36	274.68	–	–	–
Rural	303.55	236.76	–	–	–
Mixed Punjab					
Overall	235.48	188.38	188.38	147.02	136.16
Urban	256.17	204.93	–	–	–
Rural	262.61	207.46	–	–	–
Cotton/Wheat Punjab					
Overall	234.63	185.35	185.35	146.91	135.86
Urban	240.46	192.36	–	–	–
Rural	268.44	212.06	–	–	–
Low Intensity Punjab					
Overall	230.22	181.87	181.87	139.15	127.52
Urban	271.80	217.44	–	–	–
Rural	226.23	176.45	–	–	–
Barani Punjab					
Overall	301.72	238.35	238.35	178.59	164.72
Urban	351.91	285.04	–	–	–
Rural	333.83	263.72	–	–	–
Sind					
Overall	305.97	244.77	244.77	182.82	171.48
Urban	383.18	310.37	–	–	–
Rural	300.02	237.01	–	–	–
Cotton/Wheat Sind					
Overall	263.54	205.56	205.56	155.90	142.51
Urban	278.92	223.13	–	–	–
Rural	299.99	236.99	–	–	–
Rice/Other Sind					
Overall	351.20	256.96	256.96	201.47	188.47
Urban	421.72	341.59	–	–	–
Rural	296.60	234.31	–	–	–
NWFP					
Overall	228.33	178.09	178.09	135.88	124.55
Urban	260.35	205.67	–	–	–
Rural	260.55	203.22	–	–	–
Other NWFP (except D.I.Khan)					
Overall	229.36	178.89	178.89	136.20	124.80
Urban	258.89	204.52	–	–	–
Rural	262.94	205.09	–	–	–
Baluchistan					
Overall	321.93	254.32	254.32	212.10	199.64
Urban	361.04	288.83	–	–	–
Rural	354.83	280.31	–	–	–

Notes: 1. In colums 1 and 2, rural and urban poverty lines are consistent with 2805 and 2295 calorie per adult equivalent per day respectively and overall poverty lines of each region are based on 2550 calorie per adult equivalent per day.

2. Column 3 represents region specific poverty lines, which are the same as that of overall poverty lines.
3. Columns 4 and 5 represent poverty lines consistent with 80 percent and 70 percent of the calorie intake per adult equivalent per day respectively.

The households below these poverty lines (namely 80 percent and 70 percent of the calorie norms of 2550 per adult equivalent per day) would be considered very poor and extremely poor respectively. The 70 percent of the calorie norms are only slightly higher than the basal metabolic requirements. This is the level below which a person cannot sustain his life. Therefore, the person below the extreme poverty line (which is slightly higher than basal metabolic requirement) would be termed as extremely poor and in imminent danger of death.

CHAPTER 6

EXTENT OF POVERTY AND SOCIOECONOMIC PROFILE OF THE POOR

The procedures to measure poverty as adopted by Foster, Greer and Thorbecke (briefly named as the FGT poverty measures) have already been explained in Chapter 4, where we explained the methodology of our research. Using the FGT poverty measures, we have computed head count (P_0), poverty gap (P_1) and severity of the poverty (P_2) among the poor. We have estimated the extent of poverty both in terms of expenditure and income. We have also estimated poverty levels both at the population and at the household levels.

Poverty in Terms of Expenditures Using Different Calorie Norms

Using the poverty line with different calorie intake norms (as estimated in Table 5.5 of chapter-5), our estimates as given in Table 6.1 show that 16.6 percent of the overall households, 8.7 percent of urban and 19.6 percent of the rural households are poor in Pakistan. If we compare the poor households across the provinces then the highest poverty (21.9 percent) is found in Sind followed by Punjab (18.5 percent) and Baluchistan (15.8 percent). While the NWFP has the lowest poverty percentage (12.6 percent).

As regards urban poverty, we observed the lowest, head count, P_0, (6.2 percent) value in urban NWFP and the highest (21.5 percent) in urban Sind, while in Punjab and Baluchistan poor urban households are 10.2 percent and 16.7 percent respectively.

As regards rural poverty Table 6.1 shows that the P_0 index in rural Sind is the highest (43.6 percent) and it is the lowest (30.6 percent) in rural NWFP. However, P_0 index is the same (40 percent) in rural Punjab and Baluchistan.

Table 6.1: Headcount, poverty gap, Foster–Greer–Thorbecke poverty measure using poverty lines based on different calorie Norms (1987–88)

(Percent)

Region	In terms of expenditures			In terms of income		
	PO	P1	P2	PO	P1	P2
Pakistan	1	2	3	4	5	6
Overall	16.6	2.8	0.7	23.2	4.8	1.5
Urban	8.7	1.9	0.5	12.7	4.2	1.5
Rural	19.6	6.7	2.5	27.2	7.0	2.4
Punjab						
Overall	18.5	3.2	0.8	24.4	5.1	1.6
Urban	10.2	1.6	0.3	23.7	5.2	1.6
Rural	39.9	9.4	3.1	32.9	7.6	2.5
Rice/Wheat Punjab						
Overall	19.2	3.4	0.9	28.4	5.8	1.8
Urban	16.0	2.8	0.7	28.8	6.5	2.1
Rural	39.9	8.7	2.8	33.6	7.0	2.1
Mixed Punjab						
Overall	17.1	2.8	0.7	21.0	4.2	1.3
Urban	11.0	1.7	0.4	20.7	4.1	1.2
Rural	33.8	7.4	2.3	28.7	6.5	2.2
Cotton/Wheat Punjab						
Overall	20.8	3.7	1.0	23.3	4.8	1.5
Urban	3.2	0.3	0.5	17.4	2.7	0.6
Rural	42.0	9.9	3.3	35.5	8.5	2.9
Low Intencity Punjab						
Overall	25.9	4.9	1.4	27.4	5.5	1.6
Urban	27.8	6.7	2.3	27.8	7.0	2.4
Rural	46.1	11.2	3.8	26.9	5.0	1.4
Barani Punjab						
Overall	17.9	2.7	0.6	21.2	3.8	1.0
Urban	17.3	2.9	0.8	20.9	4.3	1.3
Rural	42.5	8.7	2.5	33.2	6.9	2.0
Sind						
Overall	21.9	3.5	0.8	28.4	5.6	1.6
Urban	21.5	4.0	1.1	27.5	5.9	1.9
Rural	43.6	8.4	2.3	37.8	7.2	2.1
Cotton/Wheat Sind						
Overall	19.0	2.7	0.8	20.4	3.4	0.9
Urban	9.4	1.4	0.3	16.1	2.5	0.6
Rural	44.9	8.9	2.5	38.9	7.5	2.3
Rice/Other Sind						
Overall	31.8	6.5	1.9	26.6	5.2	1.5
Urban	27.8	5.7	1.7	30.8	6.7	2.2
Rural	41.8	7.7	2.1	35.4	6.5	1.7
NWFP						
Overall	12.6	1.9	0.4	14.8	2.8	0.8
Urban	6.2	0.5	0.1	18.8	3.0	0.7
Rural	30.6	6.2	1.8	24.3	5.1	1.7
Other NWFP (except D.I.Khan)						
Overall	12.4	1.9	0.4	14.4	2.8	0.8
Urban	5.3	0.4	0.1	18.8	3.0	0.7
Rural	31.2	6.3	1.9	24.3	5.1	1.7
Baluchistan						
Overall	15.8	2.4	0.9	28.3	5.0	1.4
Urban	16.7	2.2	0.7	27.0	4.9	1.3
Rural	39.8	7.4	2.8	39.6	8.1	2.4

Notes:
1. Results given in columns 1 to 3 are based on poverty lines (given in column 2 of the table 5.5) in terms of per capita expenditure per month.
2. Results given in columns 4 to 6 are based on poverty lines (given in column 2 of the table 5.6) in terms of per capita income per month.
3. PO columns give the percentage of the households.

Among the agroclimatic zones of Punjab, the highest P_o value on overall basis is observed in the low-intensity Punjab (25.9 percent), followed by cotton/wheat Punjab (20.1 percent) and Rice/wheat Punjab (19.2 percent). Similarly P_o value for the rural areas of low-intensity Punjab is the highest (46.1 percent), followed by Cotton/Wheat Punjab (42.0 percent) and Rice/Wheat Punjab (39.9 percent). The Table 6.1 also shows that the highest P_o index is observed in rain fed zones, and especially in rural area of the low intensity Punjab and barani Punjab.

If we compare the agroclimatic zones of Pakistan, we again find highest P_o value for the Rice/other Sind (31.8 percent) on overall basis. Again the P_o value for other NWFP on overall basis is much lower than for all the other agroclimatic zones. We find the lowest number of poor households (3.2 percent) in the urban cotton/wheat Punjab, followed by urban areas of Other NWFP (5.3 percent) and the cotton/wheat Sind (9.49 percent).

As the Table indicates that the P_o index of households on overall urban and rural bases in NWFP is smaller as compared to other provinces and agroclimatic zones of Pakistan. One of the reasons for this could be that a substantial area of NWFP is not covered by the HIES. For example, the relatively poor districts like Kohistan, Malakand, Chitral and the Tribal areas are not covered by the HIES. In all the rural areas of the provinces and agroclimatic zones, the P_o index is higher than that in their urban areas. This could be due to our selection of the rural poverty line, which is based on somewhat higher calorie intake norm as assumed by us. This matter has been further explored by us using country and region specific poverty lines, which are based on the same calorie intake norm.

Perhaps, no other researcher has analysed the HIES 1987-88 data on these calorie norms for the rural areas. Therefore our rural poverty results are not comparable with the findings of

other studies, which have used the same data.

Other estimated poverty indices like poverty gap (P_1) and FGT poverty measure (P_2), more or less show the same pattern as that of P_o, that is, where P_o is the highest then poverty gap (P_1) and the FGT measure (P_2) are also the highest. The poverty gap (P_1) for overall regions ranges from 2.4 percent to 3.7 percent except for NWFP (1.9 percent) and Rice/other Sind (6.5 percent). However, the poverty gap for rural areas is greater and ranges from 6.7 percent to 10.0 percent. The later is for rural cotton/wheat Punjab. Similarly poverty sensitive index (P_2) has the highest value for rural areas, which had the highest P_o index. We have observed that P_1 and P_2 more or less observe the same pattern as that of P_o, which indicates that where P_o is high, there the poverty is also severe.

Poverty in Terms of Income Using Different Calorie Norms

The column 4 to 6 of the Table 6.1 show the poverty estimates P_o, P_1 and P_2 in terms of per capita income. Using the same calorie norm as for per capita expenditure, we find that in terms of per capita income, the incidence of poverty is considerably higher. That confirms the findings of the earlier studies (see Table 3.1). Our findings are that 23.2 percent overall households in Pakistan (12.7 percent in urban areas and 27.2 percent in rural areas) are poor as estimated in terms of P_o index.

When we compare the incidence of poverty in terms of expenditure and income, we come across some interesting results. In terms of expenditure, Sind was singled out as a province with the highest percentage of poor households, again in terms of income Sind has the highest percentage of poor households (28.4 percent). Punjab is the second poorest province in terms of expenditure thresholds but in terms of income it becomes the third poorest. NWFP again has the lowest percentage (14.8 percent) of the poor households. However, Baluchistan and Sind

have almost the same poverty percentage, that is, 28.3 and 28.4 percent respectively.

The most interesting is the difference in findings regarding the rural poverty on the basis of the expenditure and income thresholds. The overall and urban poverty of all the regions shows an increase with the per capita income threshold, while the rural poverty of all the regions shows a decrease. Again the exception is the rural Baluchistan, where almost the same percentage of rural households are identified as the poor (i.e. 39.8 percent in terms of expenditure and 39.6 percent in terms of income).

The other poverty indices (P_1) and (P_2), more or less have the same pattern as P_o. The differences in the results, on the basis of expenditure and income are perhaps due to the discrepancies in the expenditure and income data. The income data in the developing countries are usually not reliable while we can put more trust in the expenditure data. People usually understate their income. Consequently non-poor households are likely to be identified as poor when we use income threshold.

Poverty in Terms of Region Specific Poverty Lines Based on Expenditures and Income

The above results are based on different calorie norms. We now, turn to the poverty estimates, which are based on the region specific poverty lines using the same calorie intake norms.

The results reported in Table 6.2, show the poor households on the basis of region specific poverty lines, which are based on the same calorie norm of 2550 per adult equivalent.

The results under the word 'overall' in case of all the regions of Pakistan which have

Table 6.2: Headcount, poverty gap, Foster–Greer–Thorbecke poverty measure using the region specific poverty lines (1987–88).

(Percent)

Region	In terms of expenditures			In terms of Income		
	P	P	P	P	P	P
Pakistan	1	2	3	4	5	6
Overall	–	–	–	–	–	–
Urban	9.8	1.4	0.3	12.7	2.3	0.6
Rural	17.2	3.2	0.8	27.2	5.7	1.8
Punjab						
Overall	–	–	–	–	–	–
Urban	11.0	1.7	0.4	15.1	2.7	0.7
Rural	21.0	3.7	1.0	27.5	5.8	1.9
Rice/Wheat Punjab						
Overall	–	–	–	–	–	–
Urban	12.9	2.2	0.5	18.5	3.7	1.1
Rural	22.4	4.0	1.1	33.3	6.9	2.1
Mixed Punjab						
Overall	–	–	–	–	–	–
Urban	12.8	2.1	0.5	15.8	2.9	0.7
Rural	18.4	3.0	0.8	22.5	4.6	1.4
Cotton/Wheat Punjab						
Overall	–	–	–	–	–	–
Urban	12.4	1.6	0.3	14.8	2.2	0.5
Rural	21.8	4.1	1.2	25.0	5.3	1.7
Low Intensity Punjab						
Overall	–	–	–	–	–	–
Urban	20.8	4.1	1.3	18.8	3.8	1.2
Rural	26.7	5.0	1.5	29.0	5.7	1.7
Barani Punjab						
Overall	–	–	–	–	–	–
Urban	8.6	1.2	0.2	9.5	2.0	0.5
Rural	21.6	3.3	0.7	25.9	4.5	1.2
Sind						
Overall	–	–	–	–	–	–
Urban	8.4	1.2	0.2	12.6	2.1	0.5
Rural	32.0	5.3	1.3	41.0	8.2	2.4
Cotton/Wheat Sind						
Overall	–	–	–	–	–	–
Urban	9.7	1.4	0.3	11.1	1.6	0.3
Rural	21.8	3.1	0.7	23.3	4.0	1.1
Rice/Other Sind						
Overall	–	–	–	–	–	–
Urban	15.4	2.6	0.6	12.1	2.1	0.5
Rural	54.9	11.9	3.6	47.0	9.5	2.8
NWFP						
Overall	–	–	–	–	–	–
Urban	9.6	1.3	0.2	9.7	1.4	0.3
Rural	13.1	2.0	0.5	15.8	3.1	0.9
Other NWFP (except D.I.Khan)						
Overall	–	–	–	–	–	–
Urban	9.9	1.3	0.2	10.0	1.4	0.3
Rural	12.8	2.0	0.5	15.2	3.0	0.9
Baluchistan						
Overall	–	–	–	–	–	–
Urban	8.4	0.9	0.1	16.6	2.6	0.6
Rural	16.9	2.7	0.6	29.9	5.3	1.5

Notes: 1. Results given in columns 1 to 3 are based on poverty lines (given in colomn 3 of the Table 5.5) In terms of per capita expenditure per month.

2. Results given in columns 4 to 6 are based on poverty lines (given in colomn 3 of the Table 5.6) In terms of per capita income per month.

3. P0 columns give the percentage of the households.

already been reported in Table 6.1 , are based on the region specific poverty lines because we used the same calorie intake norm there. However, the rural and urban results using region specific poverty lines have changed and they are reported in Table 6.2.

With the region specific expenditure based poverty lines, using the same calorie norm for rural and urban areas, we find that 9.8 percent of the households in urban and 17.2 percent in the rural areas of Pakistan are poor. In case of provinces we find that 11.0 percent of the households in the urban Punjab are poor, followed by urban areas of NWFP (9.6 percent).

While Sind and Baluchistan have the same percentage of the poor households (8.4 percent each) in their respective urban sectors.

However, rural sector of Sind has the highest poor households (32.0 percent), followed by Punjab (21.0 percent) and Baluchistan (16.9 percent). NWFP has the lowest percentage of the rural poor households (13.1 percent).

One of the reasons for the highest percentage of the poor households in Sind could be the high concentration of land ownership there. Moreover water logging and salinity, which have destroyed the cultivable land in Sind, also might have contributed toward the higher incidence of poverty.

Among the agroclimatic zones, the rural sector of the Rice/other Sind records the highest poor households (54.9 percent) followed by the rural sector of low-intensity Punjab (26.7 percent) as estimated in terms of P_0 index. It shows that rural area of Rice/other Sind contributes much to the overall rural poverty of Sind. The second highest rural poor are recorded in the low-intensity Punjab. The other NWFP (except D.I. Khan) shows a lower percentage of the poor

households both in the rural and urban areas than in other agroclimatic zones. Among the urban areas of agroclimatic zones, low-intensity Punjab gives the highest percentage of the poor households (20.8 percent). Low-intensity Punjab consists of relatively poor districts such as D.G. Khan/Rajanpur, Muzaffargarh, Mianwali etc. Rice/other Sind is the second highest poverty zone among the urban areas of agroclimatic zones. Other indices P_1 and P_2 show the same pattern as that of P_0.

The only study using the same data set is that of Malik, S.J. (1990), who focused on the analysis of absolute poverty. His and our results can be compared. Malik's results are reported in our Table 3.2 in chapter-3. Our results are given in columns 1,2 and 3 of Table 6.2. Comparing these results we come to the conclusion that our study pinpoints a somewhat higher incidence of poverty. The reason is that Malik updated the poverty lines determined by Ercelawn (1990) assuming 14 percent increase in the prices. He did not estimate the poverty line himself from the micro data. Thus his poverty lines are lower than the actual ones computed in our study. This could be the reason that his results indicate a lower incidence of poverty. However, if we compare our results with the ones obtained by Malik using 1984-85 HIES data, our results show the same declining trend in poverty as reported by him.

In terms of the income threshold, the region specific poverty lines show a larger proportion of poor households than that shown by the expenditure based region specific poverty lines. Though the percentage of poor households increased in terms of income poverty lines, yet the same pattern emerges as with the expenditure based poverty lines, that is, rural Sind presents greater poor households (41.0 percent) followed by rural Baluchistan (29.9 percent). The third highest is the rural Punjab (27.5 percent) and the lowest is the rural NWFP (15.8 percent). Urban poor have the same pattern as that seen on the basis of the expenditure poverty lines. Nevertheless, the overall, rural and urban households show higher incidence of poverty in terms

of the income based poverty lines as compared to the expenditure based poverty lines.

If the households are poor under the income threshold and not poor under the consumption expenditure threshold, then surely some doubt is created. However, perhaps it is due to the underestimation or understating of the true income. As the income data is not very reliable as indicated earlier, therefore, such a discrepancy in the results is likely to occur.

Poverty in terms of country specific poverty line Based on Expenditure

Using country specific poverty line, which ignores the price differences across the different regions of the country, we observed somewhat different results in provinces and the agroclimatic zones. The highest incidence of poverty (19.9 percent) is found in overall Punjab, followed by overall NWFP (15.5 percent). The overall incidence of poverty in Sind and Baluchistan is almost the same (i.e. 9.5 percent in overall Sind and 9.3 percent in overall Baluchistan). The ranking of the provinces in case of country specific poverty line has changed. In case of region specific poverty lines, NWFP comes out as the province with lowest incidence of poverty and Sind with the highest incidence of poverty as compared to other provinces. But the results reported in Table-6.3 show that with country specific poverty line Punjab has got highest percentage of poverty, while Sind and Baluchistan the lowest one.

Similarly with the country specific poverty line, we also observe the major changes in the incidence of poverty across the rural and urban areas of all the provinces except the Punjab. In the rural and urban areas of Punjab a slight increase in the incidence of poverty is noted in case of country specific poverty line than that of region specific poverty lines. The incidence of poverty in the urban areas increased by 0.9 percent, while it increased by 1.6 percent in the rural areas of Punjab as compared to the incidence of poverty on the basis of region specific poverty lines. In the rural and urban areas of Sind the proportion of poor households is 14.6

Table 6.3: Headcount, poverty gap, Foster–Greer–Thorbecke poverty measure using country specific poverty line in terms of expenditure (1987–88)

Region	(Percent) Po	P1	P2
Pakistan	1	2	3
Overall	16.6	2.8	0.7
Urban	9.8	1.4	0.3
Rural	17.2	3.2	0.8
Punjab			
Overall	19.9	3.6	0.1
Urban	11.9	2.0	0.4
Rural	22.6	4.1	1.2
Rice/Wheat Punjab			
Overall	13.1	2.0	0.4
Urban	8.3	1.3	0.2
Rural	15.5	2.4	0.5
Mixed Punjab			
Overall	20.9	3.7	0.9
Urban	16.3	2.8	0.7
Rural	22.3	3.9	1.1
Cotton/Wheat Punjab			
Overall	24.6	4.7	1.4
Urban	15.6	2.2	0.4
Rural	26.5	5.2	1.5
Low Intensity Punjab			
Overall	31.7	6.4	2.0
Urban	24.3	5.3	1.7
Rural	32.8	6.6	2.0
Barani Punjab			
Overall	7.4	0.9	0.2
Urban	3.5	0.4	0.1
Rural	9.0	1.2	0.2
Sind			
Overall	9.5	1.2	0.2
Urban	3.1	0.3	0.1
Rural	14.6	1.9	0.4
Cotton/Wheat Sind			
Overall	12.0	1.7	0.4
Urban	6.3	0.8	0.1
Rural	13.8	1.9	0.4
Rice/Other Sind			
Overall	7.8	0.9	0.1
Urban	2.3	0.2	0.05
Rural	15.7	1.9	0.3
NWFP			
Overall	15.5	2.4	0.6
Urban	12.4	1.7	0.3
Rural	16.0	2.5	0.6
Other NWFP (except D.I.Khan)			
Overall	15.1	2.4	0.6
Urban	12.7	1.7	0.3
Rural	15.6	2.5	0.6
Baluchistan			
Overall	9.3	1.4	0.3
Urban	4.4	0.3	0.04
Rural	10.0	1.5	0.3

Notes: 1 These results are based on country specific poverty line in terms of expenditure (Rs.190.47) per capita per month.

2 P0 column gives the percentage of the households

percent and 3.1 percent respectively. Thus the urban Sind shows the lowest poverty incidence in case of country specific poverty line. In the rural and urban areas of NWFP the proportion of the poor households is 16.0 percent and 12.4 percent respectively, while this proportion in the rural and urban areas of Baluchistan is 10.0 percent and 4.4 percent respectively.

Among the agroclimatic zones the highest proportion of the poor is found in Low intensity Punjab (31.7 percent), followed by cotton/wheat Punjab (24.6 percent) and the Mixed Punjab (20.9 percent). Other NWFP (except D.I. Khan) shows 15.1 percent of the poor households while cotton/wheat Sind and rice/other Sind show 12.0 percent and 7.8 percent respectively.

Persons in Poverty

We have also extended our analysis to the population level. Table 6.4 reports the results on the same pattern as reported in Table 6.1. The only difference is that results of Table 6.4 are related to persons in poverty rather than the households. The interesting point to be noted in this connection is that almost the same pattern of poverty can be observed from Table 6.4 as was noticed in case of Table 6.1. For instance, in terms of expenditure and income, overall poor households were 16.6 percent and 23.2 percent respectively in Pakistan, where as on the same poverty thresholds the persons in poverty are 20.8 percent and 28.2 percent respectively. Among the provinces, the highest poor households were recorded in overall Sind, on the basis of expenditure and the income threshold. Similarly we find the same ranking of provinces as regards the poor persons as that of the poor households on the basis of the same poverty lines.

The only difference is that in terms of persons, the incidence of poverty is higher than that for households. This could be due to the fact that incidence of poverty is relatively high among the larger households which are likely to represent a larger proportion of the population.

Table 6.4: Headcount, poverty gap, Foster–Greer–Thorbecke poverty measure using poverty lines based on different calories norms (1987–88)

(Percent)

Region	In terms of expenditure			In terms of Income		
	P	P	P	P	P	P
Pakistan	1	2	3	4	5	6
Overall	20.8	3.6	0.9	28.2	5.9	1.9
Urban	15.9	2.7	0.7	16.1	5.3	2.0
Rural	46.6	10.8	3.5	33.1	8.7	3.0
Punjab						
Overall	23.2	4.2	1.2	29.6	6.3	2.0
Urban	13.2	2.1	0.5	29.0	6.6	2.1
Rural	47.5	11.7	4.0	39.7	9.4	3.2
Rice/Wheat Punjab						
Overall	23.0	4.2	1.1	32.7	6.9	2.1
Urban	19.7	3.6	0.9	33.5	7.9	2.7
Rural	45.2	10.3	3.3	38.4	8.2	2.5
Mixed Punjab						
Overall	21.6	3.6	0.9	25.8	5.3	1.6
Urban	15.1	2.4	0.6	26.6	5.6	1.7
Rural	40.4	9.1	2.9	34.4	8.0	2.7
Cotton/Wheat Punjab						
Overall	25.0	4.7	1.3	28.5	6.0	1.9
Urban	4.2	0.4	0.8	21.7	3.5	0.9
Rural	50.2	12.2	4.2	42.6	10.6	3.7
Low Intensity Punjab						
Overall	38.3	6.6	2.0	35.0	7.1	2.1
Urban	35.0	8.5	2.9	34.7	8.9	3.1
Rural	57.2	14.6	5.1	34.7	6.6	1.9
Barani Punjab						
Overall	23.6	3.8	0.9	27.7	5.0	1.4
Urban	22.7	3.9	1.1	25.0	5.2	1.6
Rural	53.0	10.6	3.5	43.7	9.5	2.8
Sind						
Overall	27.5	4.6	1.2	34.5	7.0	2.1
Urban	28.2	5.4	1.5	34.6	7.7	2.4
Rural	53.6	11.0	3.2	46.6	9.3	2.8
Cotton/Wheat Sind						
Overall	24.2	3.7	0.9	25.7	4.4	1.3
Urban	12.3	1.8	0.4	20.3	3.3	0.8
Rural	54.3	11.5	3.4	47.2	9.7	3.0
Rice/Other Sind						
Overall	39.3	8.4	2.5	32.7	6.6	2.0
Urban	35.8	7.8	2.4	38.7	8.8	2.9
Rural	52.2	10.2	2.9	38.7	4.7	2.0
NWFP						
Overall	15.1	2.3	0.5	17.6	3.3	0.9
Urban	7.6	0.7	0.1	22.3	3.7	0.9
Rural	35.8	7.3	2.2	28.0	6.0	1.9
Other NWFP (except D.I.Khan)						
Overall	14.9	2.3	0.5	17.2	3.2	1.0
Urban	6.5	0.6	0.1	22.6	3.7	0.9
Rural	36.6	7.5	2.3	28.0	6.0	2.0
Baluchistan						
Overall	20.3	3.4	0.8	35.2	6.5	1.9
Urban	20.7	2.8	0.5	33.4	5.9	1.6
Rural	49.2	9.7	2.9	49.0	10.6	3.3

Notes: 1. Results given in columns 1 to 3 are based on poverty lines (given in column 2 of the Table 5.5) In terms of per capita expenditure per month (1987–88)

2. Results given in columns 4 to 6 are based on poverty lines (given in column 2 of the Table 5.6) In terms of per capita income per month (1987–88)

3. P0 columns give the percentage of the population.

Table 6.5 reports the estimates regarding the incidence of poverty in terms of expenditure and income using the region specific poverty lines. The patterns and the trends of the results of Table 6.5 are similar to those of Table 6.2 with the only differences that the former shows the persons in poverty rather than households and the incidence in terms of persons is higher than that in case of households.

Very Poor and Extremely Poor Households

For the sensitivity analysis, we selected the households as the unit of analysis and the region specific poverty lines that are explained in chapter 5 and are given in Table 5.6.

The very poor households are those, who cannot meet or hardly meet 80 percent of the recommended calorie intake per adult equivalent. Similarly extremely poor are defined as those households, who are just surviving, that is, they hardly meet 70 percent of the required calorie norm.

Keeping these definitions in view, the very poor households in overall Pakistan are 9.3 percent, whereas they are 4.2 percent in urban areas and 11.3 percent in the rural areas of Pakistan. The proportion of extremely poor is smaller than the very poor. They are just 7.0 percent in overall Pakistan, 3.0 percent and 8.5 percent respectively in the urban and rural areas (see Table 6.6).

Among the provinces, Baluchistan has the highest proportion of very poor households (13.4 percent), followed by Punjab (10.6 percent). The same pattern of extremely poor emerges in these provinces, that is, 9.2 percent are extremely poor in Baluchistan whereas they are 7.9 percent in Punjab. However, very poor in NWFP are 4.3 percent in overall, and 1.7 percent in its urban areas, while they are 4.8 percent in rural areas whereas the extremely poor are 2.8 percent in overall NWFP while they are 0.78 percent in urban areas and 3.4 percent in rural

Table 6.5: Headcount, poverty gap, Foster–Greer–Thorbecke poverty measure using the region specific poverty lines.

(Percent)

Region	In terms of expenditure			In terms of Income		
	P	P	P	P	P	P
	1	2	3	4	5	6
Pakistan						
Overall	–	–	–	–	–	–
Urban	11.4	6.1	0.4	16.1	3.0	0.8
Rural	24.7	4.4	1.2	33.1	7.1	2.3
Punjab						
Overall	–	–	–	–	–	–
Urban	14.3	2.3	0.5	19.1	3.6	1.0
Rural	26.4	4.8	1.4	33.5	7.3	2.4
Rice/Wheat Punjab						
Overall	–	–	–	–	–	–
Urban	16.1	2.8	0.7	22.8	4.7	1.4
Rural	26.7	4.9	1.3	38.0	8.1	2.5
Mixed Punjab						
Overall	–	–	–	–	–	–
Urban	17.5	3.0	0.7	21.3	4.0	1.1
Rural	23.0	3.8	1.0	27.3	5.6	1.8
Cotton/Wheat Punjab						
Overall	–	–	–	–	–	–
Urban	15.9	2.1	0.4	18.4	2.8	0.7
Rural	27.1	5.3	1.5	30.8	6.7	2.2
Low Intensity Punjab						
Overall	–	–	–	–	–	–
Urban	26.8	5.2	1.6	23.7	4.9	1.5
Rural	34.9	6.9	2.0	38.8	7.5	2.2
Barani Punjab						
Overall	–	–	–	–	–	–
Urban	11.7	1.6	0.3	12.0	2.4	0.6
Rural	29.1	4.8	1.2	35.0	6.2	1.7
Sind						
Overall	–	–	–	–	–	–
Urban	11.5	1.7	0.4	16.5	2.9	0.7
Rural	41.4	7.1	1.9	50.1	10.6	3.2
Cotton/Wheat Sind						
Overall	–	–	–	–	–	–
Urban	12.7	1.9	0.4	14.3	2.1	0.4
Rural	28.3	4.3	1.1	29.8	5.3	1.5
Rice/Other Sind						
Overall	–	–	–	–	–	–
Urban	21.3	3.8	0.9	16.3	2.8	0.7
Rural	65.4	15.3	4.8	56.6	12.2	3.7
NWFP						
Overall	–	–	–	–	–	–
Urban	12.2	1.6	0.3	11.8	1.7	0.4
Rural	15.2	2.4	0.5	18.7	3.6	1.1
Other NWFP (except D.I.Khan)						
Overall	–	–	–	–	–	–
Urban	12.5	1.7	0.3	12.2	1.8	0.4
Rural	15.4	2.4	0.6	18.2	3.5	1.1
Baluchistan						
Overall	–	–	–	–	–	–
Urban	10.8	1.3	0.2	20.0	3.1	0.7
Rural	22.0	3.7	1.0	37.8	7.1	2.1

Notes: 1. Results given in columns 1 to 3 are based on the poverty lines (given in column 3 of th Table 5.5) in terms of per capita expenditure per month.

2. Results given in columns 4 t0 6 are based on the poverty lines (given in column 3 of the Table 5.6) in terms of per capita income per month.

3. P0 columns give the percentage of the population.

Table 6.6: Headcount, poverty gap, Foster–Greer–Thorbecke poverty measure using poverty lines based on 80 percent and 70 percent of calories requirements.

(Percent)

Region	80 percent calorie norm			70 percent calorie norm		
	Po	P1	P2	Po	P1	P2
Pakistan	1	2	3	4	5	6
Overall	9.3	1.6	0.4	7.0	1.2	0.31
Urban	4.2	0.6	0.15	3.0	0.40	01.09
Rural	11.3	2.0	0.56	8.5	1.4	0.04
Punjab						
Overall	10.6	1.8	0.05	7.9	1.3	0.35
Urban	5.3	0.79	0.19	3.8	0.53	0.13
Rural	12.3	2.2	0.61	9.3	1.6	0.43
Rice/Wheat Punjab						
Overall	14.0	2.3	0.62	11.0	1.7	0.45
Urban	8.8	1.4	0.37	7.2	1.0	0.26
Rural	16.5	2.8	0.74	12.9	2.1	0.54
Mixed Punjab						
Overall	8.3	1.4	0.39	5.9	0.97	0.25
Urban	5.4	0.73	0.16	3.7	0.43	0.09
Rural	9.1	1.6	0.45	6.5	1.1	0.30
Cotton/Wheat Punjab						
Overall	10.1	1.8	0.48	7.5	1.2	0.31
Urban	3.7	0.51	0.11	2.3	0.31	0.06
Rural	11.5	2.0	0.56	8.6	1.4	0.37
Low Intensity Punjab						
Overall	9.2	1.5	0.37	5.9	0.93	0.21
Urban	7.1	1.2	0.27	5.7	0.67	0.14
Rural	9.5	1.5	0.39	5.9	0.97	0.22
Barani Punjab						
Overall	5.5	0.75	0.17	3.3	0.45	0.10
Urban	3.4	0.49	0.09	2.5	0.29	0.04
Rural	6.4	0.86	0.21	3.7	0.52	0.12
Sind						
Overall	8.6	1.30	0.32	6.2	0.88	0.21
Urban	3.1	0.40	0.09	2.1	0.26	0.06
Rural	13.0	2.0	0.50	9.4	1.4	0.34
Cotton/Wheat Sind						
Overall	5.0	0.79	0.22	2.8	0.49	0.14
Urban	2.0	0.18	0.02	0.89	0.07	0.009
Rural	5.9	0.97	0.28	3.4	0.62	0.18
Rice/Other Sind						
Overall	11.1	1.6	0.37	7.8	1.1	0.23
Urban	4.6	0.57	0.14	2.7	0.37	0.09
Rural	20.3	3.0	0.68	14.9	2.0	0.43
NWFP						
Overall	4.3	0.78	0.27	2.8	0.54	0.20
Urban	1.7	0.22	0.07	0.78	0.14	0.05
Rural	4.8	0.88	0.31	3.2	0.61	0.22
Other NWFP (except D. I.Khan)						
Overall	4.3	0.82	0.29	3.0	0.58	0.21
Urban	1.8	0.23	0.07	0.79	0.15	0.05
Rural	4.8	0.93	0.33	3.4	0.65	0.24
Baluchistan						
Overall	13.4	2.1	0.53	9.2	1.5	0.37
Urban	7.3	0.83	0.15	4.4	0.51	0.09
Rural	14.3	2.2	0.58	9.9	1.6	0.41

Notes: 1. Results reported in columns 1 to 3 and 4 to 6 are based on the Table 5.6 columns 4 and 5 respectively.

2. P0 columns give the percentage of the households.

areas. It seems that proportion of the extremely poor households in the urban NWFP is negligible.

Again the percentage of very poor households in the rural areas are the highest in Baluchistan (14.3 percent), followed by Sind (13.0 percent). However the proportion of the extremely poor in the rural areas of Sind, Punjab and Baluchistan is more or less the same.

Among the agroclimatic zones, the Rice/wheat Punjab shows the highest proportion of the very poor (14.0 percent), and the extremely poor households (11.0 percent), followed by Rice/other Sind, which has 11.1 percent very poor and 7.8 percent the extremely poor households. We also observe that wherever the proportions of very poor and the extremely poor households are high, more or less, the poverty gap (P_1) and severity of poverty as indicated by P_2 index are also high.

Locations of the Poor

The most important task, of a poverty study, is to determine the location of the poor. Once it is known, where the poor are located, or which sector or region contributes more to total poverty, only then the policy makers can adopt the rightly directed policies for poverty alleviation. This section helps us to identify the areas where the poor are more concentrated.

More than 70 percent of the population is residing in rural areas of Pakistan. In our study we have decomposed the poverty by provinces and agroclimatic zones. The proportion of poor households is disproportionately higher in the rural areas than in the urban areas of Pakistan. Therefore, poverty is in Pakistan is basically a rural phenomena. As the estimates reported in Table 6.7 show, the urban poor households comprise only 14.47 percent of the total, while the rural areas of Pakistan have 85.53 percent of the total poor households. The highest share in the

Table 6.7: Distribution of the poor, the very poor and the extreemly poor households using region specific poverty lines in term of expenditures and income (1987–88)

Region	P	Share of population	share of poor	index	P	share of poor	index	P	share of the poor	index	P	share of the very poor	index	P	share of the extremely poor	index
Pakistan	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Overall	.166	100.0	100	100	.166	100.0	100.0	.232	100.0	100.0	9.3	100.0	100.0	7.0	100.0	100.0
Urban	.087	27.6	14.47	52.42	.087	14.47	52.4	.127	15.16	54.92	4.2	12.34	44.71	3.0	11.85	42.93
Rural	.196	72.4	85.53	118.13	.196	85.53	118.13	.272	84.83	117.16	11.3	87.64	121.07	8.5	88.14	121.74
Punjab																
Overall	.199	60.51	72.71	120.16	.185	67.53	111.30	.244	63.56	105.04	10.6	68.62	113.40	7.9	68.62	113.40
Urban	.119	15.28	10.99	71.92	.110	10.41	66.36	.151	9.96	65.18	5.3	8.74	57.19	3.8	8.39	54.90
Rural	.226	45.23	61.72	136.45	.210	57.12	126.48	.275	53.60	118.50	12.3	59.88	132.39	9.3	60.22	133.14
Rice/Wheat Punjab																
Overall	.131	20.16	15.95	79.11	.192	23.40	116.07	.284	24.67	122.37	14.0	30.13	149.65	11.0	31.76	157.53
Urban	.083	6.68	3.35	50.14	.129	5.21	77.99	.185	5.33	79.79	8.8	6.33	94.76	7.2	6.87	102.84
Rural	.155	13.47	12.60	93.54	.224	18.19	135.04	.333	19.34	143.57	16.5	23.83	176.91	12.9	24.89	184.78
Mixed Punjab																
Overall	.209	14.66	16.51	126.26	.171	15.15	103.34	.210	13.28	90.58	8.3	13.02	88.81	5.9	12.39	84.51
Urban	.163	3.29	3.24	98.48	.128	2.54	77.20	.158	2.24	68.08	5.4	1.91	57.05	3.7	1.75	53.14
Rural	.223	11.36	15.27	134.48	.184	12.61	111.00	.225	11.04	97.18	9.1	11.11	97.79	6.5	10.63	93.57
Cotton/Wheat Punj																
Overall	.246	16.59	24.59	148.22	.201	20.14	121.39	.233	16.64	100.30	10.1	17.98	108.37	7.5	17.82	110.06
Urban	.156	2.90	2.73	94.13	.124	2.16	74.48	.148	1.85	63.79	3.7	1.15	39.65	2.3	0.97	33.44
Rural	.265	13.69	21.86	159.67	.218	17.98	131.33	.250	14.78	107.96	11.5	16.83	122.93	8.6	16.85	123.08
Low Intensity Punj																
Overall	.317	7 37	14.09	191.18	.259	11.53	156.44	.274	8.79	119.96	9.2	7.27	98.64	5.9	6.24	84.66
Urban	.243	0.99	1.46	147.47	.208	1.25	126.26	.188	0.80	80.80	7.1	0.75	75.75	5.7	0.80	80.80
Rural	.328	6.38	12.63	197.96	.267	10.28	161.63	.290	7.98	125.07	9.5	6.52	102.19	5.9	5.44	85.26

Barani Punjab																
Overall	.074	6.72	3.02	44.94	.179	7.25	107.88	.212	6.14	91.36	5.5	3.96	58.92	3.3	3.20	47.61
Urban	.035	1.91	0.4	20.94	.086	1.00	53.53	.095	0.78	40.83	3.4	0.69	36.12	2.5	0.68	35.60
Rural	.090	4.80	2.62	54.58	.216	6.25	130.20	.259	5.36	111.66	6.4	3.27	68.12	3.7	2.52	52.5
Sind																
Overall	.095	22.17	12.75	57.51	.219	29.25	131.93	.284	27.16	122.50	8.6	20.48	92.01	6.2	19.58	88.31
Urban	.031	9.79	1.84	18.79	.084	4.95	50.56	.126	5.31	54.23	3.1	3.24	33.09	2.1	2.94	30.03
Rural	.146	12.37	10.91	88.19	.320	24.30	196.44	.410	21.85	176.63	13.0	17.24	139.36	9.4	16.64	134.51
Cotton/Wheat Sind																
Overall	.120	8.99	6.52	72.52	.190	10.28	114.34	.204	7.92	88.09	5.0	4.28	53.61	2.8	3.63	40.37
Urban	.063	2.09	0.79	37.79	.097	1.23	58.85	.111	1.00	47.84	2.0	0.44	21.05	0.89	0.26	12.44
Rural	.138	6.90	5.73	83.04	.218	9.05	131.15	.233	6.92	100.28	5.9	4.37	63.33	3.4	3.36	48.69
Rice/Other Sind																
Overall	.078	13.18	6.23	47.26	.318	25.27	191.72	.266	15.10	114.56	11.1	15.67	118.89	7.8	14.66	111.22
Urban	.023	7.70	1.05	13.63	.154	7.16	92.98	.121	4.01	52.07	4.6	3.76	48.86	2.7	2.99	38.83
Rural	.157	5.47	5.18	94.69	.549	18.11	331.07	.470	11.08	202.55	20.3	11.91	217.73	14.9	11.67	213.84
NWFP																
Overall	.155	12.99	12.08	93.35	.126	9.80	75.73	.148	8.27	63.91	4.3	6.02	46.52	2.8	5.27	40.72
Urban	.124	2.00	1.50	75.0	.096	1.16	0.58	.097	0.83	41.5	1.7	0.36	18.00	0.78	0.22	11.0
Rural	.160	10.94	10.58	96.70	.131	8.63	78.88	.158	7.43	67.91	4.8	5.65	51.64	3.2	5.05	46.16
Other NWFP (except D.I.Khan)																
Overall	.151	12.11	11.05	91.24	.124	9.02	74.48	.144	7.51	62.01	4.3	5.60	46.24	3.0	5.25	43.35
Urban	.127	1.86	1.43	76.88	.099	1.11	59.67	.100	0.80	43.01	1.8	0.35	18.81	0.79	0.21	11.29
Rural	.156	10.24	9.62	93.94	.128	7.91	77.24	.152	6.71	65.52	4.8	5.24	51.17	3.4	5.04	49.21
Baluchistan																
Overall	.093	4.36	2.45	56.19	.158	4.16	95.41	.283	5.31	121.78	13.4	6.27	143.80	9.2	5.74	132.25
Urban	.044	0.55	0.15	27.27	.084	0.28	50.90	.166	0.39	70.90	7.3	0.43	78.18	4.4	0.34	61.81
Rural	.100	3.81	2.30	60.36	.169	3.88	101.83	.299	4.92	129.13	14.3	5.84	153.28	9.9	5.39	141.46

Notes: 1. P0 is based on country specific poverty lines.

2. P0 is based on table 5.5 (Column 3)

3. P0, P0 and P0 are based on columns 3,4 and 5 respectively of the Table 5.6.

total poverty is that of Punjab (72.71 percent) followed by Sind (12.75 percent). NWFP contributes 12.08 percent poor households to the total of the country, while Baluchistan's contribution is very small (2.45 percent). Among the agroclimatic zones cotton/wheat Punjab contributes 24.50 percent followed by Mixed Punjab (18.51 percent) and rice/wheat Punjab (15.95 percent). The share of Barani Punjab is the minimum (3.02 percent) among the agroclimatic zones, while the share of NWFP (except D.I. Khan) is 11.05 percent. The contribution of cotton/wheat Sind and rice/other Sind in the total poor households is almost the same (i.e. 6.52 percent and 6.23 percent respectively). These results are obtained on the basis of country specific poverty line.

Column 6 of the Table 6.7 shows the percentage distribution of the poor households on the basis of region specific poverty lines in terms of expenditure. The shares of the overall and the rural-urban areas of Pakistan remain the same, because the country specific and the region specific poverty lines for Pakistan is the same. The majority of the poor households (67.35 percent) are concentrated in the Punjab, followed by Sind (29.25 percent). NWFP and Baluchistan contribute 9.80 percent and 4.36 percent poor households respectively to the total of the country. These figures do not add up to 100 because different region specific poverty lines have been used. Among the agroclimatic zones, Rice/wheat Punjab contributes 23.40 percent followed by cotton/wheat Punjab (20.14 percent). If we add up the share of poor households in both NWFP and Baluchistan, even then it is smaller than the share of Rice/wheat Punjab or cotton/wheat Punjab. This shows that these regions have a relatively high concentration of the poor households. However, Rice/other Sind's contribution is even greater (25.27 percent) than that of Rice/wheat or cotton/wheat Punjab.

Columns 9,12 and 15 of the same Table show the distribution of poor households in terms of income poverty lines based on 100 percent (i.e. 2550 calories), 80 percent and 70

percent of the required calorie norm respectively.

On the basis of income threshold almost the same pattern emerges as with the expenditure based poverty lines (see columns 3 and 6). The share of poor households in the rural areas of Pakistan is about 85.0 percent on the basis of income threshold. Again Punjab has the greatest share of the poor households (63.56 percent), followed by Sind (27.16 percent).

But when we compare the share of very poor and the extremely poor households, an interesting result is observed. The share of rural very poor and the extremely poor households as compared to the poor households in Pakistan is somewhat higher. The share of poor households belonging to rural areas is 84.83 percent out of the total poor households in the country, while the share of rural very poor is 87.66 percent and that of rural extremely poor is 88.14 percent. This shows that the severe poverty is more prevalent in the rural areas of Pakistan than in the urban areas. However, the percentage of the very poor and the extremely poor is relatively smaller in the rural areas of NWFP which has 7.43 percent poor households while 5.65 percent the very poor and 5.05 percent the extremely poor.

To determine the location of the poor, we estimate an index, which was introduced by Malik (1991). This index incorporates the weight of the total number of households in the region in the grand total of households in the country. If the percentage share of the poor households in each region is divided by corresponding percentage share of the region in the grand total of the households in the country, it gives a measure that indicates whether that specific region has more than or equal to or less than its share of the poor. A value equal to 100 for this index implies that the share of poor households in the region is equal to the share of region's overall households in the country.

The estimated values of this index are given in column 4 of Table 6.7. These estimates

show that overall rural areas of Pakistan have more poor households than their population share. This implies that poor households are concentrated in the rural areas of Pakistan.

The estimated values of Index reported in column 4 of the Table 6.7 are based on the country specific poverty line, which is in terms of expenditure. The index shows a value of 118.13 for the rural areas of Pakistan and 53.42 for the urban ones. Among the provinces, we find the highest value of this index in rural Punjab (136.45), followed by rural NWFP (96.70) and rural Sind (88.19), while for rural Baluchistan the value of index is 60.36. This shows that in rural Punjab the share of the poor households is larger than its share of the total households, while in all other provinces the share of poor households is less than their share of total households. This is also true for the agroclimatic zones. The value of the index for rural Low intensity Punjab is the highest (197.96), followed by rural cotton/wheat Punjab (159.67) and Mixed Punjab (134.41). All other agroclimatic zones show the value of indices less than 100 employing that the share of poor households in the respective zones is less than the share of total households.

The estimated values of index given in Column 7 of the same Table are based on region specific poverty lines using the expenditures. The values of index for overall and rural - urban areas of Pakistan are the same as those of the country specific poverty line. Because both the poverty lines for the Pakistan are the same. However, we observed different values of the index for different provinces and agroclimatic zones.

Among the provinces, we find the highest value of this index in rural Sind (196.44), followed by rural Punjab (126.48). The high value of the index in rural Sind is perhaps due to the highest value of this index in Rice/other Sind (331.07). So the highest concentration of the poor households can be found in Rice/other Sind (rural), followed by low-intensity Punjab

(161.63) and Rice/wheat Punjab (135.04). The value of the index is 101.83 for rural Baluchistan. This implies that the share of rural poor households in Baluchistan is marginally larger than their total households. In the rural NWFP value of the index is 78.88.

The estimated values of the index given in the column 10, 13 and 16 are based on region specific poverty lines in terms of income. Here again, we can see the same trend, that is, that the rural areas of Pakistan contain more poor households than their share of population.

Again the exceptions are those of the rural areas of NWFP, other NWFP (except D.I. Khan), and Mixed Punjab.

If we look at the Table 6.7, we find that the highest concentration of the very poor and the extremely poor is in overall Baluchistan, with 143.80 and 132.25 values of the index respectively.

This implies that in Baluchistan the share of very poor and the extremely poor households is larger than its population share and it is also larger than that of the other provinces.

Socioeconomic Profile of the Poor Households

This section focuses on the results of a breakdown of aggregate poverty according to various socioeconomic and demographic characteristics of the households. We have done the decomposition exercise separately for the households headed by male and female members.

Table 6.8 presents the distribution by age of the poor households headed by males and females. The poverty is wide spread in all the age groups. The households with male heads, between age 40-49, show the highest poverty level (36.5 percent), followed by the age group

Table 6.8: Percentage distribution of poor households by age of the head of the household (1987–88

	(1)		(2)		(3)		(4)		(5)		(6)
	Less than 30		30 – 39		40 – 49		50 – 59		60 & above		
Region	M	F	M	F	M	F	M	F	M	F	Total
Pakistan											
Overall	5.0	10.9	28.8	35.5	36.5	9.5	18.5	14.0	11.3	30.1	100.0
Urban	1.7	–	30.5	55.8	37.4	–	15.3	44.2	15.1	–	100.0
Rural	5.2	12.0	28.7	33.5	36.4	10.4	18.7	11.0	11.0	33.1	100.0
Punjab											
Overall	6.1	–	30.0	26.7	34.8	13.0	16.5	19.1	12.6	41.2	100.0
Urban	2.2	–	22.7	55.8	45.6	–	19.2	44.2	10.4	–	100.0
Rural	6.4	–	30.5	22.6	34.0	14.8	16.3	15.6	12.8	47.0	100.0
Rice/Wheat Punjab											
Overall	3.1	–	38.8	54.6	28.7	–	19.1	45.4	10.3	–	100.0
Urban	–	–	58.7	100	35.1	–	–	–	8.2	–	100.0
Rural	3.5	–	36.3	45.1	28.1	–	21.5	54.9	10.5	–	100.0
Mixed Punjab											
Overall	–	–	25.8	56.3	40.8	–	9.7	–	17.8	43.7	100.0
Urban	–	–	–	–	100	–	–	–	–	–	100.0
Rural	–	–	26.5	56.3	45.2	–	9.9	–	18.3	43.7	100.0
Cotton/Wheat Punjab											
Overall	4.5	–	26.1	–	42.0	–	19.8	–	7.7	–	100.0
Urban	–	–	52.7	–	10.0	–	37.4	–	–	–	100.0
Rural	4.6	–	25.1	–	43.1	–	19.1	–	8.0	–	100.0
Low Intencity Punjab											
Overall	–	–	52.7	–	47.2	–	12.4	–	14.7	–	100.0
Urban	–	–	27.1	–	45.4	–	27.6	–	–	–	100.0
Rural	–	–	25.6	–	47.3	–	11.5	–	15.6	–	100.0
Barani Punjab											
Overall	–	–	25.2	–	38.7	–	18.8	–	17.3	–	100.0
Urban	–	–	–	–	100	–	–	–	–	–	100.0
Rural	–	–	26.5	–	35.4	–	19.8	–	18.2	–	100.0
Sind											
Overall	–	–	31.0	100	32.2	–	26.1	–	10.5	–	100.0
Urban	–	–	26.7	–	31.2	–	12.5	–	29.6	–	100.0
Rural	–	–	31.5	100	32.6	–	27.7	–	8.3	–	100.0
Cotton/Wheat Sind											
Overall	–	–	7.1	100	29.5	–	57.4	–	6.0	–	100.0
Urban	–	–	–	–	–	–	–	–	–	–	100.0
Rural	–	–	7.1	100	29.5	–	57.4	–	6.0	–	100.0
Rice/Other Sind											
Overall	–	–	41.4	–	23.9	–	10.2	–	24.5	–	100.0
Urban	–	–	41.7	–	14.6	–	9.8	–	33.9	–	100.0
Rural	–	–	41.3	–	26.9	–	10.3	–	21.4	–	100.0
NWFP											
Overall	5.9	100	41.8	–	36.1	–	1.5	–	14.6	–	100.0
Urban	–	–	100.0	–	–	–	–	–	–	–	100.0
Rural	6.1	100	40.7	–	36.9	–	1.6	–	14.9	–	100.0
Other NWFP (except D. I.Khan)											
Overall	5.9	100	41.8	–	36.1	–	1.5	–	14.6	–	100.0
Urban	–	–	100	–	–	–	–	–	–	–	100.0
Rural	6.1	100	40.7	–	36.9	–	1.6	–	14.9	–	100.0
Baluchistan											
Overall	3.1	–	49.1	–	22.1	–	25.7	–	–	–	100.0
Urban	–	–	100.0	–	–	–	–	–	–	–	100.0
Rural	3.2	–	48.2	–	22.5	–	26.2	–	–	–	100.0

Note: M = Male
F = Female

of 30-39 (28.8 percent) in overall Pakistan. The opposite is true for female headed households, that is age group 40-49 has the lowest (9.5 percent) poverty level and the age group 30-39 has the highest poverty level (35.5 percent). The poor households with male heads are more evenly distributed among the age groups as compared to the female headed households in overall Pakistan. This holds true for male headed households in both the urban and the rural areas of Pakistan. However, in the urban areas of Pakistan, female headed poor households are mainly concentrated in the age group of 30-39 (55.8 percent), followed by the age group of 50-59 (44.2 percent).

In the rural areas of Pakistan, female headed poor households are more evenly distributed among the age groups than those in the urban areas.

The distribution of poor households among the provinces presents slightly different results. For the male headed households, the same patterns emerge in Punjab and Sind with their urban rural break up, that is, that the majority of the male headed poor households lie in the age group of 40-49.

NWFP and Baluchistan show somewhat different results. In both of these provinces, the majority of the male headed poor households lie in the age group of 30 to 39. The male headed poor households are 41.8 percent in overall NWFP and 49.1 percent in overall Baluchistan. The interesting result is that 100 percent of the urban poor male headed households in Baluchistan lie in the age group of 30-39.

For female headed households a different pattern emerges. More than 40 percent of the female headed poor households lie in the age group of 60 or above in overall and rural Punjab. While, in Sind this figure is 100 percent in the age group of 30-39 for rural and no female

headed poor household is found in the urban areas of Sind. In NWFP 100 percent female headed poor households lie in the age group of less than 30 years, while in Baluchistan no female headed poor household can be found in any age group.

In agroclimatic zones, we find more or less the same pattern of results as in case of provinces. The majority of the male headed poor households lie in the age group of 40 to 49, except in the Rice/wheat Punjab, Rice/other Sind and other NWFP, where the greatest proportion of poor households is in the age group of 30 - 39. For female headed households, we find the same pattern in case of agroclimatic zones as in case of provinces.

Marital Status

The classification according to the marital status of the head of the household shows that about 95 percent of the male headed poor households have married male heads. For instance, in overall Pakistan 94.6 percent, in urban areas 95.3 percent and in rural areas 94.4 percent male headed poor households have married heads. The remaining about 3 to 4 percent are widowers, while about 1 to 2 percent are unmarried males (see Table 6.9). Almost the same pattern emerges for the male headed poor households across the provinces and agroclimatic zones with rural urban break up (see Table 6.9).

The pattern of poverty for poor female headed households to some extent is different in different regions.

In overall Pakistan 67.9 percent of the female headed poor households are married females. While 72.6 percent of the poor female headed households in rural areas have married heads and corresponding figure for urban areas is 25.8 percent. Contrary to the poor male headed households, the proportion of the poor female headed households having windows as their heads is significantly higher. The share of the poor female headed households, having

Table 6.9: Percentage distribution of poor hoseholds by marital status of the head of the household (1987–88

Region	(1) Unmarried		(2) Married		(3) Vido/Widower		(4) Divorced		(5) Total
	M	F	M	F	M	F	M	F	
Pakistan									
Overall	1.7	–	94.6	67.9	3.6	31.6	0.1	0.5	100.0
Urban	1.7	–	95.3	25.8	3.0	74.2	–	–	100.0
Rural	1.7	–	94.4	72.6	3.7	26.9	0.2	0.5	100.0
Punjab									
Overall	2.0	–	93.8	67.3	4.0	32.7	0.2	–	100.0
Urban	1.5	–	95.4	25.6	3.1	74.4	–	–	100.0
Rural	2.1	72.7	93.5	27.3	4.1	–	0.2	–	100.0
Rice/Wheat Punjab									
Overall	1.8	–	94.5	75.2	32.2	24.8	0.5	–	100.0
Urban	0.7	–	96.4	52.7	2.9	47.3	–	–	100.0
Rural	2.1	–	94.0	79.2	3.3	20.8	0.6	–	100.0
Mixed Punjab									
Overall	2.1	–	92.9	45.5	4.4	54.5	–	–	100.0
Urban	0.7	–	96.7	13.4	2.6	86.6	0.7	–	100.0
Rural	2.4	–	92.1	49.0	4.8	51.0	–	–	100.0
Cotton/Wheat Punjab									
Overall	2.6	–	94.1	44.0	3.3	56.0	–	–	100.0
Urban	2.5	–	92.3	3.2	5.1	96.8	–	–	100.0
Rural	2.7	–	94.3	50.4	3.0	49.6	–	–	100.0
Low Intensity Punjab									
Overall	0.7	–	94.5	71.8	4.9	14.1	–	14.1	100.0
Urban	0.7	–	99.3	–	–	–	–	–	100.0
Rural	0.7	–	94.0	71.8	5.4	14.1	–	14.1	100.0
Barani Punjab									
Overall	0.9	–	92.4	74.2	6.7	25.6	–	–	100.0
Urban	1.8	–	95.7	–	2.5	–	–	–	100.0
Rural	0.7	–	91.9	74.4	7.4	25.6–	–	–	100.0
Sind									
Overall	1.4	–	95.8	6.1	2.8	93.9	–	–	100.0
Urban	1.7	–	95.8	13.7	2.6	86.3	–	–	100.0
Rural	1.4	–	95.8	–	2.9	100.0	–	–	100.0
Cotton/Wheat Sind									
Overall	1.3	–	97.9	9.2	0.8	90.8	–	–	100.0
Urban	1.2	–	97.0	52.3	1.8	47.7	–	–	100.0
Rural	1.3	–	98.0	–	0.7	100	–	–	100.0
Rice/Other Sind									
Overall	0.9	–	96.1	–	3.0	100	–	–	100.0
Urban	–	–	–	–	–	100	–	–	100.0
Rural	–	–	–	–	–	–	–	–	100.0
NWFP									
Overall	1.2	–	94.6	71.1	4.2	26.0	–	2.8	100.0
Urban	1.0	–	89.6	53.2	9.4	46.8	–	–	100.0
Rural	1.2	–	95.2	72.2	3.6	24.8	–	3.0	100.0
Other NWFP (except D.I.Khan)									
Overall	–	–	–	74.5	–	25.5	–	–	100.0
Urban	–	–	–	53.5	–	46.8	–	–	100.0
Rural	–	–	–	75.5	–	24.3	–	–	100.0
Baluchistan									
Overall	–	–	98.5	–	1.5	100.0	–	–	100.0
Urban	–	–	97.3	–	2.7	100.0	–	–	100.0
Rural	–	–	98.5	–	1.5	100.0	–	–	100.0

Note: M= Male
F= Female

widows as their heads is 31.6 percent in overall Pakistan, 26.9 percent in rural and 74.2 percent in urban areas of Pakistan. Of the poor female headed households 67.3 percent have married females as heads in overall Punjab, while the percentage of such married female headed households is 25.6 percent in urban and 27.3 percent in rural areas of Punjab, while 32.7 percent of the female headed poor households have widows as their heads in overall Punjab. The proportion of such widow-headed households among the female headed poor households is 74.4 percent in urban areas of Punjab. No poor household is headed by a widow in the rural areas of Punjab. In the rural areas of Punjab 72.7 percent of the female headed poor households have unmarried females as their heads. In case of Sind province, the most of the female headed poor households have widows as their heads e.g., their proportion is 93.9 percent in overall, 86.3 percent in urban and 100 percent in the rural areas of Sind. In Baluchistan 100 percent of the female headed poor households have widows as their heads. The proportion of female headed poor households having married females as heads is 71.1 percent in overall, 53.2 percent in urban and 72.2 percent in rural areas of NWFP, while the proportion of female headed poor households having widows as their heads is 26.0 percent in overall, 46.8 percent in urban areas and 24.8 percent in rural areas NWFP. In case of agroclimatic zones of Pakistan, more or less the same pattern emerges as is found in case of the provinces.

Literacy

The break down of the poor households (both male and female headed) according to the literacy reveals that the majority of these are headed by illiterates. The incidence of poverty among the illiterate female headed households is greater than that of the male headed households. Table 6.10 shows that more than 90 percent of the female headed poor households are illiterate in overall Pakistan and their percentage is almost the same in the rural areas. While their proportion is about 96 percent in the urban areas of Pakistan.

Table 6.10: Percentage distribution of poor households by literacy and educational level of the head of the household (1987–88)

Region	(1) Level of Literacy		(2)		(3)	(4) Educational Level		(5)		(6)		(7)		(8)		(9)		(10)		(11)		(12)		(13)		(14)
	Literate		Illiterate		Total	None		K.G. Less than Primary		Primary but Less than Middle		Middle but Less than Matric		Matric but Less than Intermediate		Intermediate but Less than Degree		Degree but Less than Post–Graduate		Post–Graduate		Ph.D.		Others		Total
Pakistan	M	F	M	F		M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
Overall	22.8	8.1	77.2	91.9	100	77.0	91.9	3.1	–	10.8	6.3	5.3	1.8	2.7	–	0.7	–	0.1	–	0.0	–	–	–	0.2	–	100
Urban	38.0	4.2	62.0	95.8	100	62.0	95.8	4.3	–	12.9	1.8	11.2	2.4	6.6	–	2.4	–	0.2	–	0.1	–	–	–	0.3	–	100
Rural	20.1	8.6	79.7	91.4	100	79.7	91.4	2.9	–	10.4	6.8	4.2	1.7	2.0	–	0.4	–	0.1	–	–	–	–	–	0.2	–	100
Punjab																										
Overall	22.2	7.1	77.8	92.9	100	77.4	92.9	3.0	–	10.2	5.8	5.7	1.3	2.9	–	0.6	–	0.1	–	–	–	–	–	0.1	–	100
Urban	38.3	2.6	61.7	97.4	100	61.6	97.4	3.9	–	12.8	2.6	11.8	–	7.6	–	1.9	–	0.1	–	–	–	–	–	0.3	–	100
Rural	19.2	7.7	80.8	92.3	100	80.4	92.3	2.8	–	9.7	6.2	4.6	1.5	2.0	–	0.3	–	.0	–	–	–	–	–	.0	–	100
Rice/Wheat Punjab																										
Overall	23.5	5.3	76.5	94.7	100	76.6	94.7	2.0	–	10.5	5.3	6.3	–	7.7	–	0.6	–	–	–	–	–	–	–	0.3	–	100
Urban	40.7	3.4	59.3	96.6	100	58.5	96.6	2.2	–	16.2	3.4	10.8	–	11.4	–	0.7	–	–	–	–	–	–	–	–	–	100
Rural	18.6	5.7	81.4	94.3	100	81.6	94.3	1.9	–	8.9	5.7	5.0	–	1.5	–	0.5	–	–	–	–	–	–	–	0.4	–	100
Mixed Punjab																										
Overall	22.8	–	77.2	100.0	100	76.9	100	3.5	–	10.4	–	6.2	–	2.6	–	0.4	–	–	–	–	–	–	–	–	–	100
Urban	36.6	–	63.4	100.0	100	63.1	100	4.2	–	13.1	–	14.7	–	4.5	–	0.4	–	–	–	–	–	–	–	–	–	100
Rural	19.9	–	80.1	100.0	100	79.7	100	3.4	–	9.9	–	4.5	–	2.2	–	0.3	–	–	–	–	–	–	–	–	–	100
Cotton/Wheat Punjab																										
Overall	19.8	6.7	80.2	93.3	100	79.3	93.3	3.3	–	10.5	6.7	3.7	–	2.3	–	0.7	–	–	–	–	–	0.1	–	–	–	100
Urban	25.3	–	74.7	100.0	100	74.7	100	2.6	–	11.4	–	4.5	–	3.5	–	2.5	–	–	–	–	–	–	–	0.8	–	100
Rural	19.1	7.8	80.9	92.9	100	79.9	92.2	3.4	–	10.4	7.8	3.6	–	2.1	–	0.5	–	–	–	–	–	–	–	–	–	100
Low Intensity Punjab																										
Overall	17.4	–	82.6	100	100	82.7	100	2.5	–	8.4	–	4.3	–	2.0	–	0.2	–	–	–	–	–	–	–	–	–	100
Urban	37.8	–	62.2	–	100	62.7	–	5.5	–	11.2	–	12.7	–	6.2	–	1.7	–	–	–	–	–	–	–	–	–	100
Rural	15.3	–	84.7	100.0	100	84.7	100	2.2	–	8.1	–	3.4	–	1.6	–	–	–	–	–	–	–	–	–	–	–	100

Barani Punjab																														
Overall	42.8		12.5	57.2	87.5	100	57.2	87.5	7.4	–	16.9	4.8	10.2	7.6	6.3	–	1.4	–	0.2	–	–	–	–	–	0.4	–100				
Urban	61.4	–	38.6	–	100		38.6	–	8.4	–	13.5	–	16.5	–	16.6	–	5.3	–	1.2	–	–	–	–	–	–	–100				
Rural	39.5		12.5	60.5	87.5	100	60.5	87.5	7.2	–	17.6	4.8	9.1	7.6	4.4	–	0.7	–	–	–	–	–	–	–	0.4	–100				
Sind																														
Overall	33.6	6.1	66.4	93.3	100		66.6	93.9	4.9	–	18.4	–	4.6	6.1	3.0	–	1.5	–	0.6	–	0.1	–	.0	–	0.2	–100				
Urban	47.4	13.7	52.6	86.3	100		52.9	86.3	5.9	–	15.9	–	8.7	13.7	9.6	–	4.7	–	1.1	–	0.4	–	0.2	–	0.6	–100				
Rural	30.2	–	69.8	100.0	100		69.9	100.0	4.7	–	19.0	–	3.7	–	1.5	–	0.7	–	0.5	–	–	–	–	–	0.1	–100				
Cotton/Wheat Sind																														
Overall	28.2	9.2	71.8	90.8	100		72.2	90.8	2.7	–	15.6	–	5.6	9.2	1.9	–	1.0	–	0.5	–	0.1	–	–	–	0.4	–100				
Urban	41.8	52.3	58.2	47.7	100		59.7	47.7	4.6	–	19.9	–	8.8	52.3	3.0	–	2.7	–	0.4	–	0.8	–	–	–	–	–100				
Rural	26.2	–	73.8	100	100		74.0	100	2.4	–	15.0	–	5.1	–	1.8	–	0.7		0.5	–	–	–	–	–	0.4	–100				
Rice/Other Sind																														
Overall	38.5	–	61.5	100	100		61.6	100	6.1	–	21.7	–	3.5	–	4.2	–	1.6	–	1.0	–	0.1	–	0.1	–	0.2	–100				
Urban	–	–	–	100	100		–	100	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–100				
Rural	–	–	–	–	–		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–100				
NWFP																														
Overall	12.8	5.0	87.2	95.0	100		87.2	95.0	2.4	–	3.8	5.0	3.7	–	2.2	–	0.1	–	0.1	–	–	–	–	–	0.4	–100				
Urban	19.7	–	80.3	100.0	100		80.8	100.0	4.4	–	5.9	–	4.3	–	3.3	–	1.1	–	0.2	–	–	–	–	–	0.4	–100				
Rural	12.0	5.3	88.0	94.7	100		88.0	94.7	2.2	–	3.5	5.3	3.7	–	2.1	–	–	–	0.1	–	–	–	–	–	0.5	–100				
Other NWFP (except D.I.Khan)																														
Overall	–	4.9	–	95.1	100		–	95.1	–	–	–	4.9	–	–	–	–	–	–	–	–	–	–	–	–	–	–100				
Urban	–	–	–	100	100		–	100	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–100				
Rural	–	5.2	–	94.8	100		–	94.8	–	–	–	5.2	–	–	–	–	–	–	–	–	–	–	–	–	–	–100				
Baluchistan																														
Overall	15.2	–	84.2	100.0	100		84.7	100.0	3.8	–	7.8	–	0.7	–	0.6	–	0.3	–	–	–	–	–	–	–	2.1	–100				
Urban	39.3	–	60.7	100.0	100		60.0	100.0	3.9	–	14.1	–	9.5	–	3.4	–	3.7	–	–	–	–	–	–	–	2.4	–100				
Rural	13.9	–	86.1	100.0	100		86.5	100.0	3.8	–	7.3	–	–	–	0.4	–	–	–	–	–	–	–	–	–	2.0	–100				

Note: M=Male

F=Female

Similarly about 70 percent of male headed poor households are illiterate. This Table also shows that proportion of literate headed households is greater in the urban areas as compared to the rural areas. In Pakistan 38.0 percent of the literate male headed poor households can be found in urban areas while 20.1 percent in the rural areas. In all the provinces and agroclimatic zones, we see that the proportion of literate headed poor households is greater in urban areas than that in the rural areas. This is also true for female headed households with the exception of rural Pakistan, where the proportion of literate female headed poor households is greater (i.e. 8.6 percent compared to 4.0 percent than that of urban Pakistan). In Baluchistan we do not find any literate female headed poor household. The relatively large share of literate poor households in urban than in rural areas is due to, perhaps, migration of the literate people from the rural areas to the urban areas. This migration is increasing the number of urban poor households.

Educational Level

Table 6.10 also presents the distribution of poor households according to the level of education. We see that as the education level of the head of the household increases, the poverty level decreases.

Among the educated we hardly find any poor at the degree level. For instance in Pakistan the degree holder heads of the poor households are 0.1 percent (male) and no female.

However, among the educated heads of the poor households, the incidence of poverty is greater in the households headed by the persons having primary or middle level education. In Pakistan, about 77 percent of the heads of the poor households have no education. The remaining about 23 percent are distributed in the matric or less than matric level of education. About 10.8 percent of the male headed poor households have heads, who had primary level of education.

Similar pattern is observed in all the province and agroclimatic zones of Pakistan (see Table 6.10).

Working Status

The decomposition of the poor households according to the working status reveals that more than 90 percent of the male heads of the households are in the working class, while more than 80 percent of the female heads of the household are among the non-working class. Of the male headed poor households 93.6 percent in overall Pakistan, 89.4 percent in urban and 94.4 in rural areas of Pakistan are in the working class. The remaining poor are in the non-working class. From this it can be concluded that the incidence of poverty is greater among the working class. The classification given in Table 6.11 also shows the fact that the proportion of male working class poor is higher in the rural areas of all the provinces and in agroclimatic zones than that in urban areas.

Occupation

Table 6.12 provides the breakdown of the poor households according to the occupation of the head of the household. We have decomposed these households into eight occupation groups. The highest proportion of the male heads of poor households is found in agriculture, animal husbandry and forestry. The figure for male workers in this occupation in overall Pakistan is 42.4 percent, in urban areas 5.2 percent and in rural areas 49.4 percent. In rural Sind 70 percent of the poor household heads, in rural Baluchistan 60.2 percent, in rural Punjab 45.2 percent and in rural NWFP 46.5 percent are engaged in the agriculture, animal husbandry and forestry. We find almost the same pattern of distribution in agroclimatic zones. As we know that rural areas have larger proportion of the poor households as compared to their share in population. The majority of these heads of poor households have the agriculture as their occupation. Agricultural land ownership is concentrated in a few hands. Our agriculture is

Table 6.11: Percentage distribution of the poor households by the Working status of the head of the household (1987–88)

Region	(1) Working		(2) Not Working		(3) Total
Pakistan	M	F	M	F	
Overall	93.6	19.0	6.4	81.0	100.0
Urban	89.4	27.0	10.6	73.0	100.0
Rural	94.4	18.1	5.6	81.9	100.0
Punjab					
Overal	92.9	19.4	7.1	80.6	100.0
Urban	88.6	27.9	11.4	72.1	100.0
Rural	93.7	18.3	6.3	81.7	100.0
Rice/Wheat Punjab					
Overall	92.0	12.0	8.0	88.0	100.0
Urban	90.1	20.2	9.9	79.8	100.0
Rural	92.6	10.6	7.4	89.4	100.0
Mixed Punjab					
Overall	94.2	33.2	5.8	66.8	100.0
Urban	90.5	86.6	9.5	13.4	100.0
Rural	95.0	27.3	5.0	72.7	100.0
Cotton/Wheat Punjab					
Overall	94.7	35.3	5.3	64.7	100.0
Urban	85.9	–	14.1	100	100.0
Rural	95.7	40.8	4.3	59.2	100.0
Low Intensity Punjab					
Overall	93.4	14.1	6.6	85.9	100.0
Urban	91.1	–	8.9	–	100.0
Rural	93.6	14.1	6.4	85.9	100.0
Barani Punjab					
Overall	89.5	23.8	10.5	76.2	100.0
Urban	89.7	–	10.3	–	100.0
Rural	89.4	23.8	10.6	76.2	100.0
Sind					
Overal	96.0	49.6	4.0	50.4	100.0
Urban	90.0	61.6	10.0	38.4	100.0
Rural	97.5	40.0	2.5	60.0	100.0
Cotton/Wheat Sind					
Overall	97.9	50.5	2.1	49.5	100.0
Urban	93.4	100	6.6	–	100.0
Rural	98.6	40.0	1.4	60.0	100.0
Rice/Other Sind					
Overall	95.4	32.5	4.6	67.5	100.0
Urban	–	32.5	–	67.5	100.0
Rural	–	–	–	–	100.0
NWFP					
Overal	92.7	10.9	7.3	89.1	100.0
Urban	91.8	–	8.2	100.0	100.0
Rural	92.8	11.5	7.2	88.5	100.0
Other NWFP (except D. I. Khan)					
Overall	–	10.7	–	89.3	100.0
Urban	–	–	100	–	100.0
Rural	–	11.3	–	88.7	100.0
Baluchistan					
Overal	98.1	16.9	1.9	83.1	100.0
Urban	92.7	100.0	7.3	–	100.0
Rural	98.5	–	1.5	100.0	100.0

Note: M=Male
F=Female

Table 6.12: Percentage distribution of poor households by occupation of the head of the houselod (1987–88)

Region	(1) Professional Technical & Related Workers		(2) Admn & Managerial Workers		(3) Clerical & Related Workers		(4) Sales Workers		(5) Service Workers		(6) Agriculture, Animal Husbandry & Forestry Workers Fishermen & Hunters		(7) Production & Related Workers. Transport Equipment Operators & Labourers		(8) Workers not Classified by Occupati		(9) Total
Pakistan	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
Overall	8.6	81.0	.0	–	1.8	–	10.0	0.3	5.5	5.3	42.4	11.1	31.4	2.5	0.	–	100.0
Urban	13.4	73.6	0.1	–	5.0	–	23.0	3.5	11.2	16.6	5.2	6.4	42.0	–	0.1	–	100.0
Rural	7.8	81.9	.0	–	1.2	–	7.6	–	4.4	4.1	49.4	11.6	29.5	2.4	.0	–	100.0
Punjab																	
Overall	9.3	80.6	.0	–	1.5	–	10.8	0.6	5.6	7.2	38.8	7.9	33.9	3.7	–	–	100.0
Urban	14.8	72.1	0.1	–	4.5	–	24.5	5.1	9.5	21.3	4.8	1.5	41.8	–	0.2	–	100.0
Rural	8.2	81.7	–	–	1.0	–	8.2	–	4.8	5.1	45.2	8.7	32.5	4.2	–	–	100.0
Rice/Wheat Punjab																	
Overall	10.2	88.1	0.1	–	1.7	–	12.3	–	5.4	2.9	34.6	9.0	35.5	–	0.1	–	100.0
Urban	11.5	80.8	–	–	27.7	–	22.7	–	10.9	19.2	5.0	–	46.6	–	0.4	–	100.0
Rural	9.9	89.4	0.2	–	1.4	–	9.4	–	3.9	–	43.0	10.6	32.3	–	–	–	100.0
Mixed Punjab																	
Overall	7.9	66.8	0.1	–	1.6	–	13.1	3.0	8.6	16.5	32.2	0.9	33.5	12.9	–	–	100.0
Urban	10.9	13.4	0.4	–	3.2	–	22.7	29.8	12.7	48.1	6.4	8.7	43.7	–	–	–	100.0
Rural	7.3	72.7	–	–	1.3	–	11.1	–	7.1	13.0	41.2	–	31.4	14.3	–	–	100.0
Cotton/Wheat Punjab																	
Overall	7.2	64.7	–	–	1.4	–	9.8	–	5.3	3.9	46.3	14.9	40.1	6.5	–	–	100.0
Urban	17.5	100	–	–	5.6	–	26.6	–	6.3	–	6.4	–	37.6	–	–	–	100.0
Rural	5.9	59.2	–	–	0.8	–	7.7	–	5.2	16.1	51.3	17.3	29.1	7.5	–	–	100.0
Low Intensity Punjab																	
Overall	8.7	85.9	–	–	0.1	–	6.5	–	4.1	–	41.5	14.1	39.0	–	–	–	100.0
Urban	14.5	–	–	–	1.4	–	28.2	–	14.0	–	4.1	–	37.9	–	–	–	100.0
Rural	8.2	85.9	–	–	–	–	4.3	–	3.1	–	45.3	14.1	39.1	–	–	–	100.0
Baran Punjab																	
Overall	15.6	76.2	–	–	2.9	–	5.2	–	8.3	–	32.2	23.8	35.8	–	–	–	100.0
Urban	11.5	–	–	–	15.5	–	14.3	–	24.2	–	2.6	–	31.9	–	–	–	100.0
Rural	16.3	76.2	–	–	0.7	–	3.5	–	5.5	–	37.5	23.8	36.5	–	–	–	100.0
Sind																	
Overall	5.5	50.4	0.1	–	3.5	–	8.8	–	5.2	40.5	57.4	6.1	19.5	3.0	–	–	100.0
Urban	12.0	38.4	–	–	9.0	–	17.4	–	16.7	41.3	5.5	13.7	39.3	6.3	–	–	100.0
Rural	4.0	60.0	0.1	–	2.2	–	6.7	–	2.4	40.0	69.9	–	14.7	–	–	–	100.0
Cotton/Wheat Sind																	
Overall	4.3	49.5	0.3	–	0.9	–	6.9	–	4.1	41.3	65.9	9.2	17.6	–	–	–	100.0
Urban	6.6	–	–	–	5.9	–	20.3	–	11.2	47.7	11.9	52.3	44.1	–	–	–	100.0
Rural	4.0	60.0	0.4	–	0.2	–	4.9	–	3.1	40.0	73.6	–	13.7	–	–	–	100.0
Rice/Other Sind																	
Overall	6.6	67.5	0.2	–	5.2	–	8.6	–	7.0	26.4	51.9	–	20.4	6.1	–	–	100.0
Urban	–	67.5	–	–	–	–	–	–	–	26.4	–	–	–	6.1	–	–	100.0
Rural	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	100.0
NWFP																	
Overall	9.3	89.0	–	–	1.8	–	9.8	–	4.1	–	42.2	10.9	32.7	–	–	–	100.0
Urban	12.0	100.0	–	–	3.7	–	16.1	–	12.9	–	5.7	–	49.6	–	–	–	100.0
Rural	9.0	88.5	–	–	1.6	–	9.1	–	3.0	–	46.5	11.5	30.8	–	–	–	100.0
Other NWFP (except D.I.Khan)																	
Overall	–	89.3	–	–	–	–	–	–	–	–	–	10.7	–	–	–	–	100.0
Urban	–	100	–	–	–	–	–	–	–	–	–	–	–	–	–	–	100.0
Rural	–	88.7	–	–	–	–	–	–	–	–	–	11.3	–	–	–	–	100.0
Baluchistan																	
Overall	5.2	90.9	–	–	3.3	–	8.9	–	7.0	–	56.4	–	29.2	9.1	0.1	–	100.0
Urban	12.6	46.0	–	–	5.5	–	19.4	–	21.4	–	9.4	–	31.7	54.0	–	–	100.0
Rural	4.4	100.0	–	–	3.1	–	8.1	–	5.9	–	60.2	–	18.2	–	0.2	–	100.0

Note: M=Male
F=Female

characterized by land-tenure arrangements in which landlords rent a small piece of land. Under the circumstances prime concern of the peasant is the survival. Sometimes all the family members work and hardly get enough to survive. These perhaps are some of the reasons that the majority of the workers in agriculture are poor.

The second highest proportion of the male heads of poor households is found in the 'production and related workers, transport equipment operators and labourers categories. Where their proportion is 31.4 percent in overall, 29.5 percent in rural and 42.0 percent in urban areas of Pakistan. Since the industries are heavily concentrated in urban areas, we find that the proportion of male heads of poor households in the above mentioned occupation is larger in the urban areas than in the rural ones. In the urban areas of all the provinces, on the average, about 40 percent of the male heads of the poor households fall in this category, while in the rural areas of all the provinces their proportion is not more than 30 percent. About 9 percent in overall, 13.4 percent in urban areas and 7.8 percent of the male heads of the poor households in the rural areas of Pakistan occupationally belong to the category of 'professional technical and related workers'. However, we hardly find any male head of a poor household in the category of 'Administration and managerial workers' in overall Pakistan or in rural and urban areas. Almost the same pattern is observed for all the provinces and agroclimatic zones of Pakistan.

The female heads of the poor households are heavily concentrated in the 'professional, technical and related workers' category. Their proportion is the highest in overall (81.0 percent), in the rural areas (81.9 percent) and in the urban areas (73.6 percent) of Pakistan. Similarly in the rural areas of all the provinces and agroclimatic zones, more than 80 percent of the female heads of the poor households belong to this category, and the same pattern is observed in overall areas of provinces and agroclimatic zones with the exception of mixed Punjab and, cotton/wheat Punjab. In mixed Punjab this proportion is about 70 percent in the rural area and it is about 67

percent in overall. In urban area of cotton/wheat Punjab 100 percent of the female heads of poor households are found in this category.

Among the female heads of poor households, the second highest proportion is observed in the 'agricultural and related workers' category, followed by the 'service workers' category (see Table 6.12).

Industrial Activities of the Heads of the Poor Households

Poor households are classified into ten groups according to the industrial activity of the heads of the households. In 'agriculture, forestry, hunting and fishing', we find the same proportion for both the male and female heads of the poor households all over the country and over various zones with their rural-urban break up as we found in case of the occupational category of 'agriculture and allied workers'. Table 6.13 gives detailed break up of the industrial activities.

In overall Pakistan the male heads of households in construction exhibit the second largest proportion of the poor (12.4 percent) while manufacturing accounts for 11.6 percent, followed by wholesale-retail trade and restaurants (11.0 percent). In urban Pakistan the highest proportion of the male heads of poor households belong to the wholesale and retail trade and restaurants (25.2 percent), followed by manufacturing (21.6 percent) and 'community, social and personal services' (16.9 percent). In the rural Pakistan the proportion of the male heads of the poor households is 12.9 percent in construction, manufacturing 9.8 percent in manufacturing and 8.3 percent in 'community, social and personal services'. In Pakistan (overall, rural and urban) about 6 to 10 percent of the male heads of the poor households are engaged in the activities that are not adequately defined.

Table 6.13: Percentage distribution of poor households by industrial activities of the head of the household (1987–88)

Region	(1) Agriculture Forestary Hunting & Fishing		(2) Mining & Quarrying		(3) Manufacturing		(4) Electricity Gas & Water		(5) Construction		(6) Whole Sale & Retail Trade & Restaurants & Hotels		(7) Transport Storage & Communication		(8) Financing, Insurance, Real estated & Business Services		(9) Community, Social & Personal Services		(10) Activities not adequately Defined		(11) Total
Pakistan	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
Overall	42.7	11.1	0.2	–	11.6	1.7	0.4	–	12.4	0.5	11.0	0.3	5.7	–	.0	–	9.7	5.4	6.4	81.0	100.0
Urban	4.6	6.4	–	–	21.6	–	06	–	10.1	–	25.2	3.5	10.0	–	0.1	–	16.9	17.1	10.6	73.0	100.0
Rural	49.5	11.6	0.2	–	9.8	1.8	0.3	–	12.9	0.6	8.4	–	5.0	–	–	–	8.3	4.1	5.6	81.9	100.0
Punjab																					
Overall	38.8	7.9	.0	–	13 8	2.8	0.3	–	12.9	0.9	11.6	0.6	5.8	–	.0	–	9.6	7.2	7.1	80.6	100.0
Urban	4.6	1.5	–	–	22.5	–	0.4	–	9.3	–	26.1	5.1	9.0	–	0.1	–	16.6	21.3	11.4	72.2	100.0
Rural	45.3	8.7	0.1	–	12.2	3.2	0.3	–	13.6	1.0	8.8	–	5.2	–	–	–	8.3	5.4	6.3	81.7	100.0
Rice/Wheat Punjab																					
Overall	34.8	9.0	0.3	–	16.0	–	0.6	–	11.2	–	14.1	–	6.0	–	–	–	9.2	3.0	8.0	88.0	100.0
Urban	4.4	–	–	–	26.2	–	1.2	–	6.7	–	27.0	–	12.1	–	–	–	12.5	20.2	9.9	79.8	100.0
Rural	43.5	10.6	0.3	–	13.0	–	0.4	–	12.4	–	10.4	–	4.3	–	–	–	8.2	–	7.4	89.4	100.0
Mixed Punjab																					
Overall	35.5	0.9	–	–	13.5	8.5	0.3	–	12.0	4.4	14.0	3.0	'4.6	–	–	–	14.1	16.5	5.8	66.8	100.0
Urban	6.5	8.7	–	–	22.7	–	–	–	11.6	–	25.1	29.8	7.7	–	–	–	16.8	48.1	9.5	13.4	100.0
Rural	41.6	–	–	–	11.6	9.4	0.3	–	12.1	4.9	11.7	–	4.0	–	–	–	13.6	13.0	5.0	72.7	100.0
Cotton/Wheat Punjab																					
Overall	46.5	14.9	–	–	11.5	6.5	–	–	11.8	–	10.1	–	6.2	–	–	–	8.6	13.9	5.3	64.7	100.0
Urban	6.4	–	–	–	17.0	–	–	–	9.8	–	26.6	–	7.7	–	–	–	18.4	–	14.1	100	100.0
Rural	51.4	17.3	–	–	10.8	17.5	–	–	12.0	–	8.1	–	6.0	–	–	–	7.4	16.1	4.3	59.2	100.0
Low Intensity Punjab																					
Overall	41.2	14.1	–	–	10.3	–	0.6	–	19.0	–	6.7	–	7.8	–	0.1	–	7.7	–	6.6	85.9	100.0
Urban	2.0	–	–	–	18.4	–	1.4	–	11.9	–	30.4	–	8.0	–	1.0	–	17.9	–	8.9	–	100.0
Rural	45.2	–	–	14.1	9.4	–	0.5	–	19.7	85.9	4.3	–	7.8	–	–	–	6.6	–	6.4	–	100.0

Barani Punjab																				
Overall	31.9	23.8	0.5	–	13.1	–	–	–	17.9	–	7.1	–	3.5	–	–	–	15.4	–	10.5	76.2	100.0
Urban	2.0	–	–	–	22.3	–	–	–	9.5	–	15.7	–	7.5	–	–	–	32.7	–	10.3	–	100.0
Rural	37.2	23.8	0.6	–	11.5	–	–	–	19.4	–	5.6	–	2.8	–	–	–	12.3	–	10.6	76.2	100.0
Sind																				
Overall	57.4	6.1	0.1	–	8.0	3.0	0.4	–	6.3	–	10.4	–	5.5	–	–	–	7.9	40.5	4.0	50.4	100.0
Urban	5.7	13.7	–	–	22.4	6.7	1.3	–	8.3	–	20.4	–	10.5	–	–	–	21.4	6.7	10.0	38.4	100.0
Rural	69.8	–	0.2	–	4.6	–	0.2	–	5.8	–	7.9	–	4.4	–	–	–	4.7	40.0	2.5	60.0	100.0
Cotton/Wheat Sind																				
Overall	65.6	9.2	–	–	5.3	–	0.3	–	7.3	–	8.7	–	3.6	–	–	–	7.2	41.3	2.1	49.5	100.0
Urban	11.9	52.3	–	–	20.6	–	0.8	–	15.2	–	22.8	–	9.5	–	–	–	12.6	47.7	6.6	–	100.0
Rural	73.3	–	–	–	3.1	–	0.2	–	6.1	–	6.6	–	2.7	–	–	–	6.4	40.0	1.4	60.0	100.0
Rice/Other Sind																				
Overall	51.7	–	0.2	–	9.8	6.1	0.3	–	5.7	–	10.3	–	6.5	–	–	–	11.0	26.4	4.6	67.5	100.0
Urban	–	–	–	–	–	6.1	–	–	–	–	–	–	–	–	–	–	–	26.4	–	67.5	100.0
Rural	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	100.0
NWFP																				
Overall	41.6	10.9	–	–	6.2	–	–	–	20.5	–	11.4	–	3.2	–	–	–	9.8	–	7.3	89.1	100.0
Urban	4.1	–	–	–	15.3	–	–	–	24.7	–	18.1	–	11.3	–	–	–	18.4	–	8.2	100.0	100.0
Rural	46.0	11.5	–	–	5.1	–	–	–	20.1	–	10.6	–	2.2	–	–	–	8.8	–	7.2	88.5	100.0
Other NWFP (except D.I.Khan)																				
Overall	–	10.7	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	89.3	100.0
Urban	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	100	100.0
Rural	–	11.3	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	88.7	100.0
Baluchistan																				
Overall	58.9	–	1.7	–	0.8	9.1	0.8	–	8.5	–	10.2	–	5.6	–	0.4	–	11.2	7.8	1.9	83.1	100.0
Urban	8.2	–	–	–	5.9	54.0	1.0	–	13.5	–	19.4	–	15.0	–	5.2	–	24.6	46.0	7.3	–	100.0
Rural	62.9	–	1.9	–	0.4	–	0.8	–	8.1	–	9.4	–	4.9	–	–	–	10.1	–	1.5	100.0	100.0

Note: M=Male

F=Female

The classifications of the male heads of the poor households by industrial activities in different provinces and agroclimatic zones is almost the same as for overall Pakistan.

As regards the decomposition of the female heads of the poor households, we find substantial differences as compared to male heads of the poor households. The activities are not adequately defined for more than 80 percent of them. For instance, in overall Pakistan 81.0 percent of the female heads of the poor households, 73.0 percent in urban and 81.9 percent in rural areas of Pakistan fall in undefined activities. Punjab presents the same picture as that of overall Pakistan. In Sind about 50 percent of the female heads of the poor households fall in undefined category. Urban NWFP and rural areas of Baluchistan have 100 percent of the female heads of the poor households in the undefined category of households. More or less the same pattern emerges in case of agroclimatic zones of Pakistan.

The 'community, social and personal services' activity accounts for 5.4 percent of the female heads of the poor households in overall Pakistan, 17.1 percent in the urban and 4.1 percent in rural areas of the Pakistan. In Sind the proportion of the female heads of poor households is the highest in this activity. In overall Sind 40.5 percent, in urban areas 6.7 percent, and in rural areas 40.0 percent of the female heads of the poor households are engaged in the activity of 'community, social and personal services'. In Baluchistan this proportion is 40 percent in urban areas and 7.8 percent in overall, while NWFP has no female head of the poor households in the community related activities. In this regard almost the same pattern can be found in Punjab as observed in case of overall Pakistan.

Employment Status of the Heads of the Poor Households

Table 6.14 exhibits the classification of poor households (male and female) according to their employment status. It is evident that the majority (72.9 percent) of the male heads of the

Table 6.14: Percentage distribution of poor households by employment status of the head of the household (1987–88)

Region	(1) Employer		(2) Self Employed		(3) Unpaid family helper		(4) Employee		(5) Unemployed		(6) Pensioner & Landlord		(7) Total
Pakistan	M	F	M	F	M	F	M	F	M	F	M	F	
Overall	0.5	–	72.9	13.2	–	–	20.1	5.4	5.1	70.0	1.3	11.0	100.0
Urban	0.4	–	53.6	13.6	–	–	35.4	13.4	8.0	70.2	2.6	2.8	100.0
Rural	0.6	–	76.5	13.6	–	–	17.4	4.5	4.5	69.9	1.1	11.9	100.0
Punjab													
Overall	0.5	–	74.0	13.3	–	–	18.4	6.1	5.7	71.9	1.4	8.7	100.0
Urban	0.4	–	56.6	12.1	–	–	31.6	15.7	8.8	67.9	2.6	4.2	100.0
Rural	0.5	–	77.3	13.4	–	–	15.9	4.9	5.1	72.4	1.2	9.3	100.0
Rice/Wheat Punjab													
Overall	1.3	–	67.2	11.1	–	–	23.6	1.0	6.5	85.2	1.5	2.8	100.0
Urban	–	–	57.2	13.8	–	–	32.9	6.4	6.3	79.8	3.6	–	100.0
Rural	1.6	–	70.0	10.6	–	–	21.0	–	6.5	86.2	0.9	3.3	100.0
Mixed Punjab													
Overall	1.8	–	71.7	12.3	–	–	20.7	20.9	4.5	59.8	1.3	7.0	100.0
Urban	0.5	–	58.9	38.5	–	–	31.0	48.1	7.8	13.4	1.7	–	100.0
Rural	2.1	–	74.4	9.4	–	–	18.5	17.9	3.8	64.9	1.2	7.8	100.0
Cotton/Wheat Punjab													
Overall	0.1	–	80.4	28.9	–	–	14.2	6.4	4.1	40.0	1.3	2 4.8	100.0
Urban	0.6	–	59.3	–	–	–	26.0	–	13.0	79.7	1.1	20.3	100.0
Rural	–	–	83.0	33.4	–	–	12.7	7.4	3.0	33.8	1.3	25.5	100.0
Low Intensity Punjab													
Overall	0.4	–	80.8	14.1	–	–	12.2	–	5.1	85.9	1.5	–	100.0
Urban	–	–	57.6	–	–	–	33.5	–	7.4	–	1.5	–	100.0
Rural	0.4	–	83.2	14.1	–	–	10.0	–	4.9	85.9	1.5	–	100.0
Barani Punjab													
Overall	0.7	–	61.5	23.8	–	–	27.3	–	6.3	65.4	4.2	10.7	100.0
Urban	–	–	24.1	–	–	–	65.6	–	4.9	–	5.4	–	100.0
Rural	0.8	–	68.1	23.8	–	–	20.5	–	6.6	65.4	4.0	10.7	100.0
Sind													
Overall	0.9	–	72.4	9.1	–	–	22.7	40.5	3.5	50.4	0.5	–	100.0
Urban	0.2	–	41.0	20.3	–	–	48.8	41.3	8.2	38.3	1.8	–	100.0
Rural	1.0	–	80.0	–	–	–	16.5	40.0	2.4	60.0	0.1	–	100.0
Cotton/Wheat Sind													
Overall	–	–	79.7	9.2	–	–	18.3	41.3	2.0	49.5	0.1	–	100.0
Urban	–	–	59.3	52.3	–	–	34.1	47.7	6.2	–	0.4	–	100.0
Rural	–	–	82.6	–	–	–	16.0	40.0	1.4	60.0	–	–	100.0
Rice/Other Sind													
Overall	1.1	–	65.1	6.1	–	–	29.3	26.4	4.3	67.5	0.3	–	100.0
Urban	–	–	–	6.1	–	–	–	26.4	–	67.5	–	–	100.0
Rural	–	–	–	–	–	–	–	–	–	–	–	–	100.0
NWFP													
Overall	0.1	–	68.1	7.1	–	–	24.4	3.8	4.7	79.2	2.6	9.9	100.0
Urban	1.3	–	41.2	–	–	–	49.2	–	3.6	100.0	4.6	–	100.0
Rural	–	–	71.3	7.5	–	–	21.5	4.0	4.3	78.0	2.4	10.5	100.0
Other NWFP (except D.I.Khan)													
Overall	–	–	–	6.9	–	–	–	3.7	–	79.6	–	9.7	100.0
Urban	–	–	–	7.3	–	–	–	4.0	–	78.4	–	10.3	100.0
Rural	–	–	–	100	–	–	–	–	–	–	–	–	100.0
Baluchistan													
Overall	0.8	–	74.0	9.1	–	–	23.3	7.8	1.3	83.1	0.6	–	100.0
Urban	–	–	49.1	54.0	–	–	43.5	46.0	5.8	–	1.5	–	100.0
Rural	0.9	–	75.9	–	–	–	21.7	–	1.0	100.0	0.5	–	100.0

Note: M=Male
F=Female

poor households in Pakistan are classified as self-employed. In rural areas this proportion is 76.5 percent, while in urban areas it is 53.6 percent. The proportion of female heads of the poor households in the category of unemployed is the largest (about 70 percent) in Pakistan and it is about 13 percent in the category of self-employed. In the category of employees, male heads of the poor households are 20.1 percent in overall, 35.4 percent in urban areas and 17.4 percent in rural areas of Pakistan. The proportion of male heads of the poor households in the categories of Employer, pensioner and landlords is negligible, which shows that male heads belonging to these categories are mostly rich. It can be seen that in unemployed category male heads of the poor households are 5.1 percent in overall and 8 percent in urban areas, while 4.5 percent in rural areas of Pakistan. This is an unexpected result. It could be, perhaps, that the head is unemployed but he might have other sources of income. He may have a joint family system with his sons or others supporting the head. It further implies that a person who is an earner is not necessarily the head of the household. Almost the same pattern emerges for overall provinces with their urban rural break up.

Number of Earners

The distribution of earners per household shows that the highest proportion of male headed households is observed in case of single member earner households. In 'overall' and in rural areas of Pakistan about 65 percent male headed poor households have a single earner, and in the urban areas such households (with single earners) are 61.1 percent. But as the number of earners per household increases the proportion of poor households falling in those categories goes on declining. For example, in case of two earners in a household the proportion of poor households in overall Pakistan declines to 18.1 percent and in rural areas of Pakistan it goes down to 18.2 percent. While in urban areas such poor households are 17.0 percent. Similarly where the number of earners further increases the proportion of poor households falling in that category further declines.

Table 6.15: Percentage distribution of poor households by number of earners (1987–88)

Region	(1) No body earning		(2) One earner		(3) Two earners		(4) Three earners		(6) Total
Pakistan	M	F	M	F	M	F	M	F	
Overall	4.2	68.5	64.7	31.52	18.1	–	7.7	–	100.0
Urban	16.9	–	61.1	100.0	17.0	–	5.0	–	100.0
Rural	3.4	75.3	64.9	24.7	18.2	–	7.9	–	100.0
Punjab									
Overall	2.8	64.1	68.3	35.9	19.0	–	8.1	–	100.0
Urban	11.8	–	65.0	100.0	21.4	–	1.8	–	100.0
Rural	2.1	73.0	68.5	27.0	18.8	–	8.6	–	100.0
Rice/Wheat Punjab									
Overall	3.9	82.7	64.7	17.3	14.7	–	10.2	–	100.0
Urban	10.0	–	90.0	100	–	–	–	–	100.0
Rural	3.1	100	61.4	–	16.6	–	11.4	–	100.0
Mixed Punjab									
Overall	5.1	73.0	64.2	27.0	23.7	–	6.9	–	100.0
Urban	–	–	–	–	100	–	–	–	100.0
Rural	5.3	73.0	66.1	27.0	21.5	–	7.1	–	100.0
Cotton/Wheat Punjab									
Overall	–	–	67.5	–	23.3	–	3.9	–	100.0
Urban	–	–	62.6	–	37.4	–	–	–	100.0
Rural	–	–	67.6	–	22.9	–	4.1	–	100.0
Low Intensity Punjab									
Overall	–	–	80.1	–	15.9	–	3.9	–	100.0
Urban	–	–	100	–	–	–	–	–	100.0
Rural	–	–	79.0	–	16.9	–	4.2	–	100.0
Barani Punjab									
Overall	46.0	–	30.1	–	23.9	–	–	–	100.0
Urban	–	–	–	–	100.	–	–	–	100.0
Rural	48.5	–	31.7	–	19.8	–	–	–	100.0
Sind									
Overall	5.8	–	33.9	100.0	29.0	–	5.9	–	100.0
Urban	54.8	–	41.9	–	3.3	–	–	–	100.0
Rural	–	–	33.0	100.0	– 32.0	–	6.6	–	100.0
Cotton/Wheat Sind									
Overall	–	–	12.5	100	36.4	–	–	–	100.0
Urban	–	–	–	–	–	–	–	–	100.0
Rural	–	–	12.5	100	36.3	–	–	–	100.0
Rice/Other Sind									
Overall	14.4	–	42.8	–	22.6	–	7.9	–	100.0
Urban	58.4	–	37.9	–	3.8	–	–	–	100.0
Rural	–	–	44.4	–	28.4	–	10.5	–	100.0
NWFP									
Overall	19.4	100.0	78.9	–	–	–	1.7	–	100.0
Urban	–	–	100.0	–	–	–	–	–	100.0
Rural	19.8	100.0	78.4	–	–	–	1.8	–	100.0
Other NWFP (except D. I. Khan)									
Overall	19.4	100	78.9	–	100	–	1.7	–	100.0
Urban	–	–	100	–	–	–	–	–	100.0
Rural	19.8	100	78.4	–	–	–	1.8	–	100.0
Baluchistan									
Overall	–	–	51.5	–	21.9	–	23.4	–	100.0
Urban	–	–	100.0	–	–	–	–	–	100.0
Rural	–	–	50.7	–	22.3	–	23.9	–	100.0

Note: M=Male
F=Female

The proportion of male headed no earner households is 4.2 percent in overall Pakistan. In case of Punjab almost the same pattern is observed. However, Sind, NWFP and Baluchistan exhibit different patterns. Single earner male headed poor households in overall NWFP and its rural areas are about 79 percent, whereas 100 percent of the male headed poor households also have a single earner in the urban areas of NWFP.

In Baluchistan the proportion of the single earner male headed poor households is 100.0 percent in the urban areas. However, in overall and in rural areas such a proportion is about 50 percent. In Sind, this proportion of single earner male headed households is about 34 percent in overall and in the rural areas, though in urban Sind such household are about 42 percent (see Table 6.15).

Table 6.15 portrays somewhat different picture for female headed poor households. The highest proportion of the female headed poor households is in no earner category and it is 68.5 percent in overall Pakistan and 79.3 percent in rural areas. No female headed poor household falls in this category in the urban areas of Pakistan. The Table shows that 100 percent of the female headed poor households in the urban areas have a single member earner. While this proportion is 31.5 percent in overall and about 25 percent in rural Pakistan. Nevertheless, no female headed poor household has more than one earner. Punjab exhibits almost the same pattern as that of overall Pakistan in this regard. In urban Sind number of female headed poor households is zero. However, 100 percent of the female headed poor households fall in the single earner category in the rural Sind. In NWFP 100 percent of the female headed poor households fall in no earner category while Baluchistan has no female headed poor household.

Household Size

Table 6.16 reports the break up of the poor households according their size. The

Table 6.16: Percentage distribution of poor households by household size (1987–88)

Region	(1) 1–2 Members		(2) 3–4 Members		(3) 5–6 Members		(4) 7–8 Members		(5) 9–10 Members		(6) 11 & above		(7) Total
Pakistan	M	F	M	F	M	F	M	F	M	F	M	F	
Overall	0.5	21.2	4.5	–	25.6	42.9	35.3	17.8	22.9	9.5	11.3	8.6	100.0
Urban	–	–	–	–	12.6	44.2	36.2	55.8	21.0	–	30.2	–	100.0
Rural	0.6	23.3	4.8	–	26.5	42.8	35.2	14.0	23.0	10.4	10.o	9.4	100.0
Punjab													
Overall	0.7	29.0	5.0	–	23.6	29.1	35.3	17.2	23.9	–	11.4	13.0	100.0
Urban	–	–	–	–	5.0	44.2	36.6	55.8	25.2	–	33.3	–	100.0
Rural	0.8	33.1	5.4	–	25.1	27.0	35.2	11.7	23.8	14.8	9.7	13.4	100.0
Rice/Wheat Punjab													
Overall	–	45.4	2.7	–	24.9	37.3	40.1	17.3	20.9	–	11.3	–	100.0
Urban	–	–	–	–	10.0	–	65.9	100	9.3	–	14.9	–	100.0
Rural	–	54.9	3.1	–	26.8	45.1	36.9	–	22.4	–	10.9	–	100.0
Mixed Punjab													
Overall	–	43.7	4.6	–	23.2	27.0	34.3	29.3	16.7	–	21.2	–	100.0
Urban	–	–	–	–	–	–	–	–	–	–	100	–	100.0
Rural	–	43.7	4.7	–	23.9	27.0	35.3	29.3	17.2	–	18.9	–	100.0
Cotton/Wheat Punjab													
Overall	3.9	–	4.5	–	19.1	–	35.6	–	25.3	–	11.6	–	100.0
Urban	–	–	67.5	–	23.3	–	52.7	–	10.0	–	37.4	–	100.0
Rural	4.1	–	4.6	–	19.7	–	35.0	–	25.8	–	10.7	–	100.0
Low Intensity Punjab													
Overall	–	–	7.3	–	18.1	–	49.3	–	21.4	–	3.9	–	100.0
Urban	–	–	–	–	–	–	51.5	–	48.5	–	–	–	100.0
Rural	–	–	7.7	–	19.2	–	49.1	–	19.8	–	4.2	–	100.0
Barani Punjab													
Overall	–	–	–	–	46.0	–	35.1	–	18.8	–	–	–	100.0
Urban	–	–	–	–	–	–	100	–	–	–	–	–	100.0
Rural	–	–	–	–	48.5	–	31.7	–	19.8	–	–	–	100.0
Sind													
Overall	–	–	2.2	–	26.2	–	39.3	100.0	14.2	–	18.1	–	100.0
Urban	–	–	–	–	50.8	–	24.9	–	10.1	–	14.2	–	100.0
Rural	–	–	2.5	–	23.3	–	41.0	100.0	14.7	–	18.5	–	100.0
Cotton/Wheat Sind													
Overall	–	–	–	–	23.3	–	52.4	100	23.3	–	–	–	100.0
Urban	–	–	–	–	–	–	–	–	–	–	–	–	100.0
Rural	–	–	–	–	23.3	–	53.4	100	23.3	–	–	–	100.0
Rice/Other Sind													
Overall	–	–	6.0	–	14.4	–	44.1	–	23.5	–	11.9	–	
Urban	–	–	–	–	58.4	–	10.1	–	15.3	–	16.3	–	100.0
Rural	–	–	8.0	–	–	–	55.3	–	26.3	–	10.5	–	100.0
NWFP													
Overall	–	–	8.6	–	26.0	100.0	31.6	–	27.8	–	5.9	–	100.0
Urban	–	–	–	–	–	–	100.0	–	–	–	–	–	100.0
Rural	–	–	8.8	–	26.6	100.0	30.2	–	28.4	–	6.0	–	100.0
Other NWFP (except D.I.Khan)													
Overall	8.6	–	26.0	100	31.6	–	27.8	–	5.9	–			100.0
Urban	–	–	–	–	100	–	–	–	–	–			100.0
Rural	8.8	–	26.6	100	30.2	–	28.4	–	6.0	–			100.0
Baluchistan													
Overall	–	–	3.1	–	34.5	–	19.5	–	16.5	–	26.4	–	100.0
Urban	–	–	–	–	–	–	100.0	–	–	–	–	–	100.0
Rural	–	–	3.2	–	35.1	–	18.1	–	16.8	–	26.9	–	100.0

Note: M=Male
F=Male

proportion of large sized households is relatively high among the poor households. The highest proportion of poor households is found in the households comprising of 7 to 8 members in case of male headed households and in the households comprising 5 to 6 members in case of female headed households in overall Pakistan. The male headed poor households with 7 to 8 family members are 35.3 percent in overall, 36.2 percent in the urban areas and 35.2 percent in rural areas, while female headed poor households with 5 to 6 family members are about 43 percent in overall Pakistan and in the rural and urban areas. The second largest proportion of the male headed poor households is found in the category of 9 to 10 family members and it is about 23 percent in overall, 21.0 percent in urban and 23.0 percent in rural areas. Whereas the second largest female headed poor households is found in the households having 7 to 8 members, and it is 17.8 percent in overall, 55.8 percent in urban and 14.0 percent in rural areas of Pakistan. However, about 10 percent male headed and about 9 percent female headed households are found having family members greater than 10. No female headed poor household is found in the category of 3 to 4 family members. In overall Pakistan, a very negligible percentage of male headed poor households is found in case of households having 3 to 4 members.

We observe almost the same pattern of poor male headed households in all the provinces i.e. the majority of the poor households lie in 7-8 and 9 to 10 members family groups. However, in rural NWFP and in rural Baluchistan 100 percent of the male headed poor households fall in the category of 7 to 8 family members. In NWFP again we find that 100 percent female headed households in overall and in rural areas have a size of 5 to 6. As pointed out earlier there is no female headed poor household in Baluchistan. Punjab and Sind exhibit more or less the same patterns as generally observed in case of Pakistan for both the male and female headed households.

At the end of this chapter we make the following concluding remarks: First of these is

that the incidence of poverty is sensitive to the poverty line selected. We find that 16.6 percent of the households in overall, 8.7 percent in urban and 19.6 percent in rural areas of Pakistan are poor in terms of the expenditure based poverty line and 23.2 percent in overall, 12.7 percent in urban and 27.2 percent in rural areas are poor in terms of the income poverty lines with different calorie norms. With the region specific poverty lines, we found a change in the urban rural pattern of poverty. We also found very poor and extremely poor households at 80 percent and 70 percent respectively cutoff points of the recommended calorie norms. The estimates indicate that 9.3 percent overall 4.2 percent urban and 11.3 percent rural households in Pakistan are very poor and 7.0 percent overall, 3.0 percent urban and 8.5 percent rural are extremely poor.

The incidence of poverty in terms of population on the basis of the above poverty lines is considerably higher than in terms of households. This is perhaps due to the fact that the highest proportion of the poor households have relatively large family size.

Our estimates suggest that poor households (persons) are disproportionately located in the rural areas of Pakistan. More than 85 percent of the total poor households are residing in the rural areas of Pakistan. Punjab contributes 72.71 percent of poor households, followed by Sind (12.75 percent) to all the poor households of the country. The contribution of NWFP to the poor households is 12.08 percent while that of Baluchistan is only 2.45 percent. In terms of Malik's index, as explained earlier, the rural areas of Pakistan have the higher proportion of the poor households than their share in the total population.

We also decomposed poor households according to the socioeconomic characteristics of the heads of the households (male/female) and our findings are:

- Majority of the male headed poor households fall in the age group of 40 - 49, while

majority of female headed poor households fall in the age group of 30-39.

- Classification of the poor according to the marital status shows that about 95 percent of the male heads of the poor households are married and 70 percent of the female heads of the poor households are married. It implies that households headed by the married persons are more at poverty risk.
- Majority of the heads of the poor households are illiterate. The percentage of the illiterate female heads of the poor households is as high as 90 percent, while this proportion is 70 percent in case of male heads. Further, that the proportion of the urban literate heads of the poor households is higher than that of the rural literate.
- The proportion of poor households decreases as the educational level of the head of the household increases. Most of the educated heads of the poor households fall in the primary or below matric category of education.
- Our results indicate that more than 90 percent of the male heads of the poor households fall in the working class category, while about 80 percent of the female heads of the poor households fall in the non-working class category.
- The occupational classifications of the heads of the poor households shows that the majority of the (male) heads of the poor households are found in the occupational category of 'agricultural, animal husbandry and forestry', followed by production and related workers, transport equipment operators and labourers categories.

  The proportion of female heads of the poor households belonging to the category of 'professional, clerical and related workers' is the highest (81.0 percent in over all Pakistan).
- Decomposition of the households according to the industrial activities suggests that the most of the male heads of the poor households are engaged in the agriculture, forestry, hunting and fishing followed by construction. While the most of the female heads of the poor households fall in the category of activities not adequately defined.

- The breakdown of employment status of the heads shows that the most of male or female heads of the poor households are classified as self employed followed by the category of employees.
- The earning status of the households reveals that the proportion of the households with single earner is the highest in case of male headed households, while in case of female headed poor households, the majority fall in the category of no earner.
- The proportion of poor households is relatively high in case of large sized households. The highest proportion of the male headed poor households is founded in case of households having 7 to 8 members and in case of female headed households, those having 5 to 6 members.

CHAPTER 7

INFAQ

'Infaq' is a very wide term and it covers all kinds of alms and charity. 'Infaq' means spending for the cause of Allah. If the aim of spending is the seeking of Allah's pleasure then each spending made on himself and family and all charity given for the social welfare is included in 'Infaq fi Sabil Lillah' (spending in the path of Allah). According to Moududi (Tafheem-ul-Quran Vol. III, p.226) 'Infaq' is "spending to satisfy the legitimate needs of one's family, to help one's relatives, neighbours and the needy, to take part in the social welfare work of the society and to sacrifice wealth in propagation of Allah's message".

Basically 'Infaq fi Sabil Lillah' is the expenditure made in the path of Allah. It is referred to sometimes as 'infaq' and sometimes as 'Infaq Fi Sabil Lillah' in the Holy Quran. Sometimes it is called 'sadaqah' and 'zakat'. Words 'sadaqat', 'infaq' and 'zakat' have been used in the Quran for alms and charity for the poor. "They are in fact the three sides of the same picture; their true purpose is the moral training of man and the purification of his soul". (Rehman (1980, p.192). The Holy Quran mentions the purpose of spending in the path of Allah in the following words:

> "And the likeness of those Who spend their wealth Seeking to please Allah And to strengthen their souls....." (2:265).

However, if such a spending is for the sake of repute or for gaining popularity or for self interest or for showing off then it does not deserve to be called 'infaq'. The following verses of Quran stress sincerity aspect of 'infaq':

> "O ye who believe! Cancel not your charity By reminders of your generosity Or by injury like those Who spend their wealth To be seen of men, But believe neither In Allah

nor in the Last Day. They are in Parable like a hard, Barren rock, on which Is a little soil: on it Falls heavy rain, Which leaves it (Just) a bare stone. They will be able to do nothing With aught they have earned And Allah guideth not Those who reject faith."(2:264), "Nor those who spend Of their substance, to be seen Of men, and have no faith In Allah and the Last Day: If any take the Satan For their intimate, What a dreadful intimate he is!" (4:38), "Those who spend Their wealth in the cause Of Allah, and follow not up Their gifts with reminders Of their generosity Or with injury,-for them Their reward is with their Lord: On them shall be no fear, Nor shall they grieve." (2:262), "Kind words And covering of faults Are better than charity Followed by injury. Allah is Free of all wants, And He is most Forbearing." (2:263), "O ye who believe! Give of the good things Which ye have (honourably) earned, And of the fruits of the earth Which We have produced For you, and do not aim At anything Which is bad, Out of it ye may give away Something, when ye yourselves Would not receive it Except with closed eyes. And know that Allah Is Free of all wants, And Worthy of all praise." (2:267).

Therefore, the institution of 'sadaqah' or charity (obligatory or voluntary) in Islam has the pre-requisites like:

- Purification of intention, that is spending must be solely for seeking the pleasure of Allah and not for bringing someone under obligation or getting some worldly reward (respect, popularity etc.)
- A thorough sense of the fact that the poor and the neglected people are also part of mankind and the nation. Therefore, their proper look after is the responsibility of those who have been bestowed with the bounties of Allah.

'Sadaqah' is of two types: voluntary 'sadaqah' and obligatory 'sadaqah'.

Voluntary 'sadaqah' is totally different from obligatory 'sadaqah' 'zakat'. It is optional and has no fixed rates. Contrary to obligatory 'sadaqah' (zakat), which can only be spent on the uses clearly mentioned in the Quran, voluntary 'sadaqah' can be given according to the will of the giver. This seems that the obligatory 'sadaqah' (zakat) requires a system of its own, the establishment of which is the responsibility of 'Ameer' or 'Imam' of Muslims. The optional or voluntary 'sadaqah', is the responsibility of the person, although there is no prohibition or ban on the establishment of some systems for optional 'sadaqah', provided it is free of all elements of force, compulsion and coercion. In fact, voluntary 'sadaqah' is for creating the habit of doing good deeds, and for gaining spiritual happiness.

'Zakat' is also called 'sadaqah' because it is a charity though it is obligatory. In the following verses eight uses of compulsory 'sadaqah' (zakat) are given.

> "Alms are for the poor And the needy, and those Employed to administer the (funds): For those whose hearts Have been (recently) reconciled (To Truth); for those in bondage And in debt; in the cause of Allah; and for the wayfarer: (Thus is it) ordained by Allah. And Allah is full of knowledge And wisdom " (9:60).

However, the term 'sadaqah' in general refers to voluntary spending for the cause of Allah. In specific context it may refer to obligatory 'zakat' as is pointed out by Siddiqi (1979 p.27). "Sadaqah is a more generic term and includes voluntary alms. Thus while every 'zakat' is 'sadaqah' only the 'sadaqah' which is obligatory is 'zakat'". Any human action which involves financial sacrifice is known as 'sadaqah'. In general usage 'sadaqah' conveys the meaning of voluntary charity and the amount of such a 'sadaqah' entirely depends on the will of the payer.

So helping the poor and the destitute, in any way, feeding or clothing them or any other

transfer made to them is the spending for the cause of Allah, and all these spending are known as 'Infaq Fi Sabil Lillah'.

Aims and Objectives of Infaq

It is the beauty of the Islamic system, that it keeps economic balance in the society. It has not only checked the concentration of wealth in a few hands through the use of illegitimate ways but through the use of legitimate methods. It has managed that the wealth may not remain idle but it should keep on circulating among the different groups of the society. In this way with the circulation of wealth the people, who can not get their due share in the national income, are also likely to benefit.

Islamic economic system aims at rooting out poverty and in this system it is guaranteed that each individual gets provisions according to his needs (standard of living), so that he may lead his life in peace and may carry out his obligations and duties, he owes to Allah and other human beings. In addition to urging voluntary 'infaq', Islam also imposes obligatory 'zakat', which is taken from the rich and is distributed among the poor in order that they could satisfy their material needs. Qardavi (1987) is of the view that in this way the poor are enabled to participate in the activities of the society. A poor person in this system feels that he is not useless person rather he is useful for the society. This sense of feeling that he is a useful person and that the society recognizes his importance, creates confidence in him. Thus a poor man is not prone to neglect his duties to Allah owing to his poverty. Through 'infaq' he is helped to satisfy his basic needs and to raise his standard of living to that extent that he may fulfil his responsibilities to the society. If needs of the poor are not cared for, the poverty may lead to unbelief and apostasy. The following invocations and saying of Prophet Muhammad (PBUH) are enough testimony in this regard:

- "Allah, I ask Thy refuge from apostasy and poverty". There upon a person enquired "are

the two similar?" The Prophet (PBUH) said, "Yes". [Nasai]

- There is another hadith which says that "poverty may take a person closer to unbelief (Kufr)". [Nomani, 1982]

Shah Wali Ullah (1966) describes three aims and purposes (Muslehat) of 'sadaqat' (including 'zakat'). One of them is the purification of self (Tazkia-Nafs). The man by his nature is greedy and miserly. Therefore, spending for the cause of Allah helps him to purify his nature and to control his evil instincts. Sharing one's property is against man's nature, therefore, spending in the path of Allah helps him to inculcate the habit of surrendering to the will of Allah. Selfishness is always a part of his nature. Leaving it aside and helping the mankind leads him to the purification of himself.

The second purpose of 'sadaqah' according to him, is to establishment of a civic system, aiming at constituting a group or organization which can help people to get a better social life.

The third purpose is to organize a financial establishment which will provide salaries to the workers (officers/officials) of social security system so that they perform their duties with full sense of responsibility.

Although all of these aims and objectives are related to 'zakat', yet voluntary 'sadaqat' also aim at the same. Only difference is that a person distributes voluntary 'sadaqat' on his own, without making people grateful to himself and without causing injury to the recipients. It could be given openly or secretly, but in such a way that it does not hurt the feeling of the person receiving 'sadaqah'.

Thus, by giving the people the right of disbursing voluntary 'sadaqat' on their own, Islam

has constituted a vast system of economic security for the poor especially where governments are not fair and have no feeling for the poor. In such governments, it is possible rather is sure that at various official and administrative levels the needy are neglected and nepotism and injustice are resorted to. Deserving people are deprived, while favours are made to those, who do not deserve at all. Keeping in view this type of unfairness, Islam has established a voluntary system of social security, which enables the well to do persons to help the deserving poor in the society.

Rehman (1980, vol.iii, p. 192) pointed out that one of the most important aims of 'zakat' is to narrow down the economic inequalities in the community to the minimum possible limit. Its purpose is to keep the economic differences among the people within just and equitable limits so that the rich may not grow richer by exploiting the less fortunate members of the community and the poor grow poorer through exploitation by the rich.

According to Qardavi (1980, p.67) the main aim of 'zakat' is to eradicate poverty altogether by spending for the welfare of the poor and the destitute. He further has pointed out that the Holy prophet (PBUH) on many occasions, made home to the companions that the poor-due (zakat) should be spent for ameliorating the condition of the poor. He had ordered Hadrat Mu'adh (Allah be pleased with him) while despatching him to Yemen as Governor that he should collect the poor-due from the rich and distribute it among the needy and the handicapped.

Imam Abu Hanifa followed the same course and declared that the poor-due (zakat) is only for the welfare of the poor. Afsar Khan (1989), while discussing the Islamic financial system, writes that "'zakat' is the best way of achieving economic justice. This system distributes the resources of the Sahib Nisab (rich persons) among the poor and needy automatically, and in this way the gap between the rich and the poor goes on declining and ultimately this gap is likely to

disappear".

Prophet Muhammad (peace be upon him) took various measures to eradicate poverty and encouraged his followers to give charity to the needy. The payment of 'zakat' was made obligatory for the benefit of the poor and the destitute. The equitable distribution of wealth in society is one of the targets of an Islamic state as is pointed out in the following verse of the Quran:

> "And those who Before them, had homes (in Madina) And had adopted the Faith,- Show their affection to such As came to them for refuge, And entertain no desire in their hearts for things Given to the (latter), But give them preference Over themselves, even though poverty was their own lot. And those saved from The covetousness of their own Souls,- they are the ones That achieve prosperity"(59,9). "What Allah has bestowed On His Messenger (and taken Away) from the people Of the townships,-belongs To Allah,-to His Messenger, And to kindred and orphans, The needy and the wayfarer; In order that it may not (Merely) make a circuit Between the wealthy among you. So take what the Messenger Gives you, and Refrain from what He prohibits you." (59:7)

The excessive accumulation of wealth in a few hands may disturb the balance of the social system, and it may lead to unjustifiable inequalities of wealth in a society. In fact, all such measures, which reduce inequalities of wealth may inculcate love, affection and brotherhood among the people and thus may lead to improving the quality of life for all the people living in an Islamic society. By his teaching and practice, the Prophet (PBUH) not only introduced radical and revolutionary social, economic and moral reforms in the society, but also changed the attitude and outlook of the people regarding these matters. As Allah says in the Quran:

> "And (moreover) He hath put Affection between their hearts: Not if thou hadst spent All

that is in the earth, Couldst thou have produced That affection, but Allah Hath done it: for He is Exalted in might, Wise" (8:63).

We refer here to some of the traditions of Prophet Muhammad (peace be upon him) which urge the Muslims to spend in the cause of Allah and to shun miserliness.

It is reported by Hadrat Ibn Masood (May Allah be pleased with him) that the Holy Prophet (peace be upon him) said: "Who is among you, to whom the wealth he would leave for his heirs, is more dear than that of his own?" The Companions replied, "O' the Messenger of Allah! There is none amongst us who does not consider his wealth more dear to him. The Holy Prophet (PBUH) said, " That is true. The real wealth of each one of you is that which is spent in Allah's way. The wealth left behind in inheritance will be for others". (Nisai)

Hadrat Abu Huraira (May Allah be pleased with him) has reported that the Holy Prophet (peace be upon him) said: "Man talks of his own wealth again and again and is much pleased to have it. But in fact, his wealth is that which he has consumed and that which he has worn to rags, and also that what he has spent in the way of Allah to please Him. Anything that is left behind is for others and he will leave it for them and depart." (Muslim)

Adi ibn Hatim (May Allah be pleased with him) has reported that the Holy prophet (peace and blessings of Allah be upon him) said: "Allah will have a discourse with each of you, in a state that there will be no interpreter between Allah and man. Then the person will see on his right and shall witness what he might have sent already for the life hereafter by spending in the path of Allah. On his left he would also see the same thing. In front of him he would not be able to see anything except the fire of Hell. So try to get yourself protected from the fire of Hell if it were by giving alms equivalent to a small part of a date ". (Bukhari and Muslim)

Hadrat Abu Huraira (May Allah be pleased with him) has reported that the Holy prophet (peace be upon him) said: "If a person gives a date in alms from his lawful income, Allah will accept it, for He is pleased with that alm or charity which is given to the needy from man's lawful income. Allah goes on nourishing it, till it (the alm) grows into a mountain". (Muslim)

Hadrat Jabir (May Allah be pleased with him) has reported that the Holy Prophet (peace be upon him) said: "Alms devour sins as water consumes fire." (Bukhari).

Islamic history is full of instances of generosity on the part of the Muslims towards the needy. It is also well known that Muslims always look for opportunities to perform good deeds, make financial sacrifices, and help the poor. Earlier history of Islam cites numerous examples of such sacrifices.

It is reported from Hadrat Abdullah bin Masood (May Allah be pleased with him) that when the verse "It is the best of loans which is given to Allah," was revealed, Hadrat Abu al-Dardah Ansari (May Allah be pleased with him) said, "O' the Messenger of Allah! Can Allah demand loan from us?" He (the Holy Prophet) replied, "Yes". Then he said, "Show me your hand?" Thereafter he kept the hand of the Holy Prophet (peace and blessings of Allah be upon him) in his own hand and said, "I give my garden on loan to Allah." Ibn Masood said that there were 600 date-palm trees in that garden and his family lived in it. When he came home, he asked his family to vacate the garden because he had given it on loan to Allah.

The system of distributing money, property and wealth among the poor, the destitute and the needy continued in every era of Islamic history, although in different forms. The righteous people of all ages, who loved Allah and His Holy Prophet (peace be upon him) more than they loved the precious things of world, continued spending in the path of Allah.

It is said about 'Abdullah bin Ja'far that he never let any beggar go unless he gave something to him. Some of his friends criticised him for such actions. He replied, "Allah has made me habitual to give to the people something out of my income, and I have made the people habitual to come to me and get some thing. Now I fear that if I change my attitude and routine, Allah will forget me and leave His habit of giving me in abundance."

It was an exemplary society in which love and affection governed relationship between individuals and economic means and resources were shared among them for the benefit of all. Actually they were practising the following commands of Allah as given in the Quran.

> " So give what is due To kindred, the needy, And the wayfarer, That is best for those Who seek the Countenance, Of Allah, and it is they Who will prosper" (30:38). " And render to the kindred Their due rights, as (also) To those in want, And to the wayfarer: But squander not (your wealth) In the manner of a spendthrift". (17:26).

Matters relating to the general welfare and common good of the society were discussed and decided by mutual consent in accordance with the following commands of Allah as stated in the Quran:

> "Those who respond To their Lord, and establish Regular prayer; who (conduct) Their affairs by mutual Consultation; Who spend out of what We bestow on them For Sustenance". (42:38).

This is one of the reasons that 'class struggle' could not get its roots in the Islamic society.

The Holy Prophet (peace be upon him) always provided financial assistance to the needy, the poor, the sick, and the invalid from the Bait-ul-Mal. He even used to pay debts of the poor

debtors, who were themselves unable to repay. He used to help every poor and destitute, who came to him and asked for help. He has said, "I am dearer to the Muslims even than their lives. If any Muslim dies indebted, I shall pay his debt, and if he leaves some property that will go to his successors". (Tirmazi).

According to Hadrat Abu Hurairah, the holy Prophet (PBUH) said, "If any one dies and leaves property, it will go to his heirs and if he leaves minor children behind, then I am responsible for their maintenance". (Tirmazi).

At another occasion, the holy Prophet (PBUH) said, "Allah and his messenger are the guardians of the one, who is without a guardian". (Tirmazi).

No doubt life of earlier Muslims was simple, but none was deprived of his basic necessities of life. The Islamic state was responsible for the social security of all. Rehman (1981, Vol.1, p.125) writes that the income of Biat-ul-Mal was very small during the time of the Holy Prophet (PBUH), the only source being the levy of 'zakat', which was not much because the Muhajrin had left all their wealth and property in Makkah and were now sharing in the wealth of the Ansar. But whatever was collected for Biat-ul-Mal was spent on the poor members of the community. He has further narrated that when Banu Nazeer left Madina and their property was captured by the Muslims, the holy prophet distributed it equally among the Muhajrin who had no means of livelihood. Two Ansars, who were poor and had no means of living, also were given share from that property to enable them to support themselves and their families. The Holy Prophet (PBUH) thus tried to provide for the satisfaction of basic needs of every member of the community, who was found destitute and unable to provide for himself and his family.

Syedna Abu Bakr Siddiq, the first caliph, tried to provide the basic necessities of life to every member of the society. When the income of the Biat-ul-Mal increased, all the Muslims benefitted from it and none was deprived of his basic necessities of life. He strictly adhered to the policy of providing for basic needs to the poor as initiated by the Holy Prophet. He declared war on those people, who had refused to pay 'zakat' and said, "By Allah! if they refuse to pay one rope, to be tied to the foot of a camel, that they paid to the Holy Prophet, I will declare war on them for their refusal". (Muslim).

According to Qutab (1969), he paid equal grants to all companions of the holy Prophet and did not distinguish between al-Sabiqun al-Awwalun (the earliest Muslims) and the later converts; the man and the women and the free and the slave. He introduced the principle of equality concerning the economic needs and totally ignored the reward of good deeds and services rendered by any one for Islam. So, all were given equal stipend and whatever was left, was spent on the preparation for jihad (holy war against the disbelievers and foes) (See Ghifari, 1989, p.126).

Once, Hadrat Umar and a number of the companions of the holy Prophet (PBUH) insisted that the earliest Muslims should be given preference over the later converts and be paid higher grants. Hadrat Abu Bakr replied.

> "That you have mentioned about the precedence in embracing faith and excellence, I do not recognize. These are the merits, the reward of which is with Allah, the Almighty. And distribution of property is the worldly matter. Equity is far better than any discrimination in it". Abu Yusuf (1979 p.80).

During the caliphate of Umar (May Allah be pleased with him) the revenue of the Bait-al-Mal had increased. There was abundance of wealth in the Bait-al-Mal and every citizen of the

Islamic state was given his due share from it. However, he replaced the equalitarian principle in the distribution of surplus wealth by the principle of preference. He did not pay the same amount to those, who had fought against the Holy Prophet and to those who had fought on the side of the Holy Prophet. Umar (May Allah be pleased with him) said: "Abu Bakr (May Allah be pleased with him) held an opinion with regard to this property and I have a different opinion. I will not treat one, who fought against the Prophet of Allah like, who fought along with him. So, he allocated to the immigrants (Muhajrin) and the helpers (Ansars), those who were present at Badar, 5,000 dirham each, and gave to those, whose Islam was like the Islam of the participants in Badar, 4,000 dirham each; and he allocated to the wives of the Prophet 1,20,000 dirhim each except Safiya and Juvairia, who were given, later, 12,000 dirhim each" [Abu Yousaf, 1979 p.81]. The opinion of Abu Bakr was closer to the equalitarian spirit of Islam and more appropriate for promoting equality among the Muslims. The policy is more effective in protecting society from the evil effects of unnatural differences in wealth. However, Umar (May Allah be pleased with him) in the last days of his caliphate, realized the importance of Hadrat Abu Bakr's principle of equality and desired to adopt it.

Umar (May Allah be pleased with him) said, "If I live up to this night of the next year, I shall enter the names of the new Muslims along with the earlier Muslims till they become equal in allowances". But he died before this.(Abu Yousaf, 1979 p.89).

During the reign of syedna Umar a regular and well-managed financial system was established. Income and expenditure accounts were maintained and a regular bait-ul-Mal was created. Gifts and other grants were given by mutual consent of the Sahaba (companions of the Prophet) and for that matter registers were maintained on the basis of tribes and households (Sultana, 1989).

Syedna Umar provided a complete system of social insurance, not only for Muslims but also for Non-Muslims. Once Hadrat Umar visited a place and there he saw an old and blind man begging. He asked him, "Who are you and why are you begging?" He replied, "I am a Jew and the payment of Jizya, economic needs and the old age have forced me to beg". Umar took him to his home and served him with food. Thus he sent an order to the treasurer and directed him to fix stipend for him and for all the people of his age, and he said, "By Allah! we have not done justice to him that we ate (Jizya) from him when he was young but we forsook him when he was old". (Abu Yousaf,1979 p.254).

Syedna Umar used to provide the means of subsistence from Bait-ul-Mal to the poor, the destitute and the slaves, invalids, the sick, the orphans, widows and the unemployed. Disabled persons were also provided with servants. He also built free guest houses in cities from the resources of Biat-ul-Mal and during the time of famine all citizens were provided with free meals. During the reign of Hadrat Usman and Hadrat Ali the above precedence was followed and continued (Afsar Khan, 1989).

This system of public maintenance of the needy was practised by the Holy Prophet and his rightly guided caliphs and it continued during the reign of later caliphs.

The Holy Prophet had predicted that there would be such abundance of wealth in the Muslim community that the class of persons, who deserve alms and charity, will be entirely eliminated. Waritha bin Wahb Khuzai has reported the Holy Prophet as saying, "Receive the alms, for a time is to come when a person will have to roam with alms in his hand, but there will be none to accept it. Every person will say to the alms-giver: If you had come here yesterday, I would have accepted it. But today I am not in need". (Bukhari).

These sayings came true. The Muslims had so much wealth that there was none to deserve for alms. But it happened at that time when Muslims had a strong government, a just ruler and a right caliphate. All these things happened during the reign of Umar bin Abdul Aziz. (Qardavi ,1981).

Thus we can summarize the following aims of 'infaq' (whether voluntary or obligatory):

- seeking the pleasure of Allah;
- Helping the poor, the needy, the destitute, the invalid, and the unemployed;
- Removing the income inequalities, narrowing the gap between the haves and have nots and thus keeping some sort of the economic harmony in the society;
- Removing selfishness and inculcating the habit of sacrificing one's wealth;
- Establishing a civic system, and creating love and affection among the members of the society;

These are the aims of 'infaq' ('zakat', 'sadaqat' etc.) and these were achieved in the earlier era of Islam. It is possible to achieve these aims now, if Muslims really follow the principles of Islam in their true spirit and act upon the sayings of the Prophet (PBUH). For practising Islamic teachings a strong belief in Allah and His Prophet (PBUH) and a firm commitment on the part of Muslims to Islam are needed.

Infaq in Pakistan

It is true that no Islamic country of the present day Islamic World is practising Islam in its true sense. The Muslim countries are not observing Islamic teachings in their totality. However, one can find the partial applications of some of the Islamic teachings in a number of Muslim countries. Therefore, we can observe some of the Islamic values being practised here and there. Although Un-Islamic values are mixed with Islamic ones, yet Islamic spirit is not

totally absent among the individuals. Some of them still practice Islamic teachings on 'infaq' and give charity and 'sadaqat' voluntarily.

In Pakistan, even before the establishment of the official 'zakat' system in 1980, people were giving their 'sadaqat' voluntarily to their poor and destitute relatives and neighbours, deeni madaris (religious schools) and other deserving institutions. Faiz Muhammad (1992) reported that "in Pakistan, till June 1980, the system of 'zakat' was practised on a voluntary basis i.e. individuals used to pay their 'zakat' to the needy people or institutions at their own without involving the state functionaries".

The Muslims of the subcontinent had a desire to have an Islamic state, where they could practice Islam independently and in a free atmosphere. This desire was materialized with the establishment of Pakistan in 1947 and that paved the way for the establishment of an Islamic state. Since then efforts were made to Islamize the economy. The institutionalization of the 'zakat' system is one part of the Islamization process of the state. "Some efforts were made to organize the institution of 'zakat' on a voluntary basis. Those efforts did not produce tangible results and were given up soon" (Butt, 1990). On 24th June, 1979, a partial 'zakat' law, called the 'zakat' and Usher (organization) Ordinance was promulgated setting up a five-tier 'zakat' organization consisting of:

- a Central 'zakat' Council at the centre composed of sixteen members and has a judge of the supreme court as its Chairman;
- a Provincial 'zakat' Council in each province is headed by a judge of the High Court.
- a District 'zakat' Committee in each district headed by a non-official member and the Deputy Commissioner being a member of it.
- a Tehsil/Taluqa 'zakat' Committee in each Tehsil/Taluqa consists of a Chairman along with six other members;

- a Local 'zakat' Committee in each locality (locality being a village in the rural area with population about three to four thousand) consist of seven members, one of them a Chairman who are all non-official persons.

The President of Pakistan, on 20th June, 1980, promulgated the 'zakat' and 'ushr' Ordinance, 1980. The clauses of ordinance relating to 'zakat' became effective from the same date, and the first 'zakat' deductions were made by the banks on 21st June, 1980. The clauses relating to 'ushr' were enforced with effect from 15th of March, 1983.

Zakat is deducted compulsorily once a year at the rate of 2.5 percent on specified assets. All assets are not subject to 'zakat' deductions. The zakatable assets which are mentioned in the first schedule of ordinance are:

1. Savings Bank Accounts and similar Accounts;
2. Notice Deposits Accounts, receipts and similar Accounts and Receipts;
3. Fixed Deposit Accounts and Receipts and similar Accounts and Receipts, on which the return is receivable by the holder periodically or is received earlier than maturity or withdrawal;
4. Savings/Deposit Certificates Accounts and Receipts and similar Certificates/Accounts/Receipts on which return is receivable and is received by the holder only on maturity or encashment;
5. National Investment Trust Units (NIT);
6. Investment Corporation of Pakistan Mutual Funds Certificates;;
7. Government Securities on which the return is receivable by the holder periodically;
8. Securities including Shares and Debentures of Companies and Statutory Corporations on which return is paid;
9. Annuities;

10. Life Insurance Policies; and

11. Provident Fund Credit Balances.

All other assets relate to the second schedule of ordinance on which 'zakat' is payable under the shariah. The owner of these assets are expected to pay 'zakat' on-self-assessment basis to 'zakat' fund or to other mustahqueen of his choice. These assets are:

- Gold, silver and manufacturing thereof;
- Cash;
- Prize bonds;
- Current accounts and foreign currency accounts;
- Loans receivable,
- Securities including shares and debentures;
- Stock in trade of
    1. Commercial undertakings;
    2. Industrial undertakings;
    3. Precious metals, stones and manufactures thereof;
    4. Fish and other catch/produce of sea;
- Agricultural produce other than that liable to compulsory 'ushr';
- Animals fed free in pastures, and
- Wealth and financial assets other than those listed in schedule on which 'zakat' is payable according to shariah.

The amount of 'zakat' deducted at the source, as described in Schedule one of the ordinance, by the financial institutions is deposited in the Central Zakat Fund. Zakat funds have been established at three levels, namely, the Central Level, the provincial level (in each province) and the local level (in each of the localities). The provincial 'zakat' funds receive six

monthly instalments from the central 'zakat' fund and similarly the local 'zakat' funds receive six monthly instalments from the provincial 'zakat' funds besides usher directly received from the producers. A very small amount of voluntary 'zakat', atiyat (donations) etc. are also deposited to these funds.

Disbursement of Zakat

The Central Zakat Council has laid down guiding principles for the disbursement of 'zakat' funds by the provincial 'zakat' councils and the local 'zakat' committees. At the provincial level, the disbursement of 'zakat' money from provincial 'zakat' funds has been suggested in the following manner:

1.	Transfer to Local Zakat Committee	50 percent
2.	Stipends to mustahiq (deserving) students	25 percent
3.	stipend to students of Deeni Madaris	10 percent
4.	Stipend to students of Social Welfare/ training institutions	5 percent
5.	Assistance to Mustahiq (deserving) patients through health institutions	5 percent
6.	Others	5 percent

At the level of the Local Zakat Committees, the utilization of 'zakat' funds has been suggested in the following way:

1.	Subsistence grant to 'Mustahqueen'.	Not more than 45 percent
2.	Permanent rehabilitation of 'Mustahqueen'	At least 45 percent
3.	Administrative expenses	Not more than 10 percent

The identification and verification of the needs of 'Mustahqueen' as well as determination

of the 'zakat' amounts to be given to them is primarily, a responsibility of the Local Zakat Committee (Faiz Mohammad, 1992).

In zakat ordinance the highest priority is given to the first two categories of the heads of the expenditure fixed by the Holy Quran (i.e. poor and needy) and next is the administration.

Present 'zakat' system is a good attempt at the Islamization process of the economy. However, there are a number of loopholes at each level.

Some unjustifiable concessions are given and 'zakat' is not collected and enforced in its true sense. This is the main reason that 'zakat' is not collected to its actual potential.

As we have already pointed out that in Pakistan 'sadaqat' were given voluntarily prior to the official enforcement of 'zakat'. Alms and charity were given by individuals in one form or the other, namely, 'zakat', voluntary atiayat and other assistance and transfers to the poor and the needy.

In HIES 1987-88, data on 'infaq', that includes, 'zakat', 'sadaqat', 'ushr', gifts and other assistance, is available. Using these data, we have tried to find the effects of 'infaq' on poverty alleviation by utilizing the methodology already explained in chapter 4.

We have also made estimates of the funds that are needed to remove the poverty gap, and have explored the possibility of reducing poverty through the existing official 'zakat' collections and disbursements.

Alleviation of Poverty Through Infaq: Some Evidence as Derived from HIES 1987-88 Data

In Chapter 6, we estimated the incidence of poverty both in terms of expenditures and income. In Table 6.1 column 4 to 6, we estimated the incidence of poverty by using the income threshold level. The number of households/persons lying below a specific poverty line (in income terms) were considered as poor. But in the income of households/persons 'infaq' (Income transferred to the poor) was also included.

To see the effects of 'infaq' on poverty alleviation, following Kakwani (1986), we subtracted the amount of this transfer (infaq) from the income of the households (persons), and then estimated the poverty incidence on the basis of the poverty lines as already discussed in Chapter 5. After deducting the amount of 'infaq' from the incomes of the households and persons, we expected that poverty incidence would have increased. In other words, if there were no 'infaq', then the poverty level would have been higher than the poverty incidence we estimated in Chapter 6 that included 'infaq'. Such a situation is shown in Table 7.1 and Table 7.2. The difference in results reported in both the tables reflects the effect of 'infaq'. Table 7.1 reports the incidence of poverty at household and population level both in terms of different calorie norms based on threshold income. Comparing Table 6.1 Column 4 to 6 and Table 6.4 (columns 4 to 6) with Table 7.1, it can be seen that incidence of poverty in households, with out 'infaq', on the average, increases from 0.5 percent to 0.7 percent in different regions of Pakistan. It shows that on the average 0.5 to 0.7 percent of the households could get rid of the poverty as a result of 'infaq'. In Pakistan overall (and within urban and rural areas also), at household level, the difference in results is of 0.5 percent that shows that on the average 0.5 percent of the households were able to be above the poverty lines.

Table 7.1: Headcount,Poverty gap, Foster–Greer–Thorbecke Poverty Measure using poverty lines based on different calories norms (1987–88)

(percent)

Region	(1) Po	(2) P1	(3) P2	(4) Po	(5) P1	(6) P2
Pakistan						
Overall	23.7	5.0	1.6	28.6	6.1	2.0
Urban	13.2	4.4	1.6	16.4	5.5	2.1
Rural	27.7	7.3	2.5	33.6	9.0	3.1
Punjab						
Overall	25.0	5.3	1.7	30.1	6.1	2.1
Urban	24.3	5.5	1.8	29.4	6.8	2.3
Rural	33.6	7.9	2.7	40.3	9.7	3.3
Rice/Wheat Punjab						
Overall	29.2	6.2	2.0	33.3	7.2	2.3
Urban	29.4	6.8	2.3	34.0	8.2	2.8
Rural	34.5	7.4	2.4	39.1	8.5	2.7
Mixed Punjab						
Overall	21.6	4.4	1.4	26.4	5.5	1.8
Urban	21.5	4.5	1.4	26.9	5.8	1.8
Rural	29.1	6.7	2.3	34.9	8.2	2.8
Cotton/Wheat Punjab						
Overall	23.9	5.1	1.7	29.2	6.3	2.1
Urban	17.7	3.0	0.9	21.9	3.8	1.2
Rural	36.1	8.8	3.1	43.2	10.9	3.9
Low Intensity Punjab						
Overall	28.0	5.6	1.7	35.2	7.3	2.2
Urban	27.8	7.4	2.7	34.7	9.2	3.3
Rural	27.3	5.2	1.5	34.9	6.7	1.9
Barani Punjab						
Overall	21.3	3.9	1.1	27.8	5.2	1.5
Urban	20.9	4.3	1.4	25.0	5.3	1.6
Rural	33.7	7.1	2.1	44.0	9.6	2.9
Sind						
Overall	28.6	5.6	1.7	34.6	7.1	2.1
Urban	28.0	6.1	1.9	35.0	7.8	2.5
Rural	37.9	7.3	2.1	46.7	9.4	2.8
Cotton/Wheat Sind						
Overall	20.5	3.5	0.9	25.8	4.5	1.3
Urban	16.1	2.6	0.6	20.3	3.3	0.8
Rural	38.9	7.6	2.3	47.2	9.7	3.0
Rice/Other Sind						
Overall	26.9	5.3	1.6	32.9	6.8	2.0
Urban	31.4	7.0	2.3	39.3	9.0	3.0
Rural	35.5	6.6	1.8	39.1	7.6	0.2
NWFP						
Overall	15.0	3.0	0.9	17.7	3.4	1.1
Urban	8.9	3.1	0.8	22.5	3.8	1.0
Rural	24.4	5.3	1.8	28.1	6.1	2.1
Other NWFP (except D.I.Khan)						
Overall	14.6	2.9	1.0	17.4	3.4	1.1
Urban	19.2	3.1	0.8	22.8	3.8	0.9
Rural	24.4	5.3	1.9	28.1	6.1	2.1
Baluchistan						
Overall	28.6	5.1	1.5	35.7	6.7	2.0
Urban	27.2	4.9	1.3	33.5	5.9	1.6
Rural	40.0	8.2	2.5	49.3	10.7	3.4

Notes: 1. Results reported in columns 1 to 6 are based on the poverty lines (given in column 2 of the Table 5.6) interms of per capita income per month.

2. In column 1 P0 gives percentage of the households and in column 4 P0 gives the percentage of the population.

Table 7.2: Differences in results with Infaq and without Infaq as regards headcount, Poverty gap and Foster–Greer–Thorbecke poverty measure using poverty lines based on different calories norms (1987–88)

(In terms of per capita income)

(Percent)

Region	(1) P_0	(2) P_1	(3) P_2	(4) P_0	(5) P_1	(6) P_2
Pakistan						
Overall	0.5	0.2	0.1	0.4	0.2	0.1
Urban	0.5	0.2	0.1	0.3	0.2	0.1
Rural	0.5	0.3	0.1	0.5	0.3	0.1
Punjab						
Overall	0.6	0.2	0.1	0.5	0.2	0.1
Urban	0.6	0.4	0.2	0.4	0.2	0.2
Rural	0.7	0.3	0.2	0.6	0.3	0.1
Rice/Wheat Punjab						
Overall	0.8	0.4	0.2	0.6	0.3	0.2
Urban	0.6	0.3	0.2	0.5	0.3	0.1
Rural	0.9	0.4	0.3	0.7	0.3	0.2
Mixed Punjab						
Overall	0.5	0.2	0.1	0.6	0.2	0.2
Urban	0.8	0.4	0.2	0.3	0.2	0.1
Rural	0.4	0.2	0.1	0.5	0.2	0.1
Cotton/Wheat Punjab						
Overall	0.6	0.3	0.2	0.7	0.3	0.2
Urban	0.3	0.3	0.3	0.2	0.3	0.3
Rural	0.6	0.3	0.2	0.6	0.3	0.2
Low Intensity Punjab						
Overall	0.6	0.1	0.1	0.2	0.2	0.1
Urban	0.0	0.4	0.3	0.0	0.3	0.2
Rural	0.4	0.2	0.1	0.2	0.1	0.0
Barani Punjab						
Overall	0.1	0.1	0.1	0.1	0.2	0.1
Urban	0.0	0.0	0.1	0.0	0.1	0.0
Rural	0.5	0.2	0.1	0.3	0.1	0.1
Sind						
Overall	0.2	0.0	0.1	0.1	0.1	0.0
Urban	0.5	0.2	0.0	0.4	0.1	0.1
Rural	0.1	0.1	0.0	0.1	0.1	0.0
Cotton/Wheat Sind						
Overall	0.1	0.1	0.0	0.1	0.1	0.0
Urban	0.0	0.1	0.0	0.0	0.0	0.0
Rural	0.0	0.1	0.0	0.0	0.0	0.0
Rice/Other Sind						
Overall	0.3	0.1	0.1	0.2	0.2	0.0
Urban	0.6	0.3	0.1	0.6	0.2	0.1
Rural	0.1	0.1	0.1	0.4	0.2	0.2
NWFP						
Overall	0.2	0.2	0.1	0.1	0.1	0.2
Urban	0.1	0.1	0.1	0.2	0.1	0.1
Rural	0.1	0.2	0.1	0.1	0.1	0.2
Other NWFP (except D.I.Khan)						
Overall	0.2	0.1	0.1	0.2	0.2	0.1
Urban	0.4	0.1	0.1	0.2	0.1	0.0
Rural	0.1	0.2	0.2	0.1	0.1	0.1
Baluchistan						
Overall	0.3	0.1	0.1	0.5	0.2	0.1
Urban	0.2	0.0	0.0	0.1	0.0	0.0
Rural	0.4	0.1	0.1	0.3	0.1	0.1

Notes: 1. Results reported in columns 1 to 6 are based on the poverty lines (given in column 3 of the Table 5.6) in terms of per capita income per month.

2. In column 1 P0 gives percentage of the household and in column 4 P0 gives the percentage of the population

With a view to show the impact of 'infaq' on poverty alleviation we have reported the differences in results with 'infaq' and without 'infaq' in Table 7.2. The 'infaq' has resulted in reducing the poverty, in Punjab, by 0.6 percent (overall) to 0.7 percent (rural). Sind province shows a decline in poverty by 0.2 percent (overall) to 0.5 percent (urban) under the impact of 'infaq'. NWFP shows a decline in poverty by 0.2 percent overall while in Baluchistan 'infaq' reduces the poverty by about 0.4 percent (rural). Among the agroclimatic zones, the highest poverty reduction with 'infaq' can be seen in case of rice/wheat Punjab (by 0.8 percent overall and by 0.9 percent in the rural areas). However, other zones of Punjab show a decline of poverty by about 0.6 percent, while rice/other Sind by about 0.3 percent (overall) to 0.6 percent (urban). It appears that the reduction of poverty under the impact of 'infaq' is relatively higher in Punjab than in other provinces.

If we look at the Table 7.1 (columns 4 to 6) and Table 6.4 (columns 4 to 6), the same picture emerges at population level, that is, the poverty is reduced with 'infaq' by about 0.5 percent in overall in all the regions of Pakistan. The differences in results at population level are also reported in Table 7.2.

Table 7.3 presents the poverty estimates without 'infaq' using region specific poverty lines in terms of income. If we compare the results reported in this Table with those of Table 6.2 and Table 6.5 (columns 4 to 6) respectively almost the same pattern emerges as that of Table 7.1. The differences in results with and without 'infaq' are reported in Table 7.4. It is evident from the results reported in Table 7.4 that reduction in the incidence of poverty under the impact of 'infaq' takes place on almost the same pattern as reported in Table 7.2. The 'infaq' has resulted in reducing the poverty gap (p_1),in general , by 0.1 percent to 0.4 percent while severity of poverty (p_2) is reduced by 0.1 percent to 0.3 percent.

Table 7.3: Headcount,Poverty gap, Foster–Greer–Thorbecke Poverty Measure using region specific poverty lines(1987–88)

	In terms of per capita Income (Percen					
Region	(1) Po	(2) P1	(3) P2	(4) Po	(5) P1	(6) P2
Pakistan						
Overall	–	–	–	–	–	–
Urban	12.2	2.5	0.7	16.4	3.1	0.9
Rural	29.7	05.9	1.9	33.6	7.3	2.4
Overall						
Punjab						
Overall	–	–	–	–	–	–
Urban	15.6	3.0	0.9	19.4	3.8	1.2
Rural	28.1	6.1	2.0	34.0	7.6	2.5
Rice/Wheat Punjab						
Overall	–	–	–	–	–	–
Urban	19.1	3.9	1.2	23.2	4.9	1.5
Rural	34.2	7.4	2.3	38.7	8.5	2.7
Mixed Punjab						
Overall	–	–	–	–	–	–
Urban	16.5	3.2	0.9	21.5	4.2	1.3
Rural	23.1	4.8	1.6	28.0	5.9	1.9
Cotton/Wheat Punjab						
Overall	–	–	–	–	–	–
Urban	15.1	2.5	0.8	18.7	3.2	1.1
Rural	25.8	5.6	1.8	31.5	7.0	2.3
Low Intensity Punjab						
Overall	–	–	–	–	–	–
Urban	18.9	4.2	1.4	23.8	5.2	1.7
Rural	29.4	5.8	1.7	37.0	7.6	2.3
Barani Punjab						
Overall	–	–	–	–	–	–
Urban	9.5	2.0	0.6	12.0	2.5	0.7
Rural	26.0	4.8	1.3	35.0	6.4	1.8
Sind						
Overall	–	–	–	–	–	–
Urban	12.8	2.2	0.6	16.6	3.0	0.8
Rural	41.0	8.3	2.5	50.1	10.6	3.3
Cotton/Wheat Sind						
Overall	–	–	–	–	–	–
Urban	11.1	1.6	0.3	14.4	2.1	0.4
Rural	23.4	4.0	1.1	29.9	5.3	1.5
Rice/Other Sind						
Overall	–	–	–	–	–	–
Urban	12.5	2.2	0.6	16.6	2.9	0.8
Rural	47.1	9.7	2.9	56.7	12.3	3.8
NWFP						
Overall	–	–	–	–	–	–
Urban	10.1	1.4	0.3	12.2	1.8	0.4
Rural	15.9	3.2	1.1	18.3	3.6	1.2
Other NWFP (except D.I.Khan)						
Overall	–	–	–	–	–	–
Urban	10.4	1.5	0.3	12.6	1.8	0.4
Rural	15.3	3.2	1.1	18.3	3.7	1.2
Baluchistan						
Overall	–	–	–	–	–	–
Urban	16.	2.6	0.6	20.4	3.1	0.7
Rural	30.3	5.4	1.6	38.3	7.3	2.2

Notes: 1. Results reported in columns 1 to 6 are based on the poverty lines(given in column 3 of the Table 5.6) in terms of per capita income per month.

2 In column 1 P0 gives percentage of the households and in column 4 P0 gives the perc of the population

Table 7.4: Differences in results with Infaq and without Infaq as regards headcount, Poverty gap, Foster–Greer–Thorbecke Poverty measure using region specefic poverty lines (1987–88)

	(In terms of per capita income) (Percent)					
	(1)	(2)	(3)	(4)	(5)	(6)
Region	Po	P1	P2	Po	P1	P2
Pakistan						
Overall	–	–	–	–	–	–
Urban	0.5	0.2	0.2	0.3	0.1	0.1
Rural	0.5	0.2	0.3	0.5	0.2	0.1
Overall						
Punjab						
Overall	–	–	–	–	–	–
Urban	0.5	0.3	0.2	0.3	0.2	0.2
Rural	0.6	0.3	0.1	0.5	0.3	0.1
Rice/Wheat Punjab						
Overall	–	–	–	–	–	–
Urban	0.6	0.2	0.1	0.4	0.2	0.1
Rural	0.9	0.5	0.2	0.7	0.4	0.2
Mixed Punjab						
Overall	–	–	–	–	–	–
Urban	0.7	0.3	0.2	0.2	0.2	0.2
Rural	0.6	0.2	0.2	0.7	0.3	0.1
Cotton/Wheat Punjab						
Overall	–	–	–	–	–	–
Urban	0.3	0.3	0.3	0.3	0.4	0.4
Rural	0.8	0.3	0.1	0.7	0.3	0.1
Low Intensity Punjab						
Overall	–	–	–	–	–	–
Urban	0.1	0.4	0.2	0.1	0.3	0.2
Rural	0.4	0.1	0.0	0.2	0.1	0.1
Barani Punjab						
Overall	–	–	–	–	–	–
Urban	0.0	0.0	0.1	0.0	0.1	0.1
Rural	0.1	0.3	0.1	0.0	0.2	0.1
Sind						
Overall	–	–	–	–	–	–
Urban	0.2	0.1	0.1	0.1	0.1	0.1
Rural	0.0	0.1	0.1	0.0	0.0	0.1
Cotton/Wheat Sind						
Overall	–	–	–	–	–	–
Urban	0.0	0.0	0.0	0.1	0.0	0.0
Rural	0.1	0.0	0.0	0.1	0.0	0.0
Rice/Other Sind						
Overall	–	–	–	–	–	–
Urban	0.4	0.1	0.1	0.3	0.1	0.1
Rural	0.1	0.2	0.1	0.1	0.1	0.1
NWFP						
Overall	–	–	–	–	–	–
Urban	0.4	0.0	0.0	0.4	0.1	0.0
Rural	0.1	0.1	0.2	0.4	0.0	0.1
Other NWFP (except D.I.Khan)						
Overall	–	–	–	–	–	–
Urban	0.4	0.1	0.0	0.4	0.0	0.0
Rural	0.1	0.2	0.2	0.1	0.2	0.1
Baluchistan						
Overall	–	–	–	–	–	–
Urban	0.2	0.0	0.0	0.4	0.0	0.0
Rural	0.4	0.1	0.1	0.5	0.2	0.1

Note: In column 1 P0 gives the percentage of the households and in column 4 Po gives the percentage of the population

The differences in incidence of poverty with and with out 'infaq' have been discussed above. In Table 7.5 we have reported the percentage differences in the various poverty measures with and without 'infaq'. These percentages are computed as the percentage changes in poverty measure computed without 'infaq' to those with 'infaq, using the with 'infaq' estimates as base. 'infaq' has resulted in reducing poverty level in Pakistan by 2.16 percent overall from levels computed with 'infaq'; and 3.78 percent in urban areas and 2.06 percent in the rural areas based on the head count measure P_o. Among the provinces, Punjab shows a decline of 2.46 percent in the urban areas. Sind province shows a decline in poverty by 0.70 percent overall and 1.58 percent in urban areas under the impact of 'infaq'. NWFP shows a decline by 1.35 percent overall and 3.30 percent in urban areas, while in Balochistan, 'infaq' reduces the poverty by about 1.06 percent overall.

Among the agroclimatic zones, the highest poverty reduction with 'infaq' can be seen in case of mixed Punjab (2.86 percent overall and 4.43 percent in urban areas), followed by Rice/Wheat Punjab (2.82 percent overall, 3.24 percent urban and 2.7 percent in the rural areas). Rice/Other Sindh shows a decline by 1.13 percent overall and 3.30 percent in the urban areas. It appears that the reduction of poverty under the impact of 'infaq' is relatively high in Punjab than in other provinces.

The most important impact of 'infaq' is on the reduction in poverty gap (P_1) and severity of poverty as shown by the P_2 index. 'Infaq' resulted in reduction in the poverty gap by 4.16 percent, 8.69 percent in the urban areas and 3.77 percent in the rural areas of Pakistan. Among the provinces, NWFP shows a reduction of poverty gap (P_1) by 7.14 percent overall followed by Punjab (3.92 percent overall). 'Infaq' reduces the poverty gap in Balochistan by 2.0 percent overall. However, no impact of 'Infaq' is observed in reduction of P_1 in the overall Sindh. As far as the reduction in poverty gap in the rural areas is concerned, Punjab shows a decline by 5.17 percent followed by NWFP (3.22 percent). Except for the urban areas of Punjab, where

Table 7.5: Percentage change in the headcount,poverty gap Foster–Greer–Thorbecke Poverty measure due to infaq using region specefic poverty lines (1987–88)

	(Percent)		
	(1)	(2)	(3)
Region	Po	P1	P2
Pakistan			
Overall	2.16	4.16	8.62
Urban	3.78	8.69	16.66
Rural	2.06	3.77	5.55
Overall			
Punjab			
Overall	2.46	3.92	6.25
Urban	3.31	11.11	28.57
Rural	2.18	5.17	5.26
Rice/Wheat Punjab			
Overall	2.82	6.89	11.11
Urban	3.24	5.40	9.09
Rural	2.70	7.24	9.52
Mixed Punjab			
Overall	2.86	4.76	7.69
Urban	4.43	10.34	28.57
Rural	2.66	4.34	14.28
Cotton/Wheat Punjab			
Overall	2.57	6.25	13.33
Urban	2.02	13.63	60.00
Rural	3.2	5.66	5.88
Low Intensity Punjab			
Overall	2.18	1.81	6.25
Urban	0.53	10.52	16.66
Rural	1.38	1.75	0.0
Barani Punjab			
Overall	0.47	2.63	10.0
Urban	0.0	0.0	20.0
Rural	0.38	6.66	8.33
Sind			
Overall	0.70	0.0	6.25
Urban	1.58	1.78	20.0
Rural	0.0	1.22	4.16
Cotton/Wheat Sind			
Overall	0.49	2.94	0.0
Urban	0.0	0.0	0.0
Rural	0.43	0.0	0.0
Rice/Other Sind			
Overall	1.13	1.92	6.66
Urban	3.30	4.76	20.0
Rural	0.21	2.10	3.57
NWFP			
Overall	1.35	7.14	12.5
Urban	4.12	0.0	0.0
Rural	0.63	3.22	22.22
Othe: NWFP (except D.I.Khan)			
Overall	1.38	3.57	12.5
Urban	4.0	7.14	0.0
Rural	0.65	6.66	22.22
Baluchistan			
Overall	1.06	2.0	7.14
Urban	1.20	0.0	0.0
Rural	1.34	1.88	6.66

Note: P0 column gives the percentage of the households

the reduction of poverty gap is 11.11 percent, the urban areas of all other provinces show no change in the poverty gap.

Among the agroclimatic zones, the higher reduction (13.63 percent) in poverty gap is seen in the urban areas of Cotton/Wheat Punjab followed by urban areas of Mixed Punjab (10.34 percent). However, the reduction of poverty gap in all the urban areas of the agroclimatic zones are significantly higher than rural areas.

As far as the severity of poverty index (P_2) is concerned, a significant decrease is observed. The severity of poverty decreased by 8.62 percent overall, 16.66 percent in urban and 5.55 percent in the rural areas of Pakistan. We find almost the same reduction in the severity of poverty (about 6.25 percent) overall in all the provinces. However, we find the higher reduction in P_2 in the urban areas of Punjab (28.57 percent), followed by urban Sindh (20 percent). We also find a significant reduction in P_2 in all the agroclimatic zones.

Our estimates are based on the HIES data of 1987-88. We have already pointed out that the HIES data does not cover in its sample the people, who are living on charity and those, not resident in permanent abode. Thus if those people had been included in the sample then perhaps 'infaq' would have had greater impact on the poverty alleviation.

We have also mentioned in this chapter the loopholes and other deficiencies in the presently operated 'zakat' system in Pakistan. Had the 'zakat' potential been fully realised, we could have had a more significant impact of 'zakat' on poverty alleviation.

In the next section we will discuss the possibility of poverty alleviation through the present system of 'zakat'; particularly we shall explore the potentiality of the present 'zakat'

receipts in bridging the poverty gap.

Possibility of Bridging the Poverty Gap Through Zakat System

For the purpose of calculating poverty gap in rupees, we used the estimated poverty gap (p_i) based on region specific income poverty lines consistent with 2550 calories per adult equivalent (called the poor) and with 80 percent of the this calorie norm (called very poor) and with 70 percent cut off point of this calorie norm (called extremely poor). The amounts needed per person, per household and thus the total amount, on the average, to bring the poverty gap to zero under each category of the poor are reported in the Table 7.6.

For overall Pakistan, there is a need of Rs.0.915 billion per month (Rs. 10.98 billion per annum) to bring all the poor households to the minimum level of the non-poor. An amount of Rs. 0.244 billion per month (about Rs. 2.9 billion per annum) is needed for removing the poverty of the very poor. An amount of Rs. 0.172 billion per month (about Rs. 2.06 billion per annum) is needed for eliminating the poverty of the extremely poor. For Punjab, funds required are Rs.0.562 billion, Rs.0.160 billion and Rs.0.110 billion per month for removing the poverty of the poor, the very poor and the extremely poor respectively. The monthly amounts needed for Sind for the three types of the poor come to Rs.0.217 billion, 0.052 billion and Rs.0.029 billion respectively. In NWFP the monthly amounts needed are Rs.0.062 billion for the poor, Rs.0.013 billion for the very poor and Rs.0.008 billion for the extremely poor, while the monthly funds required for Baluchistan are relatively low and those are Rs.0.048 billion, Rs.0.015 billion, Rs.0.008 billion respectively for eliminating the poverty of the poor, the very poor and the extremely poor. The total funds needed per month for each category of the poor in different regions of the country are given in Table 7.6.

Table 7.6: Funds required to bridge the poverty gap of the poor, the very poor and the extremely poor using region specific poverty lines in terms of per capita income per month (1987–88)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
	Poor					Very Poor					Extremely Poor				
Region	Average amount required per capita (In Rupees)	Average household size	Average amount required per household (In Rupees)	Poor households	Total amount required (billion Rs.)	Average amount required per capita (In Rupees)	Averag household size	Average amount required per household (In Rupees)	Very Poor households	Total amount required (billion Rs.)	Average amount required per capita (In Rupees)	Average household size	Average amount required per household (In Rupees)	Extremely Poor households	Total amount required (billion Rs.)
Pakistan															
Overall	43.04	7.6	327.1	2798584	0.915	27.90	7.8	217.6	1124977	0.244	25.97	7.9	205.1	841235	0.172
Punjab															
Overall	42.17	7.5	316.2	1779044	0.562	27.05	7.7	208.2	772028	0.160	24.49	7.8	191.0	577266	0.110
Rice/Wheat Punjab															
Overall	48.25	7.4	357.0	690621	0.246	31.47	7.5	236.0	339427	0.080	27.95	7.6	212.4	267251	0.056
Mixed Punjab															
Overall	37.67	7.5	282.5	371903	0.105	24.79	7.7	190.8	149006	0.028	22.38	7.8	174.5	104239	0.018
Cotton/Wheat Punjab															
Overall	38.18	7.5	286.3	465688	0.133	26.18	7.8	204.2	202291	0.041	21.37	7.9	168.8	149948	0.025
Low Intensity Punjab															
Overall	36.50	7.8	284.7	246008	0.070	22.68	8.5	192.7	81890	0.015	20.10	8.1	162.8	22568	0.003
Barani Punjab															
Overall	42.72	7.0	299.0	172031	0.051	24.35	7.4	180.1	44655	0.008	22.46	7.7	172.9	26995	0.004
Sind															
Overall	48.26	7.7	371.6	585464	0.217	27.63	8.3	229.3	230482	0.052	24.33	8.3	201.9	147778	0.029
Cotton/Wheat Sind															
Overall	34.95	7.5	262.2	221872	0.058	24.63	7.8	192.1	54250	0.010	24.93	8.1	201.9	30565	0.006
Rice/Other Sind															
Overall	53.73	8.1	435.2	422698	0.183	29.04	8.5	246.8	176310	0.043	26.57	8.7	231.1	123381	0.028
NWFP															
Overall	33.69	8.0	269.5	231513	0.062	24.64	8.0	197.1	67747	0.013	24.02	7.8	187.3	44398	0.008
Other NWFP (except D.I.Khan)															
Overall	35.66	7.9	281.7	180899	0.050	25.97	8.0	207.7	63023	0.013	24.12	7.8	188.1	44213	0.008
Baluchistan															
Overall	44.93	7.3	327.9	148866	0.048	33.23	7.7	255.8	70606	0.015	22.38	8.1	181.2	48307	0.008

In Table 7.7 we have reported the 'zakat' and 'ushr' receipts of the government during 1987-88. The problem with the 'zakat' collections is that these are available only at the aggregate level. The receipt of 'zakat' and 'ushr' totalled Rs. 2.18 billion in 1987-88. If we compare Table 7.6 and 7.7, it appears that with the present 'zakat' system, we cannot eradicate poverty, but poverty gap can be narrow down to Rs. 8.8 billion. However, the 'zakat' fund is sufficient to eradicate the poverty level of the very poor and extremely poor households, as the 'zakat' receipts (Rs.2.18 billion) exceed the amount required to bring the poverty gap to zero of the extremely poor (Rs.2.06 billion). Also to a large extent 'zakat' can bridge the poverty gap of the very poor households. The difference between 'zakat' receipts and the poverty gap of the very poor is very small (Rs.0.72 billion).

From the Table 7.7, it is clear that 'zakat' base is very limited and its collection is only from a few assets and presently it is not being collected from all the 'zakatable' assets. Therefore, the base of the 'zakat' needs to be widened. Consequently 'zakat' receipts can be considerably be increased. Faiz Muhammed (1992) estimated the 'zakat' and 'ushr' potential of Rs. 6.82 billion for the year 1987-88. If 'zakat' is collected to its potential then the remaining poverty gap of the poor would come down to only Rs. 4.16 billion from Rs. 10.98 billion. However, the potential 'zakat' receipts could result in totally eliminating the poverty of the very poor and the extremely poor in addition to considerably reducing the poverty of the poor.

Kahf (1990) also estimated the 'zakat' potential for Pakistan. He has estimated the 'zakat' potential from the National Accounts based on different opinions of Fuqaha. Thus based on different opinions, he presented three estimates. Under the first opinion 1.6 percent of the GDP, under the second opinion 3.5 percent and under the third opinion 4.4 percent of the GDP can be collected. In an other study Kahf (1987) estimated that 2 to 3 percent of the GNP can be collected as 'zakat' and 'ushr'.

Table 7.7: Zakat and Ushr Collection (1987–88)

a) ZAKAT	(Rs. in Million)
Name of Asset	
Savings Bank Accounts	1051.01
Notice Deposit Receipts	16.23
Fixed Deposit Receipts and Certificates	664.41
Savings Deposit Certificates	92.73
NIT Units	27.3
ICP Mutual Funds	2.95
Government Securities	0.83
Shares and Debentures	52.04
Annuities	0.19
Life Insurance Policies	9.16
Provident Funds	27.34
Sub–Total	1944.19
b. Ushr collection	239.88
Total (a and b)	2184.07

Source: Central Zakat Administration (1991)

If we convert our poverty gap estimate (Rs. 10.98 billion) as a percentage of GDP (Rs.685.86 billion) then it comes to only 1.6 percent of the GDP in 1987-88. Even with the most conservative opinion regarding the 'zakat' potential (i.e. 1.6 percent of GDP) the poverty gap of the poor could have been easily eliminated.

Though with the present 'zakat' and 'ushr' receipts the very poor and the extremely poor households' poverty gap can be eliminated to a large extent yet it is not possible to eliminate the poverty of all the poor. But 'zakat' can eradicate the poverty from the country, if it is collected to its full potential. If we take the second and third type of estimates of 'zakat' potential as given by Monzer Kahf, then we could create a huge surplus over and above what is needed for eradicating poverty. Even if we allow certain leakages, the required funds will be sufficient to eliminate poverty from the country. So 'zakat' and 'ushr' can play a significant role in eradicating poverty.

However, it all depends on the right targeting, proper selection of the poor households and adoption of appropriate channels for distributing funds. If the target group is known and the leakages are the minimum from the disbursing channels, then there is no way that poverty cannot be eradicated from the country through the 'zakat' system. But if funds are distributed among the non-poor in the name of the poor, the poverty will persist. In our study, we have tried to find the poverty gap (Table 7.5) at dis-aggregated zone level. We have also pin pointed the zones, where the poverty is severe (Chapter-6). These findings can help the policy makers in providing insight into the poverty problem of the country.

As regards identification and targeting of the poor and the needy, a number of methods are available. Poor can be identified through 'means testing' and 'indicator targeting' for transfer of income. Under the means testing income and assets of the individuals or households are

identified. However, identification of the poor under this method requires a vast administrative machinery for verification and record keeping and therefore, it is more costly. In developing countries identification of income and assets is more difficult and such a method is not practicable in these countries.

Under the 'indicator targeting', correlates of poverty are identified from sample surveys or other information, and direct benefits are allocated accordingly. The correlates of poverty may include region of residence, land-holding, nutritional status, sex and age etc. It is less costly than 'means testing'. Nevertheless, the problem with the 'indicator targeting' is that the easily monitored correlates of poverty are often not perfect: Some poor people will be missed and some of the non poor will receive benefits. Another problem is that non poor people might migrate to target areas (see World Development Report, 1990).

In our view, the selection of the target group can easily be done at the micro level; that is at the union council level. The 'zakat' committees are the best institutions that can provide the profile of the poor people of the area, because these committees are well aware of the localities, especially in rural areas. However, there is also a need for checking and verification to ensure that the poor households selected by them are genuine ones. Since 'zakat' committees are working voluntarily, therefore, the selection of the target groups (poor) by these committees is cost - effective as compared to any other method and accordingly direct transfers can be made or other benefits can easily be allocated by these committees.

Targeting benefits to the poor is a way of increasing cost - effectiveness as compared to un-targeted schemes of providing benefits to the poor. For example, the general subsidies that provide reasonable transfers to the poor are very expensive. According to the World Development Report (1990) in Egypt only about 20 cents of each dollar spent reached those in

the lowest quartile in case of general subsidies schemes. In case of general subsidy scheme, in Jamaica, the proportion of cost (excluding administrative costs) as share of government expenditure was 3.0 percent and in case of targeted subsidy it was 1.6 percent in 1988. As regard transfer to the poor, targeted schemes are also more beneficial. In Jamaica, in case of general subsidy the proportion of transfer going to the poorest quintile and the richest quintile was 14.0 percent and 26.0 percent respectively, while in case of targeted subsidy it was 31.0 percent and 8.0 percent respectively in 1988.

We conclude this chapter with the following remarks:

The main purpose of 'infaq' as pointed out earlier is to keep the economic harmony in the society. 'Infaq' helps the poor and the needy in the fulfilment of their basic needs and enables them to become responsible citizens of the society. The Prophet Muhammad (PBUH) took measures to eradicate poverty. He encouraged his followers to give charity to the poor and the needy, so that they (followers) may be able to shun miserliness. The rightly-guided caliphs and other companions of the Prophet (PBUH) acted upon the teachings of the Prophet (PBUH) in this regard. The Islamic history is full of such instances, which testify to the benevolence of the Muslims towards the needy.

Although the life of those people was simple, yet everyone somehow or the other was provided with the basic necessities of life. Islamic state was responsible for the social security of all. Syedna Umar (May Allah be pleased with him) established a comprehensive system of social insurance not only for Muslims but also for Non-Muslims. It is reported in the history that nobody was poor during the reign of Umar bin Abdul Aziz.

As the time passed by the weaknesses in the system went on creeping in and presently no Islamic state seems to have made satisfactory social security arrangements. There is no doubt

that the people of all the Muslim countries including Pakistan do observe certain Islamic traditions and they give alms and gifts to help the needy voluntarily.

In Pakistan we estimated the effects of 'infaq' on poverty alleviation using HIES 1987-88 data and found that 'infaq' could help in reducing poverty level in Pakistan in terms of headcount (P_0) by 2.16 percent overall and 3.78 percent in urban areas and 2.06 percent in rural areas. The most important impact of 'infaq' is on the reduction of poverty gap (p_1) and severity of poverty index (P_2). The poverty gap was reduced by 4.16 percent in overall Pakistan under the impact of 'infaq'. The 'infaq' helped in decreasing the severity of poverty by 6.66 percent in Pakistan. We have also estimated the funds required to bring the poverty gap down to zero and have explored the possibilities of filling this gap by the official 'zakat' system. Our findings are that the present 'zakat' and 'ushr' receipts can completely fill the poverty gap of the extremely poor and can partially fill the poverty gap of the very poor. But in the present form it is not capable of eradicating total poverty. Presently 'zakat' is not being collected from all the zakatable assets. If 'zakat' is collected to its full potential, it could not only result in eradication of poverty from the country but also surplus funds can be created. However, there are problems regarding the target groups and the way funds are distributed. In connection with the efforts at elimination of poverty, we have mentioned the problems related to target groups and the proper distribution of funds. As a solution to these problems, we have suggested that the target groups can easily be found with the help of the local 'zakat' committees and they can be used as functionaries for the distribution of funds among the needy. This channel of distribution of funds would prove to be cost effective as these committees provide their services on voluntary basis.

CHAPTER 8

DETERMINANTS OF POVERTY STATUS OF A HOUSEHOLD

In this chapter we are particularly interested in exploring the role of 'infaq' in the determination of poverty status of a household. In this connection we also want to evaluate the role of some other characteristics, which we feel have a significant association with the poverty status of a household. In this chapter we have tried to explore the role of 'infaq', the household size, head's educational level, number of earners in a household, and the province the household belongs to as characteristics for determining the poverty status of a household. In this chapter, the Logit model has been used for evaluation of the role of different characteristics that determine the poverty status of a household.

Education and Poverty

In 1950s and 1960s the planners of the developing countries were mainly concerned with economic growth. Each economic activity was ranked in the light of its contribution to economic growth. The earlier literature in this regard was mostly concerned with establishing a relationship between education and economic growth. The stress in the literature on establishing the relationship of education with the size distribution of income and thus linking the human capital with the poverty is the recent ones. Human capital is the stock of skills and productive knowledge that is embodied in people. Education increases an individual's skills and his earning power. Education has been recognized as an effective and expedient change agent. It not only broadens the mental horizon of the people, but also helps to motivate them to participate actively in the social and economic development of the family and the country at large. Schultz (1961) and Becker (1975) treated education and training as a form of investment, producing future benefits in the form of higher income for both educated individuals and for society as a whole. Thus education plays a positive role in alleviating poverty. Psacharopoulos, et al. (1985) reveal

that "improvement in education can help alleviate poverty both directly and indirectly by increasing income, improving health and nutrition, and reducing family size. Healthy children learn more effectively than sick children, well nourished children learn more effectively than hungry children, and educated parents are more likely to have healthy and well nourished children". The individual benefits of education are usually measured in terms of returns and earnings. Most of the studies show that rate of return to education is quite high. Schultz (1988) calculated the rates of return to education for 46 non-socialist countries and pointed out that the "Social returns decrease at more advanced levels of development across countries and they decrease, as a rule, at higher levels of schooling with in countries. Social returns tend to be about twice as large in Africa and Latin America (15-30 percent) as they are in high income countries-(8-13 percent). Moreover, private returns are often twice the social returns in low income regions. The exception is Asia, where social returns in secondary and higher education for the same countries are only moderately higher than private returns, because public subsidies at these levels are a moderate share of private costs".

Blaug (1977) has found that calculated rates of return on education range from 5-15 percent, although private rates are as high as 80 percent for primary education in certain developing countries. He further states that, in general, private rate of return tends to decline monotonically with additional years of schooling. Hanoch (1967) showed that the rate of return on education is about ten percent in different countries. Griliches and Chamberlain (1975) find that the brothers with additional schooling earn more than those with less schooling.

Psacharopoulos (1973) Conducted a cost benefit analysis of education in 32 countries. He pointed out as quoted by Woodhall (1987) "that not only is education profitable but that in many cases, particularly return to education exceeds the rate of return to physical capital, the private rate of return is consistently higher than the social rate of return, and the rate of return

to primary education is generally higher than the rate of return to secondary or higher education". Khan and Irfan (1985) find that the private rates of return to education in Pakistan are very low on an absolute level, but these are positively related to the level of education.

Moreover, the possibility of getting a suitable job increases with education, whereas employment is one of the main ways of reducing poverty. Todaro (1989) maintains that "it still remains true that one of the major mechanism for reducing poverty and inequality in less developed nations is the provision of adequate paying productive employment opportunities for the very poor".

We conclude that education by enhancing the skills of individual, increases the earning capacity of a person and also enhances the possibility of getting a job. Thus in this chapter we shall test the hypothesis that education reduces the probability of a household/person being poor.

Infaq and Poverty

Education enhances the earning capacity of a person and thus his real income. Because poverty is related with inadequate income, hence the basic problem is how to increase the income of the poor. So any action taken by the public authority or by the private persons or organizations that results in increasing the income of the poor would help in getting the poor out of the poverty. For instance, subsidies to the poor in the form of health care, educational facilities, cheap food or food stamps, unemployment compensation or direct transfer payments would supplement the income of the poor and thus would result in eradication of poverty. Western Countries were able to eradicate absolute poverty through their social security programmes.

Kakwani (1989) conducted a study on Australian data and his finding is that when

government benefits (transfer payments) are added to the original income of the people, the poverty is reduced from the range of 16.06 - 16.59 percent to 6.07 - 6.82 percent. It is found in our study also that 'infaq' (transfer payment) reduces the poverty (see Ch. 7).

An other hypothesis that would be tested in this chapter is that the probability of a household being poor declines with the increase in 'infaq'.

Household Size and Poverty

Household size and age structure of its members determine the potential dependency and labour force participation. In the developing countries the population is rapidly increasing through high birth rates. According to the World Development Report (1990), population of the Low-income economies grew at average annual rate of 2.0 percent during the period 1980-88. While during the same period population of Pakistan grew at annual average rate of 3.2 percent. The result of high growth of population is that the proportion of children in the total population has increased. About 36 percent of the population of the developing countries consists of children. This implies that the active labour force is limited and there is a high ratio of dependents to work force.

In Pakistan 45 percent of the population is below the age of 15 years (World Development Report, 1990). In the Economic Survey of Pakistan (1990-91), it is observed that the dependency ratio in 1988 was 100.5 percent. It is further stated that "dependency ratios are generally higher in Baluchistan (117.2) and NWFP (109.1) than in Punjab (98.8) and Sind (98.0)."

It is generally observed that in a developing country like Pakistan poor households try to produce more children for their future security and support. It is pointed out by Todaro

(1989) "Widespread poverty tends to sustain high birth rates for the obvious reason that families living without adequate incomes, employment, health, education, and social services have little security for the future other than reliance on their children". The Poor households consider children as their assets, which are not subject to theft (see Meier 1989 and Birdsall 1988). Therefore, the number of children in the poor households is greater than in the rich ones. Usually the children need to consume more of food, health and educational facilities. The poor families' income, which is already low is thinly spread over the number of persons in the household. So it becomes difficult for the poor to support a large family and they can not take proper care of their children. Birdsall (1988) states that "if an association between low parental income and high fertility persists over a long period, and high fertility is also associated with lower parental spending on children's human capital, then it is possible to imagine a syndrome of poverty and large family size extending from one generation to the next, producing a kind of permanent underclass, which would, barring any change, become ever-larger and poorer".

In view of the above, we can expect that in our country a household with large family size has a greater probability of being poor. We shall also test this hypothesis in this chapter.

Number of Earners

As the number of earners in a household increases, it is likely that the poverty will decline. Because each earner is expected to contribute something positively to the household's income. We shall also test this hypothesis in this chapter using HIES 1987-88 data.

The Model to Test the Hypotheses

We have estimated the Logit model with following specifications for testing the above mentioned hypotheses;

$$P\text{-}Log[\frac{P_i}{1-P_i}] = \alpha_0 + \alpha_1 D_{Sind} + \alpha_2 D_{NWFP} + \alpha_3 D_{BLCH} + \alpha_4 D_{ED2} + \alpha_5 D_{ED3} + \alpha_6 D_{ED4} + \alpha_7 Infaq + \alpha_8 D_{EN1} + \alpha_9 D_{EN3} + \alpha_{10} D_{EN4} + \alpha_{11} HSIZ$$

where

$$P = \begin{cases} 1 : \textit{if household is poor} \\ 0 : \textit{otherwise} \end{cases}$$

$$D_{Sind} = \begin{cases} 1 : \textit{if province is Sind} \\ 0 : \textit{otherwise} \end{cases}$$

$$D_{NWFP} = \begin{cases} 1 : \textit{if province is NWFP} \\ 0 : \textit{otherwise} \end{cases}$$

$$D_{Blch} = \begin{cases} 1 : \textit{if province is Baluchistan} \\ 0 : \textit{otherwise} \end{cases}$$

$$D_{Ed2} = \begin{cases} 1 : \textit{if educational level is primary but less than middle} \\ 0 : \textit{otherwise} \end{cases}$$

$$D_{Ed3} = \begin{cases} 1 : \textit{if the educational level is middle to intermediate} \\ 0 : \textit{otherwise} \end{cases}$$

$$D_{Ed4} = \begin{cases} 1 : \textit{if the education level is degree and higher} \\ 0 : \textit{otherwise} \end{cases}$$

'Infaq' = The amount of 'infaq'

$$D_{En1} = \begin{cases} 1 : \textit{no earner} \\ 0 : \textit{otherwise} \end{cases}$$

$$D_{En3} = \begin{cases} 1 : \textit{Two to Three earners} \\ 0 : \textit{otherwise} \end{cases}$$

$$D_{En4} = \begin{cases} 1 : \textit{Four and above} \\ 0 : \textit{otherwise} \end{cases}$$

HSIZ = household size

and

α_1, α_2, α_3 *....are the regression coefficients.*

We have estimated the model with the same specifications for the rural and urban areas of Pakistan. The results of the logit model are given in Table 8.1.

Results Regarding Poverty in Provinces

The results of the model show that the probability of poverty of households living in provinces other than Punjab is less (Punjab is the reference group). The Baluchistan dummy coefficient is higher followed by Sind and NWFP. All coefficients are statistically significant. The same is true for urban Baluchistan, Sind and NWFP, while rural Baluchistan has the highest coefficient followed by NWFP and Sind. These results confirm our earlier findings reported in Chapter 6 that keeping all other characteristics constant, compared to Punjab all other Provinces have lower incidence of poverty.

Results Regarding Relationship Between Educational Level and Poverty

The education dummies have negative signs and are highly significant, confirming our hypothesis that compared to reference group (i.e. educational level of the head less than primary/none) as the educational level of the head of the household increases the probability of the household of being poor decreases. The estimated coefficients of education for rural and urban areas also have a negative sign and they are highly significant.

Results Regarding the Relationship Between Infaq and Poverty

The coefficients of 'infaq' have the negative signs in overall and also in case of rural and urban areas of Pakistan, and they suggest that with the increase in 'infaq' the probability of a

Table 8.1: Results of the Logit Model

Region	Overall	Urban	Rural
Variables			
Sind	−0.685*	−1.020*	−0.367*
	(−13.44)	(−11.598)	(−5.703)
NWFP	−0.468*	−0.472*	−0.437*
	(−8.106)	(−4.858)	(−5.979)
Baluchistan	−1.197*	−1.624*	−0.983*
	(−12.623)	(−8.589)	(−8.764)
Ed2	−0.550*	−0.585*	−0.439*
	(−8.941)	(−5.691)	(−5.572)
Ed3	−1.331*	−1.219*	−1.071*
	(−22.067)	(−14.148)	(−11.699)
Ed4	−3.535*	−3.582*	−2.301*
	(−10.890	(−8.503)	(−4.350)
Infaq	−0.003**	−0.0027	−0.0027
	(−1.896)	(−0.932)	(−1.245)
En1	0.658*	0.949*	0.541*
	(13.878)	(11.125)	(9.304)
En3	−0.599*	−0.822*	−0.525*
	(−9.110)	(−6.963)	(−6.420)
En4	−1.234*	−2.791*	−0.841*
	(−6.992)	(−6.265)	(−4.106)
HSIZ	0.272*	0.303*	0.289*
	(36.301)	(23.880)	(29.244)
Constant	−1.406*	−1.758*	−1.364*
	(−105.704)	(−50.793)	(−86.242)

Notes: numbers in parenthesis are 'T' statistics

* : significant at 0.01 level

** : significant at 0.10 level

household being poor decreases. Although these coefficients have the proper sign yet their values are very low. The coefficient of 'infaq' ,for overall Pakistan, is significant at 10 percent level of significance. However, the low value of the coefficient indicates that the impact of presently practiced 'infaq' on poverty eradication is not very encouraging.

Results Regarding Number of Earners and Poverty

The coefficients of dummies for earners in a household suggest that a household with no earner has a high probability to be poor compared to the reference group (i.e. one earner household). However, the households with 2 to 3 earners and 4 or more earners have the probability to be less poor than the reference group (as the coefficients in these cases have negative signs). All the coefficients are highly significant. The-urban-rural results point to the same trend. These results confirm our hypothesis that as the number of earners in a household increases the level of poverty decreases.

Results Regarding the Household Size and Poverty

The coefficient of the household size has the positive sign and is highly significant. This suggests that as the household size increases the probability of a household being poor increases.

The conclusions of this chapter can be summarized as follows:

Our first finding is that the households living in Punjab have the highest probability of being poor as compared to other provinces.

Our second finding is that as the educational level of the head of the household increases the probability of that household being poor decreases.

Our third finding is that 'infaq' has a negative relation with the poverty. It suggests that as 'infaq' increases the probability of a household being poor declines.

Our fourth finding is that the probability of a household being poor declines when the number of earners in that household increases.

Our fifth finding is that the probability of a household being poor increases with the increase in the size of the household.

CHAPTER 9

CONCLUSIONS

In the current study an attempt has been made to determine the incidence of poverty and to identify a detailed socio-economic profile of the poor. Additionally the possibility of poverty alleviation through the 'infaq' is explored utilising the HIES 1987-88 micro data as it was the latest relevant data, when work on this study was started. An attempt is also made in this study to explore the possibility of bridging the poverty gap through the 'zakat' and 'ushr' collections. We have also evaluated the role of different characteristics that determine poverty status of a household.

For this purpose we estimated the nutritional based poverty lines both in terms of expenditure and income as a first step to estimate the incidence of poverty. Foster, Greer and Thorbecke (FGT) poverty measures, which are widely used in the recent research done on poverty, have been utilised for estimating the incidence of poverty in the present study. The FGT measures are additively decomposable by households (population) sub-groups, as a result the aggregate poverty can be represented as an appropriately weighted sum of poverty levels in the component-sub-groups of households (population). This property facilitates the construction of poverty profiles that show the variation of poverty across sub-groups of households (population).

The main conclusions of the present study are presented below:

Our first conclusion is that the incidence of poverty is sensitive to the poverty line selected. We find that 16.6 percent of the households in overall, 8.7 percent in urban and 19.6 percent in rural areas of Pakistan are poor in terms of the expenditure based poverty line and 23.2 percent in overall, 12.7 percent in urban and 27.2 percent in rural areas are poor in terms of the income poverty lines based on different calorie norms for urban and rural areas.

With the country specific poverty lines, using the same calorie norms for urban and rural areas, we find a change in the urban and rural pattern of poverty. We find that 9.8 percent of the households in urban and 17.2 percent in the rural areas of Pakistan are poor in terms of region specific expenditure based poverty line and 12.7 percent in urban and 27.2 percent in rural areas are poor in terms of income based poverty line.

We also estimated the proportions of the very poor and the extremely poor households. The very poor households in overall Pakistan are 9.3 percent, whereas they are 4.2 percent in urban areas and 11.3 percent in the rural areas of Pakistan. The proportion of extremely poor is smaller than the very poor. They are just 7.0 percent in overall Pakistan, 3.0 percent in the urban and 8.5 percent in the rural areas.

If we compare the poor households across the provinces, using poverty lines based on the same calorie norm for overall provinces and different calorie norms for urban and rural areas of the provinces in terms of expenditure then the highest poverty (21.9 percent) is found in Sind followed by Punjab (18.5 percent) and Baluchistan (15.8 percent). While the NWFP has the lowest poverty percentage (12.6 percent).

As regards urban poverty, we observed the lowest, head count, P_o, (6.2 percent) value in urban NWFP and the highest (21.5 percent) in urban Sind, while in Punjab and Baluchistan poor urban households are 10.2 percent and 16.7 percent respectively.

As regards rural poverty, the P_o index in rural Sind is the highest (43.6 percent) and it is the lowest (30.6 percent) in rural NWFP. However, P_o index is the same (40 percent) in rural Punjab and Baluchistan.

In terms of income based poverty lines based on the same calorie norm for overall

provinces and different calorie norms for urban and rural areas of the provinces, we come across some interesting results. In terms of expenditure, Sind was singled out as a province with the highest percentage of poor households, again in terms of income Sind has the highest percentage of poor households (28.4 percent). Punjab is the second poorest province in terms of expenditure threshold but in terms of income it becomes the third poorest. NWFP again has the lowest percentage (14.8 percent) of the poor households. However, Baluchistan has the second highest percentage of poverty (28.3) in terms of income based poverty line.

The most interesting is the difference in findings regarding the rural poverty on the basis of the expenditure and income thresholds. The overall and urban poverty of all the regions shows an increase with the per capita income threshold, while the rural poverty of all the regions shows a decrease. Again the exception is the rural Baluchistan, where almost the same percentage of rural households are identified as the poor (i.e. 39.8 percent in terms of expenditure and 39.6 percent in terms of income).

The other poverty indices (P_1) and (P_2), more or less have the same pattern as P_o. The differences in the results, on the basis of expenditure and income are perhaps due to the discrepancies in the expenditure and income data. The income data in the developing countries are usually not reliable, while we can put more trust in the expenditure data. People usually understate their income. Consequently non-poor households are likely to be identified as poor when we use income threshold.

Using the region specific poverty lines the incidence of poverty in the urban and rural areas has changed. On the basis of region specific expenditure threshold, we find that 11.0 percent of the households in the urban Punjab are poor, followed by urban areas of NWFP (9.6 percent). While Sind and Baluchistan have the same percentage of the poor households (8.4

percent each) in their respective urban sectors.

However, rural sector of Sind has the highest poor households (32.0 percent), followed by Punjab (21.0 percent) and Baluchistan (16.9 percent). NWFP has the lowest percentage of the rural poor households (13.1 percent).

One of the reasons for the highest percentage of the poor households in Sind could be the high concentration of land ownership there. Moreover water logging and salinity, which have destroyed the cultivable land in Sind, also might have contributed to the higher incidence of poverty.

In terms of the income threshold, the region specific poverty lines show a larger proportion of poor households than that shown by the expenditure based region specific poverty lines. Though the percentage of poor households increased in terms of income poverty lines, yet the same pattern emerges as with the expenditure based poverty lines, that is, rural Sind has the highest number of poor households (41.0 percent) followed by rural Baluchistan (29.9 percent). The third highest is the rural Punjab (27.5 percent) and the lowest is the rural NWFP (15.8 percent). Urban poor have the same pattern as that seen on the basis of the expenditure poverty lines. Nevertheless, the overall, rural and urban households show higher incidence of poverty in terms of the income based poverty lines as compared to the expenditure based poverty lines.

The estimates of the incidence of poverty in case of very poor and extremely poor across the provinces show that the Baluchistan has the highest proportion of very poor households (13.4 percent), followed by Punjab (10.6 percent). The same pattern of extremely poor emerges in these provinces, that is, 9.2 percent are extremely poor in Baluchistan whereas they are 7.9 percent in Punjab. However, very poor in NWFP are 4.3 percent in overall, and 1.7 percent in its urban

areas, while they are 4.8 percent in rural areas whereas the extremely poor are 2.8 percent in overall NWFP while they are 0.78 percent in urban areas and 3.4 percent in rural areas. It seems that proportion of the extremely poor households in the urban NWFP is negligible.

Again the percentage of very poor households in the rural areas are the highest in Baluchistan (14.3 percent), followed by Sind (13.0 percent). However the proportion of the extremely poor in the rural areas of Sind, Punjab and Baluchistan is more or less the same (i.e. 9.4 percent in rural Sind, 9.3 percent in the rural Punjab and 9.9 percent in the rural Baluchistan are the extremely poor).

Using country specific poverty line, which ignores the price differences across the different regions of the country, we observed somewhat different results in provinces and the agro-climatic zones. The highest incidence of poverty (19.9 percent) is found in overall Punjab, followed by overall NWFP (15.5 percent). The overall incidence of poverty in Sind and Baluchistan is almost the same (i.e. 9.5 percent in overall Sind and 9.3 percent in overall Baluchistan). The ranking of the provinces in case of country specific poverty line has changed. In case of region specific poverty lines, NWFP comes out as the province with the lowest incidence of poverty and Sind with the highest incidence of poverty as compared to other provinces. But the results reported in-Table-6.3 show that with country specific poverty line Punjab has got the highest percentage of poverty, while Sind and Baluchistan the lowest one.

Other estimated poverty indices like poverty gap (P_1) and FGT poverty measure (P_2), more or less show the same pattern as that of P_o, that is, where P_o is the highest, these poverty gap (P_1) and the FGT measure (P_2) are also the highest. The poverty gap (P_1) for overall regions ranges from 2.4 percent to 3.7 percent except for NWFP (1.9 percent) and Rice/other Sind (6.5 percent). However, the poverty gap for rural areas is greater and ranges from 6.7 percent to 10.0

percent.

As regards the incidence of poverty in the agroclimatic zones, using the poverty lines on the basis of different calorie norms for the urban and rural areas in terms of expenditure, we find highest P_0 value for the Rice/other Sind (31.8 percent) on overall basis. Again the P_0 value for other NWFP on overall basis is much lower than for all the other agroclimatic zones. We find the lowest number of poor households (3.2 percent) in the urban cotton/wheat Punjab, followed by urban areas of Other NWFP (5.3 percent) and the cotton/wheat Sind (9.49 percent).

On the basis of region specific poverty lines in terms of expenditure , the rural sector of the Rice/other Sind records the highest poor households (54.9 percent) followed by the rural sector of low-intensity Punjab (26.7 percent) as estimated in terms of P_0 index. It shows that rural areas of Rice/other Sind contribute much to the overall rural poverty of Sind. The second highest rural poor are recorded in the low-intensity Punjab.The other NWFP (except D.I. Khan) shows a lower percentage of the poor households both in the rural and urban areas than in other agroclimatic zones. Among the urban areas of agroclimatic zones, low-intensity Punjab gives the highest percentage of the poor households (20.8 percent). Low-intensity Punjab consists of relatively poor districts such as D.G. Khan/Rajanpur, Muzaffargarh, Mianwali etc. Rice/other Sind is the second highest poverty zone among the urban areas of agroclimatic zones. Other indices P_1 and P_2 show the same pattern as that of P_0.

Using country specific poverty line, among the agroclimatic zones, the highest proportion of the poor is found in Low intensity Punjab (31.7 percent), followed by cotton/wheat Punjab (24.6 percent) and the Mixed Punjab (20.9 percent). Other NWFP (except D.I. Khan) shows 15.1 percent of the poor households while cotton/wheat Sind and rice/other Sind show 12.0 percent and 7.8 percent respectively.

The incidence of poverty in terms of population on the basis of the above poverty lines is, on the average considerably higher than in terms of households. For instance, in terms of expenditure and income poverty lines, overall poor households were 16.6 percent and 23.2 percent respectively in Pakistan, where as on the same poverty thresholds the persons in poverty are 20.8 percent and 28.2 percent respectively. Among the provinces, the highest poor households were recorded in overall Sind, on the basis of expenditure and the income thresholds. Similarly we find the same ranking of provinces as regards the poor persons as that of the poor households on the basis of the same poverty lines.

The only difference is that in terms of persons, the incidence of poverty is higher than that for households. This could be due to the fact that incidence of poverty is1777Xrelatiighgr among the larger households, which are likely to represent a larger proportion of the population.

Our estimates suggest that poor households (persons) are disproportionately located in the rural areas of pakistan. More than 85 percent of the total poor households are residing in the rural areas of Pakistan. Punjab contributes 72.71 percent of poor households, followed by Sind (12.75 percent) to all the poor households of the country. NWFP share is 12.08 percent while Baluchistan has the lowest (2.45 percent). Malik's index as explained earlier, suggests that the rural areas of Pakistan have the relatively higher proportion of the poor households than their share in the total population.

We also decomposed poor households according to the socioeconomic characteristics of the heads of the households (male/female) and our findings are:

- The majority of the male headed poor households fall in the age group of 40 - 49, while the majority of female headed poor households fall in the age group of 30-39.

- Classification of the poor according to the marital status shows that about 95 percent of the male heads of the poor households are married and 70 percent of the female heads of the poor households are married. It implies that household headed by the married persons are more expose to poverty risk.
- Majority of the heads of the poor households are illiterate. The percentage of the illiterate female heads of the poor households is as high as 90 percent, while this proportion is 70 percent in case of male heads. Further, that the proportion of the urban literate heads of the poor households is higher than that of the rural literate.
- The proportion of poor households decreases as the education level of the head of the household increases. Majority of the educated heads of the poor households fall in the primary or below matric category of education.
- Our results indicate that more than 90 percent of the male heads of the poor households fall in the working class category, while about 80 percent of the female heads of the poor households fall in the non-working class category.
- The occupational classification of the heads of the poor households shows that the majority of the male heads of the poor households are in the 'agricultural, animal husbandry and forestry', followed by production and related workers, transport equipment operators and labourers categories.

  The proportion of female heads of the poor households belonging to the category of 'professional, clerical and related workers' is the highest (81.0 percent in over all Pakistan).
- The decomposition of the households according to the industrial activities suggests that most of the male heads of the poor households are engaged in the agriculture, forestry, hunting and fishing, followed by construction. While most of the female heads of the poor households fall in the category of activities not adequately defined.
- The breakdown of employment status of the heads shows that most of male or female heads of the poor households are classified as self employed, followed by the category of

employees.

- The earning status of the households reveals that the proportion of the households with single earner is the highest in case of male headed households while in case of female headed poor households, the majority fall in the category of no earner.
- The proportion of poor households is relatively high in case of large sized households. The highest proportion of the male headed poor households is found in case of households having 7 to 8 members and in case of female headed households those having 5 to 6 members.

We used the Logit model, which is helpful in evaluating role of different characteristics that play an important role in determining poverty status of a household. In this regard our findings are as follows:

Our first finding is that the households living in Punjab have the highest probability of being poor as compared to other provinces.

Our second finding is that as the educational level of the head of the household increases the probability of that household being poor decreases.

Our third finding is that 'infaq' has a negative relation with the poverty. It suggests that as 'infaq' increases the probability of a household being poor declines.

Our fourth finding is that the probability of a household being poor declines when the number of earners in that household increases.

Our fifth finding is that the probability of a household being poor increases with the increase in the size of the household.

In Pakistan we estimated the effects of 'infaq' on poverty alleviation using HIES 1987-88 data and found that 'infaq' could help in reducing poverty level in Pakistan in terms of headcount (P_0) by 2.16 percent overall and 3.78 percent in urban areas and 2.06 percent in rural areas. The most important impact of 'infaq' is on the reduction of poverty gap (p_1) and severity of poverty index (P_2). The poverty gap was reduced by 4.16 percent in overall Pakistan under the impact of 'infaq'. The 'infaq' helped in decreasing the severity of poverty by 6.62 percent in Pakistan. We also estimated the funds required to bring the poverty gap to zero and explored the possibilities of filling this gap by the official 'zakat' collections. Our findings are that the present 'zakat' collections can fill the poverty gap completely of the extremely poor and partially that of the very poor. But in the present form it is not capable of eradicating total poverty. Presently 'zakat' is not being collected from all the 'zakat'able assets. If 'zakat' is collected to its full potential, it could not only result in eradication of poverty from the country but also can generate surplus funds. In the efforts at elimination of poverty we have mentioned the problems related to target groups and the proper distribution of funds. As a solution to these problems we have suggested that the target group can easily be found by the help of the local 'zakat' committees and they can be used as functionaries for the distribution of funds among the needy. This channel of distribution of funds would prove to be cost effective because these committees provide their services on voluntary basis.

Limitations

We observed, in our review of literature, that most of the studies on poverty use different methodologies and they cover different time periods. Therefore, poverty estimates made in these studies are not comparable across regions and overtime. Same is the case with our study. The scope of our study is limited to one period because it has only used HIES 1987-88 data. To make the results comparable there is a need to cover more than one periods and to analyse the

incidence of poverty using the same methodology. That could be possible on the availability of the new HIES data. We are waiting for that and have a strong desire to carry on the same exercise on the new data in another study.

We have used the present 'zakat' collections to see the possibility of bridging the poverty gap. However, we have not estimated the actual 'zakat' potential in Pakistan, rather we have used the estimated 'zakat' potential by others. We also intend to do that in the future.

Appendix A: Classification of Districts of Pakistan by agroclimatic zone

Zone	District
Rice/wheat Punjab	Sialkot
	Gujarat
	Gujranwala
	Sheikhupura
	Lahore/Kasure
Mixed Punjab	Sargodha/Khushab
	Jhang
	Faisalabad/Toba Tek Singh
	Okara
Cotton/wheat Punjab	Sahiwal
	Bahawalnagar
	Bahawalpur
	Rahim Yar Khan
	Multan/Vehari
Low-intensity Punjab	Dera Ghazi Khan/Rajanpur
	Muzaffargarh/Leiah
	Mianwali/Bhakkar
	Dera Ismail Khan
Barani Punjab	Attock
	Jhelum
	Rawalpindi/Islamabad
Cotton/wheat Sindh	Sukkur
	Khairpur
	Nawabshah
	Hyderabad
	Tharparkaar

Rice/other Sindh	Jacobabad
	Larkana
	Dadu
	Thatta
	Badin
	Shikarpur
	Nasirabad
	Karachi

Other N.W.F.P. except Dera Ismail Khan
Other Balochistan except Nasirabad

APPENDIX–B: Calorie content of food expenditures

Code No	Item	Edible Proportion	Unit in which quantity is available	Calorie
1.	2	3	4	5
	Food Items			
1010.	Cereals			
1011.	Wheat.	1.00	K. G.	3290
1012.	Wheat flour (fair price shop)	1.00	K. G.	3400
1013.	Wheat flour (average or fine quality)	1.00	K. G.	3400
1014.	Rice and rice flour.	1.00	K. G.	3580
1015.	Maize, barely, bajra and their flour.	1.00	K. G.	3530
1016.	Sooji, Maida.	1.00	K. G.	3480
1017.	Basen.	1.00	K. G.	3570
1019.	Other cereals and cereal product like ready made vermicelli	assumed calorie/Rs.= named (calorie/Rs.)		
1030	Pulses–Split and whole.			
1031	Gram whole (White and Black)	1.00	K. G.	3570
1032	Gram (Pulse).	1.00	K. G.	3570
1033	Mash.	1.00	K. G.	3470
1034.	Moong.	1.00	K. G.	3480
1035.	Masoor.	1.00	K. G.	3540
1036	Arhar.	1.00	K. G.	3510
1039	Other Pulses like beans (lobia), peas, tur, moth etc.	assumed calorie/Rs.= named (calorie/Rs.)		
1040	Milk and Milk Products			
1041	Milk (fresh and boiled).	1.00	Ltr.	920
1042	Packed milk of milk plant i.e. tetra Pack.	1.00	Ltr.	630
1043	Milk (dry and condensed).	1.00	K. G.	4900
1044	Butter.	1.00	100 Grams	729
1045	Desi Ghee.	1.00	K. G.	9000
1046	Ice Cream, Kulfi.	1.00	100 Grams	153
1047	Curd.	1.00	K. G.	510
1049	Other milk products such as chease. cream, eva porated milk (khoa), rurbri etc.	assumed calorie/Rs.= named (calorie/Rs.)		
1050	Edible Oil and Fats.			
1051	Vegetable Ghee (banaaspati such as dalda, tulo, malta, haidry etc).	1.00	K. G.	8910

1052	Mustard Oil.	1.00	K. G.	8800
1053	Edible Oil (such as Pakwan, Pakeeza etc).	1.00	Ltr.	8800
1059	Other fats and oils, such as salad oil, margarine, peanut, olive oil, coconut oil (til oil) etc.	assumed calorie/Rs.= named (calorie/Rs.)		
1060	Meat and Fish.			
1061	Meat.	0.75	K. G.	1780
1062	Beaf.	0.85	K. G.	2120
1063	Fish (fresh).	0.95	K. G.	1220
1064	Fish (dried).	1.00	K. G.	2774
1065	Other sea food such as shrimps, crab, Labstar, etc.	assumed calorie/Rs.= named (calorie/Rs.)		
1070	Poultry			
1071	Chicken.	0.60	K. G.	1850
1072	Eggs of chicken, ducks etc.	0.9	Nos.	75
1079	Other poultry, such as turkey, ducks, goose, and birds such as partridges etc.	assumed calorie/Rs.= named (calorie/Rs.)		
1080	Fruits			
1081	Banana.	0.65	Nos.	123
1082	Mosmi, Malta Kino.	0.75	Nos.	68
1083	Mangoes	0.70	K. G.	640
1084	Apples.	0.90	K. G.	510
1085	Melon, Water melon Gurma,Sarda.	0.65	K. G.	210
1086	Grapes.	0.90	K. G.	755
1087	Fruits—canned.	assumed calorie/Rs.= named (calorie/Rs.)		
1088	Fruits – dried.	assumed calorie/Rs.= named (calorie/Rs.)		
1089	Other fresh fruits.	assumed calorie/Rs.= named (calorie/Rs.)		
1090	Vegetables			
1091	Potato.	0.85	K. G.	810
1092	Tomatoes.	1.00	K. G.	200
1093	Onion.	0.95	K. G.	380
1098	Other vegetables (fresh and frozen).	assumed calorie/Rs.= named (calorie/Rs.)		
1099	Other vegetables canned.	assumed calorie/Rs.= named (calorie/Rs.)		

1100	Condiments and Spices			
1101	Salt–(rock and sea).	1.00	K. G.	2
1102	Chillies–(dried and grinded).	1.00	250 Grams	705
1103	Turmeric–whole or grinded.	1.00	100 Grams	337
1104	Corriander–whole or grined.	1.00	250 Grams	735
1105	Ginger, Garlic.	0.95	250 Grams	221
1109	Other spices–as black pepper, long, zeera etc.	assumed calorie/Rs.= named (calorie/Rs.)		
1110	Sugar, Honey and Sugar preparations			
1111	Sugar (millmade).	1.00	K. G.	3910
1112	Sugar (desi)	1.00	K. G.	3650
1113	Gur and Shakkar	1.00	K. G.	3100
1114	Honey	1.00	K. G.	3150
1115	Sweets such as, barfi, Gulab–jaman, Qalaqand, Resgulla, rasmalai, amarti, Jalebi, halwa sohan, cham cham etc.	assumed calorie/Rs.= named (calorie/Rs.)		
1116	Confectionary itsms such as, chocolate, chewing gum, toffee, shahi sapari etc.	assumed calorie/Rs.= named (calorie/Rs.)		
1119	Other sugar prepartion such as misri, patasha, rewri etc.	assumed calorie/Rs.= named (calorie/Rs.)		
1120	Tea and Coffee			
1121	Tea black and Green (Leaves)	1.00	250 Grams	293
1020	Baked and fried products	assumed calorie/Rs.=average calorie/expenditure for named groups.		
(1122, 1129 1130)	Other drinks			
1160	Prepared meals			
1190	Miscellaneous food items			

Source: Ercelawn (1990), and Ahmad and A.Rehman (1991).

Appendix C: Regression Estimates

Region	Calorie–Expenditure Relation 1	2	3	4
Pakistan				
Overall	−1031.50	652.92	.20	11548813.5
	(1.14)	(.19)		
Urban	−936.35	581.50	.22	3667139.5
	(1.86)	(.30)		
Rural	−2693.72	953.37	.34	16496884.2
	(1.37)	(.23)		
Punjab				
Overall	−1309.74	706.65	.26	9719578.3
	(1.33)	(.23)		
Urban	−914.46	590.09	.26	2435440.1
	(2.30)	(.37)		
Rural	−2466.54	924.56	.37	11842455.8
	(1.56)	(.27)		
Rice/Wheat Punjab				
Overall	−1116.34	655.88	.26	3336139.6
	(2.16)	(.36)		
Urban	−1246.87	629.43	.33	1564419.0
	(3.12)	(.50)		
Rural	−2372.68	893.61	.37	3707560.06
	(2.75)	(.46)		
Mixed Punjab				
Overall	−1873.15	815.95	.27	2443999.3
	(3.04)	(.52)		
Urban	−991.75	611.32	.24	470578.3
	(5.30)	(.89)		
Rural	−2888.23	1008.68	.36	2861103.13
	(3.45)	(.59)		
Cotton/Wheat Punjab				
Overall	−2771.59	979.91	.38	45343551.8
	(2.66)	(.46)		
Urban	−1925.45	808.27	.26	457744.3
	(7.04)	(1.19)		
Rural	−3107.62	1044	42	4486929.8
	(2.84)	(.49)		
Low Intensity Punjab				
Overall	−2338.50	901.68	.28	1292741.7
	(4.52)	(.79)		
Urban	−3150.07	982.45	.46	381102.4
	(9.27)	(1.59)		
Rural	−2462.64	933.08	.28	1135680.4
	(4.97	(.88)		

Barani Punjab				
Overall	−1301.01	682.39	.25	1042302.4
	(4.04)	(.67)		
Urban	−1515.60	657.15	.34	45198.5
	(6.13)	(.97)		
Rural	−2899.69	976.02	.41	1552147.9
	(4.67)	(.78)		
Sind				
Overall	−181.73	483.64	.11	1268116.5
	(2.59)	(.43)		
Urban	−1679.10	677.78	.26	1571417.8
	(3.38)	(.54)		
Rural	−3100.73	1025.08	.27	2076708.1
	(4.14)	(.71)		
Cotton/Wheat Sind				
Overall	−2496.32	904.95	.26	1464599.0
	(4.39)	(.74)		
Urban	−2240.04	817.62	.24	315294.7
	(8.60)	(1.45)		
Rural	−3579.70	1105.97	.35	1651988.03
	(5.0)	(.86)		
Rice/Other Sind				
Overall	−5.48	437.53	.09	669531.0
	(3.27)	(.53)		
Urban	−2144.70	739.27	.32	1653325.1
	(3.63)	(.57)		
Rural	−2489.55	921.94	.19	607357.95
	(6.89)	(1.18)		(11)
NWFP				
Overall	−2269.34	883.03	.24	1743203.6
	(3.92	(.67)		
Urban	−860.77	590.85	.14	150666.4
	(9.06)	(1.52)		
Rural	−2959.29	1012.15	.30	1980062.3
	(4.21)	(.72		
Other NWFP (except D.I.Khan)				
Overall	−2200.48	869.41	.24	1637890.9
	(3.98)	(.67)		
Urban	−673.44	577.78	.13	27539.9
	(9.30)	(1.56)		
Rural	−2906.75	1001.03	.30	1893370.5
	(4.26)	(.73)		
Baluchistan				
Overall	−2842.23	965.36	.29	809597.2
	(6.38	(1.07)		
Urban	−2028.01	759.93	.27	95885.5
	(15.03)	(2.45)		
Rural	−3574.38	1100.32	.35	933084.5
	(6.75)	(1.14)		

Note: 1. Numbers in parentheses are standard error.
2. Coefficients are highly significant.

Appendix D: Regression Estimates

Region	Expenditure–Income Relation			
	1	2	3	4
Pakistan				
Overall	−2682.19	524.84	.56	61750590.1
	(.40)	(.06)		
Urban	−4034.07	745.59	.61	20873456.9
	(1.01)	(.16)		
Rural	−1855.92	382.80	58	−48621262.5
	(.32)	(.05)		
Punjab				
Overall	−2596.89	510.93	0.53	33594557.5
	(.53)	(0.09)		
Urban	−4036.48	749.38	.58	10276[illegible]4.8
	(1.44)	(.23)		
Rural	−188.7	376.91	.58	30472585.03
	(.40)	(.07)		
Rice/Wheat Punjab				
Overall	−366.01	689.89	.54	11522607.3
	(1.24)	(.20)		
Urban	−5123.22	924.77	.61	4959461.1
	(2.61)	(.41)		
Rural	−2215.01	444.92	.51	6891422.5
	(1.01)	(.17)		
Mixed Punjab				
Overall	−2086.01	423.31	.52	7623441.03
	(.91)	(.15)		
Urban	−2872.95	556.93	.48	14450441.9
	(2.79)	(.46)		
Rural	−1784.50	371.07	59	7881732.8
	(.77)	(.13)		
Cotton/Wheat Punjab				
Overall	−1940.83	397.38	58	10840904.97
	(.71)	(.12)		
	−2617.03	511.12	72	3560919.9
	(1.62)	(.27)		
Rural	−1805.58	374.10	54	7858465.8
	(.78)	(.13)		
Low Intensity Punjab				
Overall	−1748.69	362.92	.59	5220331.09
	(.92)	(.16)		
Urban	−2368.0	467.7	.55	59495303
	(3.62	(.60)		
Rural	−1610.15	338.69	.62	5072337.07
	(.87)	(.15)		

Barani Punjab				
Overall	−2658.0	514.97	.73	8779417.7
	(1.07)	(.17)		
Urban	−3453.46	645.22	.81	3923908.3
	(2.07)	(.33)		
Rural	−2164.69	431.63	.68	4882793.6
	(1.19)	(.19)		
Sind				
Overall	−3337.49	632.66	.66	21199865.9
	(.83)	(.14)		
Urban	−4388.00	796.72	.67	9775942.9
	(1.61)	(.25)		
Rural	−1878.26	384.99	.79	23671909.5
	(.46)	(.08)		
Cotton/Wheat Sind				
Overall	−2025.88	410.77	.79	17188165.9
	(.58)	(.99)		
Urban	−2455.6	481.44	.83	4903602.4
	(1.32)	(.22)		
Rural	−1880.21	385.87	.78	11878550.96
	(.65)	(.11)		
Rice/Other Sind				
Overall	−3820.32	710.38	.67	12767038.12
	(1.23)	(.19)		
Urban	−4702.68	845.14	.67	7706152.8
	(1.95)	(.30)		
	−1879.7	384.57	.82	
Rural	.65	(.11)		
NWFP				
Overall	−1225.90	379.35	.56	7808299.6
	(0.81)	(.14)		
Urban	−2951.91	568.19	.61	1492093.3
	(2.82)	(.47)		
Rural	−1568.45	335.36	.57	7010314.16
	(.75)	(.13)		
Other NWFP (except D. I. Khan)				
Overall	−1834.04	380.67	.55	7129340.49
	(0.85)	(.14)		
Urban	−3030.47	582.97	.61	1396745.1
	(2.97)	(.49)		
Rural	−1566.86	335.01	.57	6431303.5
	(.78)	(.13)		
Baluchistan				
Overall	−3211.94	602.40	.54	2515420.5
	(2.32)	(.38)		
Urban	−3499.05	644.31	.54	314617.76
	(7.23)	(1.14)		
Rural	−3184.52	598.45	.54	2177435.57
	(2.47)	(.41)		

Note: 1. Numbers in parentheses are standard error.
2. Coefficients are highly significant.

APPENDIX E: SOME OBSERVATIONS ON THE IMPACT OF NON-INFAQ MEASURES FOR ALLEVIATION OF POVERTY

Economic growth, social sector developments and asset redistribution could be some other measures, which may help in reduction of poverty. The views of different writers on the role of these measures in poverty alleviation are briefly discussed here:

Economic Growth and Poverty Alleviation

Economic growth is recognised as a way of improving the conditions of the poor through 'trickle down' effects. Haq (1983), expressed his view that " we were confidently told that if you take care of your GNP, poverty will take care of itself. we were often reminded to keep our eyes focused on a high GNP growth target, as it was the best guarantee for eliminating unemployment and of redistributing income later through fiscal means." However, in most of the cases trickle down is very slow.

Bergsman (1979) is of the view that "rapid GDP growth can be very good at alleviating absolute poverty. Even if income distribution does not improve, or even if it gets a little worse, a rapidly growing pie usually reduces the percentage of the population in absolute poverty." Similar view is also expressed by Sen (1980), when he says that ".... What is not however, disputed is that these countries (Taiwan, Hong kong, South Korea and Singapore) have achieved very high growth rates with at least no sharp deterioration of the extent of inequality, so that the poorer sections of the population have shared substantially in the benefits of economic growth".

Fields (1980) has pointed out that developing countries as a whole showed a growth rate of 6 percent on the average between 1965 and 1973; their per capita growth rates averaged 3.5 percent. Galenson (1977) is of the view that "growth rates of this magnitude are not likely to relieve poverty to any great extent, or to change any thing else rapidly".

Economic growth alone is insufficient to guarantee decent standard of living for all. Fields (1980), noted that "both kinds of (Cross section and time series) studies produce the same general pattren: growth reduces poverty. Many countries'experiences fit this rule, although, of course, there are some exceptions. The exceptions are of two kinds: Some countries have alleviated poverty substantially despite little economic growth (an example is Sri Lanka); other countries have experienced substantial economic growth, yet the data show no demonstrable reduction in absolute poverty (the Philippines is such a case)". Changes in the income of the poor is a way to increase the welfare of the poor. According to World Development Report 1990, changes in the income of the poor can be expressed in terms of overall economic growth and changes in the inequality of the income. Table 1 shows such a picture.

In case of Pakistan, growth has decreased the poverty by 31 percent during 1962 and 1984, while assuming unchanged income distribution simulated reduction in poverty is 26 percent during the same period. This suggests that growth has reduced poverty in Pakistan and the poor gain much from the growth. However, in case of Brazil, as the table shows, actual reduction in poverty was 29 percent during 1960-80 as compared to simulated reduction of 34 percent in poverty during the same period. This implies that during this period the poor gained less than the non-poor because growth also increased the income inequality. Nevertheless, growth has reduced poverty as reported in the table.

Fields (1989), using data for 35 developing countries finds that economic growth generally but not always reduce poverty. However, it is the character of the growth that determines the welfare of the poor and very poor. In other words, how growth is achieved, who participate in the growth and which sectors are given priority will determine the effect of growth on the poor. Meier (1984) reports that the "connection between economic growth and poverty reduction goes both ways. Few would dispute that the health, education and well-being of the

mass of people in industrialized countries are a cause, as well as a result, of national prosperity. Similarly, people who are unskilled and sick make little contribution to a country's economic growth. Developing strategies that bypass large numbers of people may not be the most effective way for developing countries to raise their long-run growth rates".

Table 1: Impact of Growth on Poverty Alleviation

Country and period	Length of Period (years)	Observed reduction in poverty (headcount) (percentage points)	Simulated reduction in poverty (percentage points)	Annual growth of mean income or expenditure (percent)
Indonesia(1970-87)	17	41	35	3.4
Thailand(1962-86)	24	33	30	2.7
Pakistan(1962-84)	22	31	26	2.2
Brazil (1960-80)	20	29	34	5.1
Malaysia(1973-87)	14	23	19	4.0
Singapore (1972-82)	10	21	19	6.4
Costa Rica(1971-86)	15	21	22	3.5
Colombia (1971-88)	17	16	8	1.1
India (1972-83)	11	11	10	1.0
Sri Lanka(1963-82)	19	10	8	0.9
Morocco (1070-84)	14	9	1	0.2

Source: World Bank (1990).

From the literature we have reviewed above, one can confidently conclude that growth reduces poverty. Pakistan, in the past decades, has experienced impressive growth rates that also enabled the country to reduce poverty. Gross domestic product has grown at an annual average rate of 5.2 percent during 1950-1990. GDP growth record during the 1960s and 1980s was 6.8 percent and 6.1 percent respectively. However, the progress in other welfare indicators (literacy, health and sanitation etc.) is not impressive one, especially in comparison of other developing countries.

Education.

Education reinforce the country's development and hence helps in the reduction of poverty. The relationship between the education and poverty has been analysed in detail in chapter 6 and chapter 8. However, here we report some basic facts related to education in Pakistan. In Table 2 literacy rates are reported.

Table 2: Literacy Rates

Year	Total	Male	Female
1951	13.2	17.0	8.6
1961	18.4	26.9	8.2
1972	21.7	30.2	11.6
1981	26.2	35.0	16.0
1990	34.9	45.1	20.9
1993	35.0	–	–

Source: Banuri (1992) and Pakistan Economic Survey (1992-93)

As the table shows that the literacy rate at the time of independence was only 13.2 percent, which rose to 34.9 percent in 1990 and 35.0 percent in 1993. However, the female literacy rate remained low than the male one. The low literacy rate is due to the low participation rate at the primary level. Nevertheless, participation rate has shown an increase recently and in 1992-93 it was about 70 percent. As regards the enrolment, it increased overtime, but the female enrolment rates are low than the male ones.

It may be noted from Table 3 that allocation of resources to education is also very low, and these allocations are increasing at very slow rate. In 1961 the expenditure on education as a percentage of GNP was 1.28, while it was 3.04 percent in 1988. It has fallen to 2.4 percent during 1992-93.

Table 3: Enrolment and Educational Expenditure

Year	Primary enrolment (in Thousands)		Secondary enrolment (in thousands)		Expenditure as % of GNP
	Male	Female	Male	Female	
1961	1710	455	134	25	1.28
1965	2380	725	186	48	1.98
1972	3140	1190	302	76	2.59
1975	3655	1490	375	103	1.71
1981	3769	1839	394	133	1.58
1985	4653	2309	488	169	2.01
1988	5425	2708	552	201	3.04
1992	8685	4036	785	370	2.2
1993	9695	4425	822	433	2.4

Source: Burney et al,(1992) and Pakistan Economic Survey (Various issues)

Health Facilities

The growth of health facilities in Pakistan is awfully slow. There were 2111 persons per doctor, 1525 persons per hospital bed in 1992. The allocation of expenditure to health is very small. The total allocation in 1992-93 was 0.81 percent of the GNP (Table 4). Life expectancy increased to 61 in 1988, infant mortality was 113 per 1000 and crude death rate was 10.5 per 1000 in the same year.

Safe Drinking Water and Sanitation

Acces to safe drinking water and sanitation facilities are not available upto the required health standards.There are great differences in access to safe drinking water and sanitation in the rural and urban areas.

Table 4: Health Facilities

Year	Population Per		Total expenditure as % of GNP
	Hospital Bed	Doctor	
1961	2063	6368	0.46
1971	1804	4137	0.39
1975	1852	3912	0.74
1981	1731	3144	0.68
1985	1695	2229	0.82
1988	1610	1880	1.02
1990	1535	2127	0.74
1991	1506	2008	0.73
1992	1525	2111	0.81

Source: Pakistan Economic Survey (various issues)

Table 5: Population With Access to Safe Drinking Water and Sanitation Facililities (in percentage)

Year	Drinking Water			Sanitation		
	Total	Rural	Urban	Total	Rural	Urban
1976	22	11	54	-	-	22
1980	31	17	68	-	-	37
1985	44	25	79	20	-	53
1988	66	40	80	27	15	59
1989	69	44	80	32	19	66

Source: Burney and others (1992)

As Table 5 shows that these facilities are increasing over time but rural population still has far less access to them than the urban population.

Employment

World Development Report (1990), concludes that developing countries can make progress against poverty by following strategy with two elements. The first element of the

strategy is a growth oriented policy that uses the poor's most abundant asset: labour. The second element is the provision of basic social services to the poor: primary health care, education, nutrition and family planning services. The rational behind the strategy is that most of the poor earn their income from labour. Policies for employment-intensive growth create employment opportunities for the poor households by increasing the demand for labour, thereby increasing wage rates, and the political power of the poor. Social sector policies provides the poor with enough human capital to exploit these new opportunities.

In Pakistan, labour force is estimated to reach 33.80 million as on January 1993. The open unemployment estimated at 6.28 percent overall, 8.19 percent in urban and 5.48 percent in the rural areas of Pakistan (Pakistan Economic Survey 1992-93). Some reports cast doubt on the official figures of unemployment. According to the Report of the Working Group of Institute of Policies Studies (1987) open unemployment in Pakistan is 15 percent, and if underemployment is taken into account the overall real unemployment is in the range of 20-25 percent.

Pakistan's past development plans have ignored problems of unemployment, rural poverty, urban unrest etc. Most of the time planners have involved themselves in theoretical discussions and very few practical measures have been undertaken. In all the five-year development plans planners have referred to government's commitment to promote gainful employment. However, Working Group report (1987) casts doubts on the seriousness of the government's commitment to the employment promotion. No doubt, Pakistan has achieved a respectable growth in its GNP, but it did not adopt the policies which were most suitable to the economic structure of a labour surplus economy.

Distribution of Assets: Access to Land.

Poverty reduction can also be achieved through the assets redistribution. Jazairy (1992)

concludes that in the developing World approximately half of the rural poor are very small-scale farmers; about one-fourth are landless; and the remainder are pastoralists, ethnic indigenous groups, small artisanal fishermen, nomads and female headed households. Selowsky (1982) finds that in Brazil most of the rural poor are landless laborers and in Peru most of the rural poor are subsistence farmers. In Colombia, half of the rural poor are landless laborers. Islam (1985) is of the view that literature on the poverty suggest that growing poverty in rural Asia can be explained by an agrarian structure charactrised by land concentration, population growth and little or no extension of cultivated land. Increasing poverty is linked with a steady decline in the asset base of the vulnerable group of rural population.

Some countries have successfully reduced absolute poverty through land distribution. For example China, Japan and Republic of Korea have successfully implemented the land reforms and thus have benefitted the poor.

With a view to redistributing the land and to provide security of tenure to the landless peasants, land reforms have been introduced in Pakistan. The major land reforms were:

Land reforms of 1959

Land reforms of 1972

Another pack of land reforms was introduced in 1977, however, it was small in size and in its impact. The total land resumed, distributed among the tenant landless and the number of beneficiaries are given in Table 6.

As the table shows that 6.2 percent of the total cultivated land was resumed in 1959, 2.6 percent in 1972 and only 0.4 percent in 1977. The actual surrender of land is small. Land reforms have failed to cause significant changes in the agrarian structure of the economy as far as the land tenure and the agricultural production are concerned.

Table 6: Land Resumed and Distributed

Area (000 hectares)	1959	1972	1977
Resumed	1035	497	76
Distributed	970	350	45
Resumed as percentage of cultivated	6.2	2.6	0.4
Persons benefitted (numbers)	183371	77243	17659

Source: Nasir and Hyder (1993-94)

Safety nets

A number of safety nets have been used in different countries to help the aged, the disabled, the sick and the other persons vulnerable to poverty. The safety nets guarantee them minimum acceptable living. Such safety nets have two components; redistribution and insurance.

Developed countries have been able to develop effective mechanism over time to transfer some proportion of the income from the rich to the poor by progressively taxing the rich and through introducing social security payments, unemployment compensation, food stamps and welfare payments for the benefits of the poor. Unfortunately such social security schemes cover only a small fraction of the population in developing countries (Lipton and Gaag 1993).

Introduction of rural public employment schemes that work in the direction of providing infrastructure and employment to the poor have been successful in some countries. The participation of the poor in Maharashtra Employment Guarantee Scheme in India and Food for Work Programme in Bangladesh was quite high. As a result of this kind of scheme the rural unemployment rate in Maharashtra declined significantly in comparison to other states. Moreover, the evidence also shows that the proportion of the poor also declined (World Development Report 1990).

Pakistan also introduced a number of rural development programs under different names for the development of the infrastructure (roads, education, health and electrification etc.) and to create employment opportunities for the rural poor. These rural development programs helped in developing the infrastructure (Ali 1985), but no rigorous study has been made to evaluate the impact of these programs on poverty alleviation.

The food price subsidies are an other strategy for alleviation of poverty. Food subsidies are designed to subsidies the commodities which mostly consumed by the poor. However, in practice benefits can leak to the non-poor. Targeting the poor is most important in this regard, which we have discussed in chapter 7.

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