Review of Pakistan Poverty Data

by

Haris Gazdar

Monograph Series # 9

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Executive Summary

Economic and Poverty Trends

Current economic conditions

Economic growth has slowed down considerably in Pakistan over the 1990s compared with a decade earlier. The most recent period in particular, i.e. the mid-1990s, has seen a serious recession.

Some causes of the recent economic crisis are of a short term nature as the country's economy, particularly the manufacturing sector, adjusts to the loss of subsidies and concessions. The severity of the recession in manufacturing is partly due to the failure to make orderly adjustments over a longer period. To an extent the loss in investor confidence due to law and order problems, and perceptions of widespread corruption are also short-to-medium term problems. Other short term factors that have worsened the situation in the recent years have been sporadic crop failures due to crop infestation or bad weather.

Longer trends

Many of the short term problems, however, have longer term roots. Fundamental reforms in public finance, the organisation of the public sector, and the direction of the manufacturing sector are required for sustainable growth. The agricultural sector, too, is in the need of institutional reforms, though its performance, thus far, has been robust.

Manufacturing has been the lead sector in Pakistan in terms of economic growth, but its role in generating employment has been limited. There has been a secular decline in the relative contribution of agriculture to GDP as well as to employment over the past four decades. The gap has been filled by sectors such as construction, trade and transport. These sectors, however, conceal
a large amount of low-remuneration self-employment, under-employment and casual employment.

The relationship between economic growth and poverty reduction is not a straightforward one in Pakistan. Historically, the period of fastest growth, the 1960s, coincided with a popular perception of widening inequality, rising poverty, and economic injustice. This perception was instrumental in bringing about an end to the model of growth pursued in the 1960s. In the 1970s, more populist policies led to perceptions of increasing well-being among the poorest, while growth rates had declined. In the 1980s, Pakistan experienced strong growth as well as rapid reductions in poverty. In the 1990s the slowdown in the economy is widely perceived to have punished the poor.

The 1980s growth experience was something of an aberration and cannot be replicated. Most of the factors that led to high growth rates resulted from fortuitous external circumstances, and had little to do with the economic strategies of the government. The interpretation of the 1980s growth as the template for future poverty reduction, therefore, is altogether misleading. Many of the problems facing the Pakistani economy today are a direct result of irresponsible policies pursued over that period.

**Growth and poverty-reduction**

There are indications that the slowdown in economic growth in the 1990s has had serious consequences for poverty reduction. Reliable time series on the latest trends in poverty are not available, but existing information does indicate that poverty decline entered a period of stagnation in the late 1980s. There is also some evidence of a rise in inequality over this period.

Another source of data for poverty trends is the movement in real wages of unskilled workers, since these workers are at the bottom of the economic hierarchy. Casual wage rates are also a particularly useful index in Pakistan now, given the growing casualization of the work force. Wage growth has also slowed down in the 1990s, and but for small increases in the 1995 and
1996, they are thought to be on the way down again in the last two years. Also, interestingly, the period of high GNP growth in the early 1980s corresponded with stagnant or declining real wages.

The relationship between growth and poverty reduction, moreover, cannot be assumed to be automatic in Pakistan. There is a large role for public policy in not only enabling growth (by creating a sound macroeconomic environment) but also actively pursuing the objective of 'pro-poor' growth. Even if the current policy reforms achieve the objective of setting the economy on a growth path, the political sustainability of that path is vulnerable to public perceptions of economic injustice. The promotion of 'pro-poor' growth, therefore, would be the key to the sustainability of any economic strategy.

Regional Patterns of Poverty

Regional disparities

There are important contrasts between regions, and urban and rural areas in the incidence of poverty. In general, urban areas are less poor, as expected, than rural areas. Intra-urban and intra-rural contrasts, however, are also important. Urban-rural disparity is quite sharp in Sindh, but not very marked in Punjab. This is due to the closer economic and social integration between rural and urban areas in Punjab compared with Sindh. While urban-rural disparity is an important feature of poverty in Pakistan, it needs to be recognised that urban and rural poverty are closely inter-linked with one another. Moreover, the classification of localities as urban or rural is partly an administrative one, and not necessarily reflective of fundamental economic and social distinctions.

Intra-rural differences in the incidence of poverty are significant. There are strong variations not only between provinces, but there are wide variations within the largest province, Punjab. Lower Punjab is consistently found to have been the region with the highest incidence of poverty, while upper Punjab comes out, consistently, as the region with the lowest poverty ratio.
'Backward' regions and poverty

Analysis of poverty data indicates that some of the regions traditionally regarded as suffering from extreme deprivation (such as rural Sindh, Balochistan, and parts of rural NWFP), are not, indeed, among the poorest areas. Punjab, which, on the other hand, has long been regarded as relatively wealthy and better served with rural infrastructure, has pockets of extreme poverty. Part of the explanation for the disparity between 'received wisdom' and the results of distributive data analysis is the unreliability of distributive data from geographically remote and socially inaccessible regions.

Part of the explanation lies in the precise choice of method for poverty analysis. The sensitivity of regional poverty rankings in rural Sindh and Punjab was checked for methodological variations. These regions together comprise the agricultural heartland of Pakistan, and are relatively better integrated into the national economy, both in terms of physical infrastructure and the political-institutional framework. Some of the results -- such as the finding that lower Punjab is a region of extreme poverty, while upper Punjab is the least poor region -- are robust to the choice of welfare indicator and the choice of poverty line. In the case of Sindh the choice of poverty line and that of welfare indicator does matter. Sindh comes across as a region with a relatively low incidence of extreme deprivation, but a region with a relatively high incidence of moderate deprivation. Also, it is a region of relatively high income poverty, but one of relatively low consumption poverty.

Non-income indicators of poverty, such as achievement in basic education, access to health, mortality rates, and gender disadvantage, also rank the regions differently. Regional poverty rankings are, therefore, somewhat contingent on the type of poverty indicator under consideration.
Policy implications

Two prominent approaches to regional targeting are: (a) priority to regions with the highest incidence of poverty, and (b) priority to regions with the highest share of the country's population that is poor. In principle, there might be some conflict in these approaches, since regions with the highest incidence of poverty might not be the regions with the highest share of the national poor.

To some extent this policy choice does not involve a sharp trade-off in Pakistan, since the region with the highest head-count ratio of poverty (lower Punjab) also accounts for the highest proportion of the country's poor. Besides lower Punjab, however, other regions with moderate to high poverty ratios such as middle Punjab and Sindh and urban Punjab ought to be the focus of regional targeting, given their high contribution to overall poverty. These high population areas are, clearly, not always the most backward in terms of remoteness, access, and physical and institutional infrastructure.

Regional targeting, however, has often been focused on areas with relatively small populations, such as Balochistan, parts of rural NWFP, and the Northern Areas. Targeting towards these regions can be justified on the grounds that they face special problems due to remoteness, harsh environmental conditions, historical neglect, and the weakness of physical and institutional infrastructure. It cannot be justified on the grounds that it is an efficient way of lowering the overall level of poverty in Pakistan. In any case, our analysis of regional patterns of poverty indicates that regional targeting needs to be thought through more clearly than it has been done in the past.

Finally, there needs to be clearer recognition that regional rankings differ according to the type of poverty being considered. Variation in regional rankings by type of poverty indicator, however, is not a source of confusion, but can provide invaluable insights for more precise targeting. Different types of policy instruments are required for addressing different types of poverty,
and a detailed picture of regional variations in these different forms of deprivation offers the opportunity of greater precision in the deployment of policy instruments.

Economic and Social Conditions of the Poor

Sources of Livelihood

Wages and salaries, i.e. employment in the casual labour market and the formal sector, respectively, are the main sources of livelihood in urban areas. In rural areas, self-employment in agriculture remains the most important source of earnings. There are regional variations: formal sector employment is more important in urban Sindh (due to Karachi) than in other urban areas.

The importance of agricultural self-employment also varies widely between the regions, with it accounting for the largest shares of income in rural Sindh, rural Balochistan and lower Punjab, and lowest shares in rural NWFP and upper Punjab. Self-consumption of agricultural produce accounts for a relatively high proportion of the household budget in all areas.

The poor in both urban and rural areas rely much more on the casual labour market than the population at large. In urban areas, however, the contribution of formal sector employment to the earnings of the poor is also considerable. In rural areas, the poor in all regions of Punjab have a high degree of dependence on the casual labour market, while in rural Sindh and Balochistan this source accounts for a relatively small proportion of their household budgets.

Labour markets

Labour markets are highly differentiated and access to different types of labour markets is a close correlate of poverty.

There are strong regional patterns in the out-migration of workers. In rural NWFP and upper Punjab, participation in extra-regional labour markets (both within the country and outside) and the
repatriation of savings is an extremely important source of income as well as economic mobility. In comparison, remittances play an insignificant role in the household economy of rural Sindh and lower Punjab. At least part of the explanation for these regional differences lies in historical patterns of employment. Long-term trends in migration patterns, particularly the narrowing of opportunities for international migration will have a strong regional impact. The poorest regions, and the poorest sections of the population benefit proportionately less from remittances. The main impact in these regions and these groups, therefore, would be the closure of opportunities for economic mobility, rather actual declines in income.

Casual labour is the 'bottom line' activity for people without tangible assets. In spite of having the highest ratio of rural landlessness, however, casual labour is relatively unimportant in rural Sindh. In Punjab, however, participation in casual wage labour is an extremely close correlate of poverty.

Although in most developing countries participation in the casual labour market is a low-remuneration but 'free-entry' activity, for a large segment of the population in rural Pakistan, this 'free-entry' cannot be taken for granted. Bonded labour exists over a wide scale in particular sectors, but its incidence is not well-captured by household surveys.

Access to agricultural land

Although the relative importance of agriculture has declined in Pakistan over the previous four decades, this sector continues to be the largest employer. Agricultural self-employment remains an important source of income in some regions but has declined in importance in others. The access of the landless to agricultural self-employment via tenancy has declined dramatically, particularly in Punjab.

The decline in agricultural self-employment has not occurred entirely as a result of the availability of positive economic and employment opportunities in non-agricultural sectors. Secular
demographic and technological trends have led to the eviction of increasing numbers of landless tenants, and therefore increasing alienation of the landless from direct agricultural production. The consequence has been a corresponding rise in wage labour employment in lower and middle Punjab and non-agricultural self-employment in middle Punjab.

Access to agricultural land on the part of the landless has significant advantages (compared with, say, casual employment) for the poor for at least three reasons: (a) it allows for maintenance of livestock, (b) the poor can share directly in technological improvements in agriculture, (c) it provides consumption protection even in situations where landlords are able to capture any surplus income via rents.

Credit and insurance

Access to formal credit markets in Pakistan is highly correlated with initial asset endowments. The poor and the landless rely mainly on the informal sector for their credit needs.

Many of the informal credit arrangements are part and parcel of transactions in other markets, such as markets for produce, inputs, consumer goods, labour and land. Other survival strategies of the poor for access to informal credit include reciprocal arrangements within extended families, kinship groups, castes and tribes. Informal credit arrangements can be exploitative and oppressive in some cases, and mutually beneficial in others.

The value of informal credit arrangements to the poor lies not only, or even primarily, as a source of productive investment or asset creation, but in the smoothing of consumption over the crop (or other production) cycle, and in providing some level of insurance against adverse shocks. As such, anti-poverty micro-credit initiatives that are focused purely on asset creation are able to supplement informal credit arrangements only partially.
Policy Implications

Changes in employment patterns, including changes in the formal sector, are likely to affect the poor, and not only the middle classes. In contrast with other developing countries where formal sector employment is restricted to middle income groups, in Pakistan it is an important source of income even for the poor. Any economic strategy that would lead to dramatic changes in formal sector employment patterns will affect the poor directly, particularly in urban areas.

The increasing rate of employment in the non-agricultural sector cannot be viewed only as the manifestation of positive economic opportunities. The growth in the importance of casual wage labour, for example, is a sign of the absence of such opportunities. Entry into this market is a close correlate of poverty. Sustainable poverty reduction is not possible without a much greater contribution of leading sectors, such as manufacturing, to job creation.

Entry into casual labour cannot be taken for granted for a large section of the poor. The government needs to play an active part in ensuring that people are able to participate freely in these markets, and are not constrained through coercion or social discrimination.

Although agricultural self-employment will and should decrease in the long term in Pakistan through technological and demographic trends, there is a strong case for slowing down the alienation of the landless and the poor from direct agricultural production. Land reforms, therefore, must be part of an effective anti-poverty policy, though the precise modality need not be the traditional one which involves the redistribution of property rights. Innovative programmes, including public interventions in the leasing and tenancy markets ought to be actively considered.

The role played by informal credit arrangements in providing consumption smoothing and insurance needs to be more clearly
recognised. Micro-credit interventions that focus solely on asset creation address the credit requirements of the poor only partially.

Outlook and Policy Analysis

**Outlook for growth and poverty reduction**

Issues in macro-economic management have dominated the policy agenda in Pakistan in the 1990s. Since around 1988, various governments have pursued programmes of economic stabilisation and structural adjustment, mostly under agreement with the IMF and the World Bank. The main features of these programmes are: liberalization of trade and investment, deregulation, privatisation and down-sizing of public sector firms, reduction in uneconomic subsidies and concessions to various manufacturing sectors, and attempts at the reform of public finances. The record of implementing this programme, and the effectiveness of these measures in restoring sustainable growth has been extremely uneven.

The outlook for economic growth and poverty reduction can be viewed at two levels: (a) issues that are, in principle, of a transitory nature, such as government control of public finances, initial negative impact of down-sizing, privatisation, loss of subsidies, and investor confidence, and (b) longer term issues concerning not simply the end of recession and the return to a growth path, but questions about the nature of the growth path, its potential for employment generation, and sustainable poverty reduction.

Issues of short-term impact and stabilisation, which are transitory in nature, are linked in Pakistan, nevertheless, to questions of political will. The progress of economic reforms and the outlook for the restoration of economic growth are linked crucially to the ability of the government to manage political and economic conflicts between powerful interest groups.

Over the longer term, in order to ensure that growth is substantially poverty-reducing longer trends in key sectors would have to be checked or reversed. The manufacturing sector will
need to play a crucial role in expanding employment. In agriculture, there is scope for further technological improvement, and need for institutional reform in order to facilitate such improvement. Crucially, however, the role of agriculture in reducing poverty depends not only productivity increases but on slowing down the alienation of the landless and the land-poor from direct cultivation.

**Policy proposals for poverty alleviation**

The government has recently initiated policy dialogue on poverty alleviation. This is a welcome departure from a long absence of an anti-poverty agenda in official thinking. The main initiatives in this regard are the Task Force on Poverty Alleviation, and the Working Group on Poverty for the Ninth Five-Year Plan.

Although these documents make references to different types of poverty, or different aspects of the problem of poverty, the main focus is on income poverty. The key initiatives proposed in these documents are: (a) setting up rural support organisations (RSOs) at the district or divisional levels, which would, in turn, be responsible for setting up 'community' organisations at the village or locality levels; (b) micro-credit schemes for the poor through these RSOs; (c) targeted food subsidies through a food stamp scheme in urban areas, and school-feeding programmes in rural areas.

These proposals are partly based on recent development experience in Pakistan and neighbouring countries. The feasibility of these proposals, problems in their implementation, and their relevance to poverty-reduction, however, need to be scrutinized more carefully.

The proposals concerning RSOs, for example, fail to spell out adequately the governance structure in these organisations, their responsiveness and accountability to central and provincial governments, their relationship with existing 'community mobilisation' initiatives, and their relationship with elected local government.
The main proposed activity of the organisations created under this structure is the implementation of a micro-credit program. The standard micro-credit model, however, responds only partially to the credit and insurance requirements of the poor.

The method for the selection of beneficiaries in these micro-credit schemes, or indeed, for the food stamp schemes not clear. It is generally well-known that public subsidies are often captured by officials, political functionaries, and local elites. The main issue in the success of any of these programmes, therefore, is likely to be the effectiveness with which they are implemented. Likewise, the functioning of a school-feeding programme is vulnerable to the corruption which is now endemic in the government schooling system.

A possible route for effective implementation might be broad-based political and social mobilisation behind an anti-poverty agenda, in order to establish wider ownership of this agenda by the poor as well as the non-poor. The recent government initiatives provide an opportunity, hitherto unrealised, for such mobilisation.

The Task Force and the Working Group documents have very little to say about possible policy interventions in the labour market (for example to tackle the problem of bonded labour), or about access to agricultural land. These documents are also largely silent on other aspects of an effective anti-poverty agenda such as basic education, health care, and female disadvantage.
1. Introduction

The main objectives of this monograph are to provide an assessment of poverty in Pakistan and on the basis of that assessment make some interventions in the policy discussion. The Government of Pakistan has recently launched a number of policy initiatives, in addition to existing policies, for the alleviation of poverty. This study aims to inform the public debate on poverty in Pakistan on the basis of a detailed review of the existing secondary material.

1.1. Outline

Section 2 examines recent economic trends, as well as longer term changes in Pakistan's economy. The impact of these trends on overall poverty indicators is discussed with reference to the available time series.

In section 3, a detailed regional and urban-rural profile of poverty is constructed on the basis of household survey data. This exercise is carried out in order to identify the regions with a high incidence of poverty, as well those regions that account for a high proportion of the country's poor. A province-by-province picture of poverty is constructed. A new methodology is suggested for examining regional rankings of poverty. Non-income aspects of poverty are also examined in section 3.

Section 4 extends the regional profile of poverty further by examining the economic and social situation of the poor. Patterns of economic activity and sources of livelihood of the poor provide useful insights. Poverty is closely connected with restricted access to productive assets (land and credit), and the nature of the labour markets. Furthermore, credit is not merely important as a source of investment, but as a way smoothing consumption. Finally, the position in the social hierarchy can be a key determinant of a person's access to these markets.

In section 5, insights from the review of poverty are used in order to make inferences about the poverty impact of recent policies and current economic trends.
1.1.1. Qualifications

It is important to begin with three sets of qualifications. Firstly, the definition of poverty used in this review is, for the most part, a relatively narrow one based on income and/or consumption deprivation. This needs some justification, particularly in the light of recent theoretical as well as policy literature that argues for a broader definition of poverty. A detailed review of the conceptualisation of poverty in Pakistan on the basis of recent policy literature is offered in Appendix A.

Secondly, there are important limitations in the sources of data generally used for poverty analysis. The sources of poverty data in Pakistan are reviewed in Appendix B.

Finally, there is no consensus in Pakistan on the appropriate methodology for poverty measurement. This has led to a number of glaring inconsistencies in the poverty indicators obtained by various researchers. While some of these inconsistencies are based on genuine differences in approach, others result from the use of flawed methodology. A detailed review of the issues and literature is provided in Appendix C, where the choice of method for the present study is also made clear.

These three issues, i.e. definition of poverty, data sources, and methodology, are of central concern to any empirical work on poverty. They are relegated to the Appendix in order to facilitate the presentation of substantive results. Brief summaries of the main arguments are provided, respectively, in sections 1.2-1.4 below.

1.2. Poverty Definition

The conventional economic approach to poverty in academic as well as policy literature is based on the idea in standard welfare economics that income (or, indeed, consumption or some proxy of purchasing power) is an adequate measure of individual well-being. This focus on private incomes has been criticised for missing out on other key factors that determine individual well-being, which may not be closely correlated with income. These factors, such as basic
education, access to health care, and other public goods are now widely acknowledged as relevant poverty indicators in addition to income deprivation.

The policy literature in Pakistan is cognizant of the broader approaches to poverty in current development thinking. Some of the key official initiatives, including the reports of the Task Force on Poverty, and the Working Group on Poverty Alleviation of the Ninth Five-Year Plan, as well as the Social Action Programmes reflect this broader concern. Key donor documents on poverty in Pakistan, e.g. the World Bank’s Pakistan Poverty Assessment of 1995 also incorporate ‘human development’ as a goal of anti-poverty policy. The same is true of other influential documents such as the Human Development in South Asia Report.

The specific proposals of the main Government of Pakistan policy literature on poverty, however, relate almost entirely to income-based poverty, or to economic well-being. In this regard, there is a gap between the overall objectives of these policies, and their specific interventions. The issues of human development, sustainability, social equality, women’s empowerment, and human rights, are not seen as part and parcel of an anti-poverty agenda. An important aspect of the policy dialogue on an anti-poverty agenda would be to develop an integrated approach to these questions.

The present study, being a review of existing material on poverty, also reflects the current policy bias towards economic well-being. Barring a few exceptions most of the analysis and discussion presented here is focused on income or consumption-based indicators of deprivation. While this is not, admittedly, a comprehensive picture, the economic dimension continues to be an important one in poverty analysis.

1.3. Secondary Data

The empirical literature on poverty in Pakistan is based, almost entirely, on nation-wide sample surveys of households. The main data series is known as the Household Integrated Economic Survey
(HIES), and is conducted by the Federal Bureau of Statistics (FBS) of the Government of Pakistan. Other useful data series include the Pakistan Integrated Household Survey (PIHS), also implemented by the FBS. The HIES series provides statistically representative distributional data based on a large sample of households. Although the frequency of these data has been irregular in the past, in recent years (from 1992 onwards) surveys have been conducted every year. Data from 1992-93 have been used internally by the FBS in order to generate some poverty statistics, but the most recent large sample HIES that has been worked on by poverty analysts is HIES 1987-88.

The sampling frame of the HIES (and the PIHS) is based on the Population Census 1981. As such, the sampling frame needs to be renewed urgently. Although the data are generally of high quality, comparable with similar data in other countries, a number of limitations and qualifications in the use of these data for poverty analysis need to be noted.

Firstly, there are strong reasons to suspect that some of the poorest are systematically left out of the sample design. In particular, the HIES and PIHS are household surveys, and as such, focus on settled households. There is a relatively large and poor population of nomadic, semi-nomadic, or otherwise homeless persons in Pakistan. Secondly, surveys have not been held frequently enough to construct a reliable time series, though this problem relates more to earlier years (i.e up to the mid-1980s) than now. Thirdly, statistically representative distributional data are available only down to the level of the provinces, for the most part. This is an important handicap, since, ideally, a lower level of regional disaggregation would be required for detailed poverty analysis, as well as for informing policy interventions. Finally, these surveys are not designed to provide information on institutional issues such as intra-household allocation, unequal access to markets and social inequalities, all of which are likely to have a strong impact on economic well-being.
1.4. Methodological Issues

Empirical studies of poverty in Pakistan provide a somewhat confusing array of contradictory results. A recent example of this is the Working Group report, which (as argued in Appendix A) is the closest to an official document on poverty. Four different sets of poverty indicators (based on the same data-set) are presented in this report, which differ not only in their estimates of the magnitude of poverty, but also contradict one another on the identification of the poorest regions. Two out of the four sets of results, for example, find that the incidence of poverty was higher in rural areas compared with urban areas, while the other two find the converse.

Policy discussion, let alone policy intervention, has been severely hampered by these apparent inconsistencies, which are entirely due to methodological differences in poverty estimation. While any poverty measurement would be vulnerable to precise methodological choices, it is important that the issues involved in pursuing these choices are clearly spelled out. Analysts would normally differ on their choice of method, but this does not render empirical analysis meaningless, as long as the method that is chosen is explained.

Broadly speaking, in the case of Pakistan, four sets of issues have been involved:

1.4.1. Poverty lines

Firstly, there are no agreed or standard methods for arriving at a poverty line. A popular approach has been to use 'caloric norms' as the basic benchmark of poverty, and then to translate minimum caloric standards into a rupee poverty line. The interpretation of a calorie-based poverty line as the level of income that guarantees freedom from hunger, however, is extremely problematic. In the present study, no attempt is made to construct a new poverty line. Instead, for some purposes (such as time trends in poverty) existing poverty lines suggested by earlier authors are used, while for other purposes (i.e. cross-sectional analysis) analysis is conducted with reference to relative poverty rankings of the poorest deciles. Some of the regional rankings are reported using a range of poverty lines.
1.4.2. **Adjusting the poverty line**

Secondly, how the chosen poverty line is adjusted for cost of living differences across regions, between urban and rural areas, and over time, makes an important difference to final poverty estimates. Standard price indices are recommended for making these adjustments, and this, indeed, is the method followed here.

1.4.3. **Welfare Indicator**

Thirdly, various analysts have used different definitions of income and consumption expenditure as the indicators of well-being. The choice of indicator can affect poverty indices, and also the ranking of regions. Expenditure is thought to be a more reliable variable in developing countries than income. The two variables, moreover, measure different aspects of deprivation. In this study consumption expenditure is used as the main welfare indicator, though where income is used this is made clear.

1.4.4. **Household size**

Fourthly, the method used to account for household size have varied. A common error has been the interpretation of grouped aggregated data ranked by household income, rather than per capita income, for poverty analysis. In the present study, the focus is on counting poor individuals rather than households, and rankings of households are obtained using household income adjusted for the number of adults equivalents.

1.4.5. **Head-count ratio of poverty**

Finally, the index of poverty used in this study is the head-count ratio. This is an index of absolute poverty, and measures (in percentage terms) the proportion of the population below the poverty line. Comparisons over time, and between regions will be carried out using this index.
2. Economic and Poverty Trends

2.1. Current Economic Crisis

Pakistan currently faces one of the most serious economic crises of its recent history. The real annual growth rate of the GDP in the 1990s has thus far averaged at around 4.7 per cent, compared with 6.5 per cent through the 1980s. In per capita terms, this has amounted to an even more dramatic slowdown -- from an annual per capita growth rate of over 3 per cent in the 1980s to around 1.5 per cent in the 1990s. The most immediate and apparent features of this economic crisis are to do with public finances, rising debt ratios, and inflationary pressures. While the prospects for Pakistan graduating from the low income category to the low middle income group of countries had appeared bright in the 1980s, the current outlook remains relatively unpromising.

2.1.1. Causes of recession

Many of the causes of the current crisis are deep-rooted, and of long standing. They include unsustainable patterns of government revenue and expenditure, inefficiencies in the public sector, and mis-targeted subsidies and concessions to the private sector. In addition, the uncertain macro-economic, political and 'law and order' conditions of the past few years have done little to instill confidence among domestic and foreign investors.

Industrial recession has resulted, arguably, as a combination of two factors: an adjustment shock, particularly in sectors such as textiles which have experienced sharp cuts in government subsidies and concessions (partly due to the failure to make orderly adjustments earlier), and lack of investor confidence. Investor confidence has also been undermined by widespread reports of corruption in official and private transactions.

Although Pakistan has been through a range of economic reforms, and is currently under agreement with the IMF to carry out further reforms, the results have not, thus far, been very promising. The main triggers of the economic crisis have
been public finance imbalances, and the need for balance of payments support. On both these counts, the situation has not improved over the last ten years, but has further deteriorated. Moreover, the ability of various governments to see through the radical reforms needed has been severely tested.

2.1.2. Exogenous factors

In terms of longer trends in 'exogenous' variables also, there are a number of worrying signs. According to some analyses, agricultural growth is likely to taper off in the absence of radical structural and institutional reforms in that sector.\(^6\) It needs to be added, however, that thus far the evidence of a general slowdown in agricultural growth is not convincing. Apart from a disastrous harvest in 1992-93, mainly due to floods, agriculture has actually performed better in the first half of the 1990s than it did in 1980s taken as a whole (Economic Survey, 1996-97).\(^7\)

Workers' remittances which became important sources of private incomes as well as foreign exchange earnings declined in dollar terms by around a third between the mid-1980s and the early 1990s, and have stagnated or decline somewhat since then. These remittances which had peaked at around $3 billion in 1982-83, when they surpassed Pakistan's total earnings from merchandise exports, slumped to under $1.5 billion in 1995-96. The decline in remittances has been mainly due to the fall in demand for Pakistani labour in the Middle East.

2.2. Longer Economic Trends

The impact of Pakistan's current economic problems on poverty will be discussed with reference to poverty trends further below. It is useful, however, to place the current economic situation in its historical perspective. Broad trends in the structure of the economy also inform the analysis of poverty.
2.2.1. 1960s to the 1990s

Pakistan's real GDP grew at an average annual rate of 6.8 per cent in the 1960s, 4.8 per cent in the 1970s, 6.5 per cent in 1980s and 4.7 per cent in the 1990s. In both the high growth decades (1960s and 1980s) it was the manufacturing sector that led the growth, recording annual growth rates of 9.9 per cent in the 1960s and 8.3 per cent in the 1980s. In fact, through most of this period from the early 1960s till the late 1990s, the manufacturing sector has been the 'leading' sector, in the sense that its rate of growth exceeded that of the economy as a whole, and that of agriculture.

These differential growth rates have been reflected in the overall economic structure. Agricultural output decline as a proportion of GDP from around 40 per cent in the 1960s to 30 per cent in the early 1980s, and was under 25 per cent by the mid-1990s. The proportion of the workforce employed in agriculture is considerably higher (47 per cent) than its contribution to the GDP, though this too has seen a large decline (from 60 per cent in the early 1960s).

Unlike other comparable economies, however, manufacturing accounted for the decline of agriculture in employment only over part of this period. Manufacturing employed a smaller proportion of the workforce in 1994-95 (10 per cent) than it had done in the early 1960s (14 per cent). The main sources of new employment have been in sectors such as construction, transport, trade and other services, which together account for nearly as much employment as agriculture.

2.2.2. 1960s: 'Development decade'

The relationship between economic growth and poverty reduction has not been a straightforward one in Pakistan. The 1960s, which was dubbed as the 'development decade', ended with a period of intense political conflict, which was fuelled by widespread perceptions of economic injustice. Although
growth rates had been spectacular, there were also serious concerns that growth had come at the expense of equity, and more specifically, that growth had spawned poverty. The government that had presided over the growth decade was brought down by popular discontent sparked off by perceptions of economic injustice.

There were three main issues of economic injustice that surfaced at this time. Firstly, regional disparity in industrial investment and in agricultural growth was a potent theme of political opposition. Secondly, workers in manufacturing, the very sector that was the flagship of the 'development decade' complained bitterly of stagnant or even declining real wages. There is some empirical evidence to suggest this was the case. Finally, while agricultural output grew rapidly, particularly in the province of Punjab, there was also a widespread eviction of landless tenants.

### 2.2.3. 1970s: Populism

The economic model of the 1960s was inspired by the belief on the part of policy-makers that there was a fundamental trade-off in Pakistan, between growth and equity. The blatant disregard for equity concerns undermined the entire enterprise and the regime that presided over it. This was followed by a period of populism in the 1970s, when, at least in terms of rhetoric, the issues of poverty and economic equality were prominent. The government took over many industries, trade union rights were recognised, and public sector employment soared. Land reforms were announced and implemented, though in an extremely limited manner. It is not clear if these reforms had a significant impact on poverty and equity. There was, meanwhile, a withdrawal of private investment. Economic growth slowed down in this period. Finally the populist government was overthrown in a military coup in 1977.
2.2.4. **1980s: Windfall gains and policy indiscipline**

The populism of the 1970s was followed in the 1980s by a military regime, that was, on the surface interested in market-orientation, and the withdrawal of the state from economic activity. The high growth rates in the 1980s have been interpreted by some as a vindication of this policy, and a continuation of the growth in the 1960s. In reality, however, the military regime in the 1980s was less successful in implementing economic reform, and growth in the 1980s was to a great extent the result of a series of fortuitous exogenous circumstances for Pakistan, including the migration of workers to the Middle East, the generous flow of foreign aid, and the growth in the informal economy, including illegal activities such as the manufacture and export of narcotics.

The macro-economic crises in the 1990s are to a great extent the hangover of profligate policies in the 1980s. Far from downsizing the public sector, the 1980s saw further increases in public sector employment. Large-scale use was also made of public resources to provide cheap loans and subsidies to supporters of the government. Most fundamentally, the government's capacity to enforce and implement public finance discipline was steadily eroded. The windfall gains from workers’ remittances and a favourable foreign aid environment were used mainly to buy short-term political support for the government, rather than for investment in longer term sustainable growth.

2.2.5. **1990s: Structural adjustment**

Crises in the management of public finances and external balances have dominated the entire policy agenda of the 1990s. Pakistan has been involved with IMF/World Bank programmes for stabilisation and restructuring since 1988. There are three broad themes for reform: control over public finances; downsizing the public sector; and liberalization and market-orientation of the economy. Progress on these issues has been uneven. It is widely understood that there are serious political constraints to radical
reforms of public finance, as well as the downsizing of public sector enterprises. Public perceptions of growing inequality, poverty and economic injustice are also high.

2.3. Recent Poverty Trends

2.3.1. Consistent time series

In principle, the growth-poverty relationship which has been debated so intensely in Pakistan over the last 40 years could be put to empirical test. One practical problem in this regard is the unavailability of consistent time series of poverty indicators covering this period.

Amjad and Kemal (1997) claim to have produced such a series. The method used to construct this series is flawed, however, as it is based on the use of grouped aggregated data (see Appendix C below). The Human Development in South Asia document reports yet another series (going up to 1995). The source of this series is somewhat obscure, and it does not appear to be based on any of the well-known sources of distributional data on Pakistan.

Table 1: Poverty Trends, 1984-85 to 1990-91 (GHZ series)

<table>
<thead>
<tr>
<th>Year</th>
<th>Mean Consumption</th>
<th>Gini</th>
<th>Head-count</th>
<th>HC se</th>
<th>Poverty Gap</th>
<th>Foster f=2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pakistan</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1984-85</td>
<td>424.1</td>
<td>284</td>
<td>46.0</td>
<td>0.5</td>
<td>111</td>
<td>0.038</td>
</tr>
<tr>
<td>1987-88</td>
<td>456.5</td>
<td>270</td>
<td>37.4</td>
<td>0.5</td>
<td>077</td>
<td>0.023</td>
</tr>
<tr>
<td>1990-91</td>
<td>484.9</td>
<td>287</td>
<td>34.0</td>
<td>0.8</td>
<td>071</td>
<td>0.022</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1984-85</td>
<td>399.1</td>
<td>263</td>
<td>49.3</td>
<td>0.7</td>
<td>119</td>
<td>0.041</td>
</tr>
<tr>
<td>1987-88</td>
<td>424.1</td>
<td>240</td>
<td>40.2</td>
<td>0.6</td>
<td>083</td>
<td>0.025</td>
</tr>
<tr>
<td>1990-91</td>
<td>456.4</td>
<td>267</td>
<td>36.9</td>
<td>1.0</td>
<td>078</td>
<td>0.024</td>
</tr>
<tr>
<td></td>
<td>Urban</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1984-85</td>
<td>486.0</td>
<td>314</td>
<td>38.2</td>
<td>0.7</td>
<td>092</td>
<td>0.031</td>
</tr>
<tr>
<td>1987-88</td>
<td>535.0</td>
<td>316</td>
<td>30.7</td>
<td>0.7</td>
<td>061</td>
<td>0.018</td>
</tr>
<tr>
<td>1990-91</td>
<td>545.7</td>
<td>316</td>
<td>28.0</td>
<td>1.2</td>
<td>057</td>
<td>0.017</td>
</tr>
</tbody>
</table>

Notes: From Gazdar, Howes and Zaidi (1994) Tables 4.1 and 4.4, based on HIES data for 1984-85, 1987-88 and 1990-91. The poverty line used is Rs 342 per adult equivalent per month in 1991-92 prices. Mean consumption figures are in terms of per adult equivalent per month and are in terms of rural 1991-92 prices. All indices measure the number of individuals.

HC se: standard error for the head-count ratio.
Foster f=2: Foster-Greer-Thorbeck distribution-sensitive poverty index.
2.3.2. Poverty trends in late 1980s

It is possible, however, to construct a time series for the more recent years, for which raw data are available. Table 1 reports the time series estimated using HIES data for 1984-85, 1987-88 and 1990-91, using a consistent methodology. The series is based on a poverty line of 296 rupees per person per month in 1991-92 prices, or roughly 500 rupees per person per month in 1996 prices.

According to this poverty line, the head-count ratio of poverty fell from 46 per cent in 1984-85 to 34 per cent in 1990-91. Most of this decline was achieved in the mid-1980s, in the period between 1984-85 and 1987-88. The period from 1987-88 to 1990-91 saw a slowdown in poverty decline, and also witnessed a deterioration in the distribution of income.

Another analysis of recent distributional trends using disaggregated raw data is an FBS study reported in Jafri (1996a). Head-count ratios of poverty for 1987-88 and 1990-91 have been estimated using HIES data. While the GHZ (1994a) study shows small declines in the head-count ratios over this period, the FBS study indicates that the poverty indices rose dramatically. This difference is due, almost entirely, to the difference in adjusting the poverty line between the survey years for changes in the cost of living. While the GHZ 1994a study uses price indices, the FBS study estimates separate calorie-based poverty lines for each survey year. The FBS poverty line increases in nominal terms by over 38 per cent between 1987-88 and 1990-91, compared with the 28 per cent rise in the cost of living estimated in GHZ 1994a, and the rise in the GDP deflator of 24 per cent over the same period.

The empirical basis of the contending claims about poverty and inequality trends is somewhat limited thus far. Much turns on the analysis of the 1987-88 and 1990-91 HIES data-sets. The background study on which the World Bank (1995) conclusions are based found that the change in the head-count ratio of poverty between 1987-88 and 1990-91 was small enough to be statistically
insignificant. The change in inequality, however, was large and significant -- i.e. inequality had increased significantly during this period.

2.4. Real Wages

While household budget data-sets are recognised as the standard method of constructing poverty trends, an important limitation is their infrequency; there are numerous gaps in the HIES series. Wages provide another possible source of examining poverty trends. Households that rely on casual wage labour are disproportionately represented among the poorest. The casual wage rate, therefore, can be a useful summary index of trends in the purchasing power of the poorest. Time series for wages of casual labourers in rural and urban areas are available for Pakistan since 1983 and 1976 respectively.

Figure 1: Real daily wage rates for casual labourers, urban and rural

Sources: Calculated by author using Economic Survey 1996-97 for urban wages and CPI and FPL and Monthly Statistical Bulletin (various) for rural wages.

Notes: Wage rates deflated using general consumer price index (CPI) and food price index (FPI) respectively.
Figure 1 traces the daily wages of casual labourers in the two types of areas using two alternative price deflators: the general consumer price index and the food price index. The actual adjustment factor is likely to lie between the two indices. Since casual labourer households are among the poorest section of the population, they are likely to spend a relatively higher proportion of their incomes on food than the average household. Since food prices have risen somewhat faster than the general price index, a CPI-adjusted wage is likely to over-estimate wage increases.

In 1996, the last year for which data were available, the daily wage rate in Lahore stood at 108 rupees. Assuming that a labourer supporting a family of 5 persons managed to find work for as many as 20 days a month, the per capita income of such a family would be 432 rupees -- considerably below the GHZ 1994a poverty line, which is estimated to be around 500 rupees in 1996 prices. In the absence of comparable time series data on distributional indices, real wages of casual labourers might, therefore, be an effective index of poverty trends.

Figure 1 indicates that urban wages rose sharply in the mid-1970s, then declined till around 1984. They started rising again in the mid-1980s and continued to rise till around 1989. Between 1989 and 1994 they were on a downward trend, and then they began to rise again in the most recent period. Real wages are likely to have decline in 1997 due to sharp rises in food prices in that year.

Rural wages experienced a steady but not spectacular rise through the 1980s. In 1994 they were not much higher than they had been when the series began in 1983. The gap between urban and rural wages remained wide, though this needs to be offset against the higher cost of living in urban areas.

In Figure 2, real wage indices are traced alongside the index of GNP per capita. It is interesting to note that although GNP per capita grew throughout, the period of its most rapid growth (early 1980s) coincided with a downward trend in real urban wages. The relationship between economic growth and poverty reduction,
therefore, is not straightforward. Wage data also confirm the general picture emerging from the household budget data-sets that the early 1990s were a period of less rapid decline (or indeed increase) in poverty. Figure 2: Trends in GNP per capita, urban and rural wages.

Sources: Calculated by author using Economic Survey 1996-97 for GNP per capita, urban wages, GDP deflator and FPI, and Monthly Statistical Bulletin (various) for rural wages.

Notes: GNP per capita deflated using the GDP deflator, wage rates deflated using the food price index (FPI).

2.5. Conclusion

Economic growth has slowed down considerably in Pakistan over the 1990s compared with the 1980s. The most recent period in particular, i.e. the mid-1990s, has seen a serious recession.

Some causes of the recent economic crisis are of a short term nature, as the economy, particularly the manufacturing sector, adjusts to the loss of subsidies and concessions. The severity of the recession in manufacturing is partly due to the failure to make orderly adjustments over a longer period. To an extent
the loss in investor confidence due to law and order problems, and perceptions of widespread corruption are also short term problems. Other short term factors that have worsened the situation in the recent years have been sporadic crop failures due to crop infestation or bad weather.

Many of the short term problems, however, have longer term roots. Fundamental reforms in public finance, the organisation of the public sector, and the direction of the manufacturing sector are required for sustainable growth. The agricultural sector too is in need of institutional reforms, though its performance, thus far, has been robust.

Manufacturing has been the lead sector in Pakistan in terms of economic growth, but its role in generating employment has been limited. There has been a secular decline in the relative contribution of agriculture to GDP as well as to employment over the past four decades. The gap has filled by sectors such as construction, trade and transport. These sectors, however, conceal a large amount of low-remuneration self-employment, and casual employment.

The overall context for poverty alleviation or elimination is not as promising in the 1990s as it was a decade earlier. Significant reduction in poverty can occur only if underpinned by strong growth in the key sectors, and strong growth in sustainable livelihoods. The prospects in the immediate future are not bright. There are likely to be further adverse shocks to employment before the situation improves.

The relationship between economic growth and poverty reduction, however, is not a straightforward one in Pakistan. Historically, the period of fastest growth, the 1960s, coincided with a popular perception of widening inequality, rising poverty, and economic injustice. This perception was instrumental in bringing about an end to the model of growth pursued in the 1960s. In the 1970s, more populist policies certainly led to perceptions of increasing well-being among the
poorest, while growth rates had declined. In the 1980s, Pakistan experienced strong growth as well as rapid reductions in poverty. In the 1990s the slowdown in the economy is widely perceived to have punished the poor.

The 1980s growth experience was something of an aberration and cannot be replicated. Most of the factors that led to high growth rates were the results of fortuitous external circumstances, and had little to do with the economic strategies of the government. The interpretation of the 1980s growth as the template for future poverty reduction, therefore, is altogether misleading. Many of the problems facing the Pakistan economy today are a direct result of irresponsible policies pursued over that period.

There are indications that the slowdown in economic growth in the 1990s has had serious consequences for poverty reduction. Reliable time series on the latest trends in poverty are not available, but existing information does indicate that poverty decline entered a period of stagnation in the late 1980s. There is also some evidence of a rise in inequality over this period.

Another source of data for poverty trends is the movement in real wages of unskilled workers, since these workers are at the bottom of the economic hierarchy. Casual wage rates are also a particularly useful index in Pakistan, given the growing casualization of the work force. Wage growth has also slowed down in the 1990s, and but for small increases in the 1995 and 1996, they are thought to be on the way down again in the last two years. Also, interestingly, the period of high GNP growth in the early 1980s corresponded with stagnant or declining real wages.

The current economic agenda of the government is dominated by the management of immediate crises in external balances, and in public finance. Economic reforms such as the increasing opening up of the economy, the reduction of subsidies, and the
ongoing programme of privatisation, have not yet yielded tangible benefits in terms of growth or poverty reduction.

The relationship between growth and poverty reduction, moreover, cannot be assumed to be automatic in Pakistan. There is a large role for public policy in not only enabling growth (by creating a sound macroeconomic environment) but also actively pursuing the objective of 'pro-poor' growth. Even if the current policy reforms achieve the objective of setting the economy on a growth path, the political sustainability of that path is vulnerable to public perceptions of economic injustice. The promotion of 'pro-poor' growth, therefore, would be the key to the sustainability of any economic strategy.

In order to understand the requirements of 'pro-poor' growth, however, it is necessary to have a more detailed analysis of the patterns of poverty: e.g. where are the poor located? what are their sources of livelihood? The next two sections address these issues. Section 5 returns to the problems of economic growth and poverty reduction, with a discussion of outlook and policy in the light of the analysis of sections 3 and 4.
3. Regional Profile of Poverty

This section provides basic information on the distribution of poverty in Pakistan by region. It begins with a discussion of urban-rural contrasts (3.1). This is followed by province-wise analysis of existing poverty data (3.2). Inter-regional contrasts in rural poverty are examined in more detail in section 3.3. Non-income indicators of poverty are reported for rural areas of the four provinces in section 3.4.

3.1. Urban-Rural Contrasts

There is some confusion in the empirical work on poverty in Pakistan, on the relative incidence of poverty between urban and rural areas. There are strong reasons to expect poverty to be more acute in rural compared with urban areas. This, indeed, is the general pattern in developing countries, and in South Asia in particular. The literature on Pakistan is far from unanimous on this score. The only recent piece of empirical work emanating from an official source\(^{15}\), for example, reports four different estimates, of which two indicate a higher index of urban compared with rural poverty.\(^{16}\) As explained in Appendix C, however, these anomalous results are due to the application of non-standard methodology.

As reported in Table 1, rural areas come across as universally poorer than urban ones when the adjustment is made using standard price indices. This is not to say, of course, that urban poverty is not an important problem for policy or analysis, but that the issue of rankings is a trivial one once consistent and standard methodology is applied.

Although the incidence of poverty is lower in urban areas compared to rural ones, problems of urban poverty are nevertheless not unimportant. Pakistan has seen some of the fastest rates of urbanisation due to migration from rural to urban areas. The continuing rise in the relative share of the urban population would have a secular impact on the weight of
urban poverty. There are economic and demographic factors that might lead to urban poverty becoming a more acute problem than it has hitherto been. The gap between the head-count ratios in the two types of areas is around 10 per cent points, though it does appear to narrow somewhat in the most recent year (Table 1).

A note of caution needs to be sounded in reading too much into urban-rural contrasts. Statistical estimates of urban and rural variables are based upon the administrative (rather than economic or sociological) designation of an area as rural or urban. Contrasts within areas designated thus as 'urban' are likely to be as important as any contrasts between many of these areas and their 'rural' hinterlands. Market towns, sub-district level centres (tehsils and talukas) and even district headquarters with the exception of the handful of large metropolises are very closely integrated with the hinterland. Even between the large metropolitan areas and the rural hinterland there are close economic ties, and thus the problems of economic and social deprivation are inter-linked.

3.2. Provincial Poverty Rankings

Few of the studies on poverty in Pakistan have paid sufficient attention to the regional dimension. An understanding of regional variations is useful for both targeting, and because inter-regional variations can be useful sources of insight into causes and determinants of poverty.

Table 2 reports the distribution of the country’s population, head-count ratios of poverty, and the proportion of the poor, by province and by urban-rural region. The population shares are based on the 1981 population census, and are likely to have changed considerably. In particular, the proportion of the population living in urban areas as a whole is likely to have increased from under 30 per cent, to over 40 per cent. Also, the share of Punjab is likely to have declined from 57 per cent to
around 50 per cent. Both these sets of changes are likely to have come about as a result of internal migration.

**Table 2:** Distribution of Relative Poverty by Region and Urban-Rural Areas

<table>
<thead>
<tr>
<th>Region</th>
<th>Year</th>
<th>1981</th>
<th>1987</th>
<th>1991</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Proportion of the country's population in region</td>
<td>Head-count ratio (proportion of population poor)</td>
<td>Proportion of the country's poor by region</td>
<td>Head-count ratio (proportion of population poor)</td>
</tr>
<tr>
<td>Punjab</td>
<td>16</td>
<td>30</td>
<td>16</td>
<td>31</td>
</tr>
<tr>
<td>Sindh</td>
<td>10</td>
<td>14</td>
<td>5</td>
<td>17</td>
</tr>
<tr>
<td>NWFP</td>
<td>2</td>
<td>38</td>
<td>3</td>
<td>13</td>
</tr>
<tr>
<td>Balochistan</td>
<td>1</td>
<td>26</td>
<td>0.5</td>
<td>22</td>
</tr>
<tr>
<td>URBAN</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper Punjab</td>
<td>7</td>
<td>20</td>
<td>4.5</td>
<td>9</td>
</tr>
<tr>
<td>Middle Punjab</td>
<td>17</td>
<td>28</td>
<td>19</td>
<td>33</td>
</tr>
<tr>
<td>Lower Punjab</td>
<td>17</td>
<td>47</td>
<td>26</td>
<td>45</td>
</tr>
<tr>
<td>Sindh</td>
<td>13</td>
<td>27</td>
<td>11</td>
<td>32</td>
</tr>
<tr>
<td>NWFP</td>
<td>14</td>
<td>30</td>
<td>12</td>
<td>20</td>
</tr>
<tr>
<td>Balochistan</td>
<td>4</td>
<td>31</td>
<td>4</td>
<td>41</td>
</tr>
</tbody>
</table>

**Source:** Author's calculations based on Census 1981, HIES 1987 and PIHS 1991.

### 3.2.1. Regional disaggregation

Table 2 uses data from HIES 1987-88 and PIHS 1991 to estimate the incidence of poverty in the various regions. The data are disaggregated by province and by urban and rural area. In the case of rural Punjab, however, which on its own accounted for over two-fifths of the total population in 1981, the province is further disaggregated. This is done to make the analysis more meaningful, given the large disparity in the size of provincial units (rural Balochistan, for example, had a population which was less than a tenth of the size of rural Punjab taken as a whole).

Punjab can be sub-divided between upper Punjab (Rawalpindi division, plus the district of Mianwali from Sargodha division), lower Punjab (comprising Multan, Bahawalpur and Dera Ghazi Khan divisions), and middle Punjab (the rest, including Lahore,
Gujranwala, and Sargodha divisions, minus Mianwali). Sindh is treated as one region. The case for going down to lower levels of aggregation (say, districts) is strong on the grounds of institutional analysis, but weaker on those of statistical representation.

Regional disaggregation is also important for the purposes of the policy-making. Regional targeting can be an important instrument of anti-poverty policy. For these purposes it would be desirable to disaggregate further down, perhaps to the district level. The sample sizes of the HIES and PIHS, however, do not allow for this level of detail.

3.2.2. **Method of poverty analysis**

The index for regional poverty analysis in Table 2 is the head-count ratio (as described above in 1.4.7 above). Consumption expenditure is used as the measure of economic welfare. The analysis is conducted in terms of *relative* poverty in each year--i.e. comparison is not being made between the overall level of poverty in 1987-88 and 1991. Rather, the question here is: what is the head-count ratio in each region, and in rural and urban areas, for a poverty line that yields a *national* head-count ratio of 30 per cent. In other words, we concentrate attention on the poorest 30 per cent of the population, and ask (a) what is the relative incidence of poverty in the regions and urban and rural areas?, and (b) which regions or urban and rural areas account for the bulk of the poor in the country?

3.2.3. **Consistent patterns**

The region with the highest relative incidence of poverty in 1987-88 was rural lower Punjab, while the region with the lowest head-count ratio was urban Sindh in this year. Among rural areas the least poor was upper Punjab. The poorest urban region was NWFP. In 1991, lower Punjab was again both the poorest rural region, as well as the poorest region overall. Upper Punjab was also, once again, the least poor rural region. It was also less poor than the least poor urban region, which, in this year was NWFP.
The change in the rank of urban NWFP between 1987-88 and 1991 requires comment. Likewise, the change in the position of rural Balochistan between the two survey years needs to be explained. These regions, taken together, accounted for around 6 per cent of the national population. Given the small sample sizes for these regions, distributional data tend to be somewhat unreliable. It would be wrong, therefore, to read much of real significance into these changes.

There are a number of consistent patterns that do provide real insights into the distribution of poverty, and call for further analysis. Firstly, lower Punjab comes out consistently as a region of high relative poverty. Upper Punjab, on the other is consistently a region of low poverty. This contrast within the province of Punjab confirms the need for much greater attention to the regional dimension of poverty analysis and anti-poverty policy.

Secondly, urban Punjab is also a region of relatively high poverty, in contrast with, say urban Sindh. This reiterates the point made earlier, that urban poverty (and indeed rural poverty) should not be treated as a homogenous problem. The urban sample in Sindh is dominated by metropolitan Karachi. In Punjab, however, the urban sample has a much higher representation of smaller cities and towns, with closer links to the rural economy.

Thirdly, the ranking of rural Sindh, which is widely regarded as a region of extreme poverty and backwardness, appears not to be very adverse in either survey year. This issue needs to be probed further.

Finally, there are a number questions concerning the regional distribution of poverty for which existing secondary data are clearly inadequate. A province by province account of poverty-related economic and social factors is provided further below.
3.2.4. **Punjab**

Punjab is the most populous province of Pakistan, and is also generally regarded as the seat of political power in the country. It is the heartland of the agrarian economy and agricultural development, and has also witnessed a large increase in non-agricultural activities.

Middle Punjab, in particular, has long been regarded as the lead region in the adoption of agricultural innovations, and was the site of the beginnings of the Green Revolution in Pakistan in the 1960s. Much of the industrial development in Punjab, including the development of small scale manufacturing, has occurred in the cities and towns of middle Punjab. It is, however, also a region of high population density, and declining land-labour ratios.

Upper Punjab is traditionally regarded as a poor region because of its low productivity agriculture. Much of the land here is unirrigated and relies on rainfall. In comparison with the rest of Punjab and most of Sindh, there is little potential for irrigation development in this region. Labour migration and employment in the armed services has been a long-standing source of employment in this region.

Lower Punjab is mainly agricultural, and is relatively well-endowed with cultivable land. The main crops here are cotton and wheat. The settlement pattern in lower Punjab, as in middle Punjab is dominated by 'canal colonies'. These are settlements in canal-irrigated zones which were established over the early part of this century. Unlike middle Punjab, however, there continues to be a presence of relatively powerful landlords in parts of lower Punjab.

3.2.5. **Explaining Punjab’s poverty rankings**

The poverty rankings obtained above appear to contradict a number of received views about the position of Punjab and about patterns of poverty within the province, and need further explanation. Firstly, the overwhelming impression of Punjab's
relative prosperity is not based on careful consideration of regional contrasts within the province.

Secondly, by its sheer size, the proportion of the poor in Pakistan who are in Punjab is relatively high.

Thirdly, improvements in agricultural productivity that are thought to underpin Punjab's escape from poverty, have also been accompanied with important changes in the structure of land tenure and labour markets. This issue and the impact of the Green Revolution on agricultural employment are discussed further in section 4 below.

Fourthly, the rise in non-agricultural activities is only partly a sign of new positive employment opportunities. While it is true that upper Punjab has benefited from non-agricultural employment and labour migration (this is discussed further below), the decline in the agricultural workforce and the rise in non-agricultural workers is at least partly due to push factors--i.e. workers rather than being pulled into new non-agricultural activities are also being pushed out of agriculture due to shrinking employment possibilities there. The high level of poverty in urban Punjab is also a manifestation of this 'push' factor.

One aspect of poverty and inequality in Punjab that is not captured by survey data is the issue of social hierarchy. Caste discrimination continues to be an important factor in the province. Numerical estimates of the low castes are not available. A number of micro studies, however, have brought out the role of caste as a source of economic inequality and social discrimination in agriculture, as well as non-agricultural industries, particularly brick making.

3.2.6. Sindh

Rural areas of Sindh are generally regarded as extremely poor and backward. They are dominated by powerful landlords who exercise a great deal of political influence, and control over land, irrigation, and credit. The finding that Sindh is not particularly
badly off, therefore, contradicts conventional wisdom on the issue. This issue is addressed with reference to a range of poverty indicators further in section 3.3 below.

The agricultural sector in Sindh is dominated by the ‘zamindar-hari’ or landlord-tenant system. Landlessness is relatively high, and so is the concentration of land ownership. A large proportion of landless families work as tenants of landlords, on a share-cropping system. While precise arrangement might vary from place to place, the general pattern is that the tenant and landlord are each entitled to half the harvest. Arrangements about sharing of agricultural inputs are subject to a great deal of local variation. In practice, landlords make cash and grain advances to tenants over the crop cycle and recover the loan at harvest time. The relationship is, therefore, not merely that of land rental, but a comprehensive which includes credit and insurance arrangements also.

There is a great deal of anecdotal evidence on the abuse of privilege by landlords, and the poverty and oppression faced by tenants. It is not clear, however, if such oppressive practices are the norm or if they represent extreme cases. The general pattern of landlords wielding political and social power is robust.

In contrast with Punjab, the economic and social integration between rural and urban areas in Sindh is less comprehensive. This, in part, reflects ethnic differences between the urban and rural populations. Rural-urban migration, which has been a steady source of economic levelling in Punjab, has also, hitherto, been relatively modest, though there are signs that such migration is on the rise.

3.2.7. Data issues: NWFP and Balochistan

Patterns and trends of relative poverty in NWFP and Balochistan on the basis of existing secondary data are not robust. According to Table 2, both urban and rural relative poverty declined dramatically between 1987-88 and 1991 in NWFP. Other data sources from around the same time give a
different picture. Likewise, rural Balochistan showed a sharp rise in relative poverty between 1987-88 and 1991 in Table 2, while according to a different data series there was dramatic improvement in rural poverty in the province. The reason for uncertainty about the quality of distributional data from NWFP and Balochistan are various.

Firstly, there is a great deal of variation in the economic, social and environmental conditions within these provinces.

Secondly, the population densities, particularly in Balochistan, are relatively low. The wide intra-provincial variations, therefore are spread over a small population. Standard sampling techniques that focus on relatively simple stratification criteria are not able to account for such variations.

Thirdly, a number regions, possibly some of the poorest ones, are not easily accessible to enumerators because of remoteness (mountainous areas in NWFP and northern Balochistan, and deserts in central and southern Balochistan), and due to the influence traditional tribal laws and customs. While such survey problems do not compromise the quality of overall national averages (due to the small relative contribution of these regions to the national sample), they do pose problems in the interpretation of region-wise poverty estimates.

3.2.8. **NWFP and Balochistan: other contrasts**

There are a number features of the economies and societies of NWFP and Balochistan, besides their topography, that distinguish them from Punjab and Sindh.

Firstly, both the regions are strongly tribal (and pastoral) in their traditional social structures, compared with the largely village and caste-based societies in Punjab and Sindh. As such, there is a measure of social equality in the traditional institutions in these areas.
Secondly, as a result of political and military factors, the borders between these provinces and their neighbouring states are relatively unpolic ed. This has resulted in extensive cross-border trade and smuggling, particularly over the last two decades. The impact of these illegal activities on the economy of these regions has not been measured, but it is far from trivial.

Thirdly, both Balochistan and NWFP have also experienced massive in-migration from neighbouring Afghanistan. The demographic impact of this migration has also not been well-documented, but this too, is likely to have been non-trivial.

Finally, because of mainly geopolitical and military factors, these provinces have been recipients of a great deal of foreign assistance over the last two decades. While the need for development assistance has, indeed, been quite desperate, due to the special problems of remoteness and the absence of infrastructure in many regions of the two provinces, the primary reason for targeting of assistance to these regions has been political. Furthermore, since many parts of these provinces and their contiguous territories are relatively closed to the outside world due to their special tribal privileges and customs, assistance had tended to be concentrated on those regions within the provinces that are accessible.

3.2.9. Regions not covered: Azad Kashmir and Northern Areas

There are two other important regions that have not been covered in the secondary data at all. These are, respectively, Azad Kashmir and Northern Areas. The reason for the lack of coverage of these areas is partly their constitutional status within Pakistan. Azad Kashmir is formally not a province of Pakistan, but an independent entity with treaty status. The constitutional position of the Northern Areas is uncertain. They were formerly part of the state of Jammu and Kashmir, but have been integrated into Pakistan, though the administrative integration is not complete.
The combined population of these areas, however, is relatively small (constituting less than 4 per cent of the total population of Pakistan). Azad Kashmir is similar in topography, economy and society to upper Punjab. Like upper Punjab, this area is also relatively poorly endowed with an agricultural base. Also like upper Punjab, employment in the armed services and migration to urban areas and abroad have been important sources of economic mobility.

The Northern Areas of Pakistan have received a great deal of attention from foreign donors and NGOs. In terms of population, however, these areas represent, at the most 2 per cent of the total population of Pakistan. Economic and social conditions in these areas are markedly different from the conditions in the high population rural areas of Punjab, Sindh and NWFP.

3.3. Poverty in the Agrarian Heartland

It was noted above that results of poverty analysis might be vulnerable to variations in data source and methodology. It is important, therefore, to check for the robustness of the findings reported in section 3.2 above. Regional poverty rankings are constructed here incorporating a range of methodologies, to determine whether and to what extent, our findings relating to the regional distribution of poverty, are reliable. It might be added that testing the robustness of regional poverty rankings is crucial for policy purposes. If anti-poverty programmes are to be targeted by region, it is important to know the range of conditions under which any given set of rankings would hold true.

3.3.1. Focus on rural Punjab and Sindh: Indus Basin

The focus here is on the main agrarian regions of Pakistan--Punjab and Sindh. The choice of these two provinces for detailed analysis of poverty data is dictated by four sets of considerations.
Firstly, it is useful to study contrast within a region of some economic, geographical and cultural homogeneity. The areas comprising the two provinces approximate closely with the Indus basin. This geographical unity of the Indus basin has been further enhanced by an integrated system of canal irrigation.\textsuperscript{23} The Indus basin also represents a degree of cultural and linguistic continuity.\textsuperscript{24} Secondly, as noted above, distributional data from NWFP and Balochistan are less reliable. Thirdly, a number of substantive issues in the regional distribution of poverty that require further attention relate to Punjab and Sindh: the relatively good position of upper Punjab, the adverse position of lower Punjab, and the counter-intuitive results about the incidence of poverty in Sindh. Fourthly, the region comprising rural Punjab and rural Sindh accounts for over half the national population, and 80 per cent of the rural population.

### 3.3.2. Contrasts within Indus basin

Punjab is in general considered to be more advanced in terms of the transition from traditional forms of agricultural to markets than Sindh where semi-feudal relations continue to prevail. Within Punjab, the northern districts of the Potohar plateau and surrounding highlands can be contrasted with the rest of the province in their agronomy. While these areas in upper Punjab rely mainly on barani rain-fed agriculture, the rest of the province is served with canal irrigation and tubewells. The 'canal-colony' areas can be further subdivided between middle and lower Punjab, with the latter having a higher concentration of land ownership, and a stronger political presence of powerful landowners. In this regard, lower Punjab shares some features of the agrarian economy of Sindh where rural economic and political life is dominated by large landlords.
Some of the salient features of economic and social development in the four regions are presented in Table 3. Upper Punjab is relatively poorly endowed with agricultural land. Although the cultivated area per person was the highest, little of it was irrigated. In terms of irrigated equivalent (counting each non-irrigated hectare as being equivalent to half an irrigated hectare), upper Punjab had the lowest land availability per person. It was also the region with the lowest yield per hectare for wheat. A relatively higher proportion of the workforce, however, was in non-agricultural activities, particularly in the formal sector. A high proportion of households owned some land, and literacy rates were relatively high.
Of all the regions, Middle Punjab had the lowest proportion of its workforce in agriculture. Landlessness was relatively high, and certainly higher than in upper Punjab, but landlordism, as measured by the concentration of land ownership was the least conspicuous of all the regions. Somewhat surprisingly, considering that middle Punjab is often thought of as the most progressive agricultural region, the yield of wheat in 1986 was lower than the yields obtained in lower Punjab and in Sindh.

Lower Punjab appears to have been located not only geographically, but in terms of land distribution and non-agricultural development between middle Punjab and Sindh. Although landlessness was less severe than it was in middle Punjab, the concentration of ownership holdings was much higher. The proportion of the workforce in agriculture was higher than in either upper and middle Punjab, but lower than in Sindh.

The adult literacy rates in these sub-regions of the Indus basin were uniformly low, but the contrasts are noteworthy all the same. Upper Punjab had the highest rates of literacy, followed by middle Punjab, and lower Punjab and Sindh were at the bottom.

3.3.3. **Method of analysis**

Regional poverty rankings of upper, middle and lower Punjab and Sindh are checked here for two sources of methodological variation. Firstly, do the poverty rankings switch if a different indicator of economic welfare is used? In much of the literature, as well as in section 3.2 above, the indicator used was consumption expenditure. In this section rankings are constructed using income also. Secondly, do rankings switch if different poverty lines are used? This, as discussed in Appendix C, is a major source of disagreement in the results obtained by different analysts. As in Table 2, the analysis is conducted with reference to HIES 1987-88 and PIHS 1991 data.
Figures 3 to 6 give head-count ratios of relative poverty for the four regions over a range of poverty lines. Each of the regions is represented using a distinctive symbol. Figures 3 and 4 report the results for consumption and income poverty, respectively, for 1987-88. Figures 5 and 6 report consumption and income poverty results, respectively, for 1991.

The results can be read in the following way: if the graph for any particular region lies above that of another region, the first region is poorer than the second one, no matter what the poverty line. In Figure 3, for example, the graph for lower Punjab lies above that of Sindh. The interpretation of this is that lower Punjab was poorer than Sindh regardless of the choice of poverty line. If the graphs of any two regions cross, then their poverty ranks switch. Again, in Figure 3, for example, the graph for Sindh lies below that of middle Punjab for low poverty lines, and above that of middle Punjab for high poverty lines. This means that if we are interested in extreme poverty (i.e. low poverty lines) middle Punjab is poorer than Sindh, but if we are interested in a more liberal interpretation of poverty (i.e. high poverty line) Sindh is poorer than middle Punjab.

3.3.4. Results

We are interested in checking the robustness of regional poverty rankings for a range of poverty lines, and for income and consumption poverty. It might be recalled that in section 3.2, in terms of consumption poverty, lower Punjab came across as the poorest region, upper Punjab as the least poor, and Sindh and middle Punjab were in between.

Figure 3 shows that for consumption poverty in 1987-88, lower Punjab was the poorest region regardless of the poverty line used. Upper Punjab was the least poor region, again, regardless of poverty line. The rankings of Sindh and middle Punjab, however, were contingent on the choice of poverty line. For low poverty lines, Sindh was less poor than middle Punjab, but for higher poverty lines middle Punjab was less poor.
Figure 3: Consumption Poverty, 1987-88

Source: Author's calculations based on HIES 1987-88

Figure 4 repeats this analysis, but with reference to income poverty rather than consumption poverty. Here also, the rankings of lower and upper Punjab are not affected by the choice of poverty line, while those of Sindh and middle Punjab are. In this case the switch in the rank takes place at a lower poverty line than it does in Figure 3. This means that if the indicator of interest were income poverty rather than consumption poverty, rural
Sindh would come across as poorer than middle Punjab over a wider range of poverty lines.

*Figure 4:* Income poverty, 1987-88

![Figure 4: Income poverty, 1987-88](image)

*Source:* Author’s calculations based on HIES 1987-88

Figure 5 shows the results for 1991 using consumption poverty. In this case too, the rankings of lower and upper Punjab are robust, while those of Sindh and middle Punjab are ambiguous. In Figure 6, the analysis is repeated for income poverty. The relative rankings of lower and upper Punjab are preserved, but in this case,
Sindh is found to be unambiguously poorer than middle Punjab for the entire range of poverty lines.

*Figure 5:* Consumption poverty, 1991

*Source:* Author's calculations based on PIHS 1991.
3.3.5. **Interpretation**

There are four important policy-relevant conclusions of this analysis of poverty rankings within the Indus Basin with reference to different welfare indicators (i.e. consumption and income), and a range of different poverty lines.

---

*Figure 6: Income poverty, 1991*

Source: Author's calculations based on PIHS 1991.
Firstly, the result that lower Punjab is the poorest region is robust. This is in spite of the fact that in terms of agricultural endowments, lower Punjab is a relatively better off area.

Secondly, also robust, is the result that upper Punjab is the least poor region. This is in spite of the fact that upper Punjab is poorly endowed with agricultural potential.

Thirdly, the rankings of Sindh under various conditions provide some clues to the paradox that this region, which is otherwise known for its poverty and backwardness, came across as relatively well-off in the comparisons presented in section 3.2 (Table 2). The earlier rankings were based on consumption expenditure as the welfare indicator. When the analysis is carried out in terms of income poverty, Sindh appears to be poorer than middle Punjab, and closer to lower Punjab. This is so, for both 1987-88 and for 1991. Moreover, even in terms of consumption poverty in 1987-88, the region comes across as poorer than middle Punjab at higher poverty lines (the same is true for income in 1987-88, but the switch occurs at a lower poverty line). This provides a possibility of reconciling the observation of economic deprivation and landlordism with relatively low incidence of extreme consumption poverty reported in Table 2. It is likely that the landlord-tenant system in Sindh is protective of the basic consumption of the poor, even as it is detrimental to their overall economic well-being and opportunity as measured in terms of income.

Finally, these results demonstrate that regional rankings of poverty are, indeed, vulnerable to variations in the choice of method and indicator. Regional anti-poverty policy, therefore, needs to pay attention to the different instruments that need to be deployed in order to target different forms of poverty. It is not clear, a priori, whether more notice ought to be taken of income or consumption poverty. Both are important, and provide information about different aspects of well-being. The choice of which aspect of poverty to give priority is partly a political one. Different types of policies are required to deal with different types
of poverty, and careful analysis of the data can help to target these different interventions more effectively.

**Table 4:** Selected rural poverty indicators - provinces

<table>
<thead>
<tr>
<th></th>
<th>PAK'N</th>
<th>Punjab</th>
<th>Sindh</th>
<th>NWFP</th>
<th>Bal'n</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Population (Census 1981)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of Pakistan's rural population 1981</td>
<td>100.0</td>
<td>58.3</td>
<td>17.2</td>
<td>19.9*</td>
<td>4.1</td>
</tr>
<tr>
<td><strong>Human Development Index (Haq)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Real GDP per capita, (PPP 1993 $) 1988</td>
<td>1.915</td>
<td>1.948</td>
<td>1.633</td>
<td>2.048</td>
<td>2.005</td>
</tr>
<tr>
<td>HDI Value</td>
<td>0.420</td>
<td>0.425</td>
<td>0.402</td>
<td>0.434</td>
<td>0.388</td>
</tr>
<tr>
<td>HDI Rank</td>
<td>-</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td><strong>Education (PIHS 1995-96)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Precent 10+ literate 1981 census</td>
<td>17</td>
<td>20</td>
<td>16</td>
<td>13</td>
<td>6</td>
</tr>
<tr>
<td>1995-96 PIHS</td>
<td>31</td>
<td>33</td>
<td>29</td>
<td>25</td>
<td>28</td>
</tr>
<tr>
<td>Gross primary enrolment rate (5-9)</td>
<td>68</td>
<td>72</td>
<td>59</td>
<td>61</td>
<td>73</td>
</tr>
<tr>
<td><strong>Health (PIHS 1995-96)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Infant mortality rate (per 1,000 live births)</td>
<td>108</td>
<td>108</td>
<td>125</td>
<td>89</td>
<td>117</td>
</tr>
<tr>
<td><strong>Female Disadvantage</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Females per 1,000 males (1981)</td>
<td>920</td>
<td>910</td>
<td>937</td>
<td>917</td>
<td>910</td>
</tr>
<tr>
<td>Female-male ratio literacy</td>
<td>36</td>
<td>43</td>
<td>21</td>
<td>28</td>
<td>18</td>
</tr>
<tr>
<td>Female-male ratio enrolment</td>
<td>67</td>
<td>76</td>
<td>50</td>
<td>53</td>
<td>73</td>
</tr>
<tr>
<td>Female-male ratio infant survival</td>
<td>102</td>
<td>101</td>
<td>101</td>
<td>103</td>
<td>98</td>
</tr>
</tbody>
</table>


* Includes FATA (Federally Administered Tribal Areas) not formally part of the province.

3.4. Non-Income Rural Poverty Indicators

Table 4 provides a range of non-income indicators of development including the human development index (HDI), basic education and health indicators, as well as indicators of female disadvantage. Not only is there a great deal of variation between provinces, but there are important differences in the rankings of provinces depending on the precise indicator used. These data were not available for sub-provincial levels of disaggregation.
3.4.1. *Human development index (HDI)*

In terms of per capita income, rural Sindh is the poorest, while rural NWFP is the richest. Punjab ranks well ahead of Sindh, though behind NWFP and Balochistan. These rankings are consistent with our findings that Sindh has relatively high income poverty, though in terms of consumption poverty it is better off. In terms of the HDI ranking, however, Balochistan comes out as the worst off. The human development index is a composite index of variables measuring economic well-being, educational attainment, and access to health and sanitation services.

3.4.2. *Basic Education*

In terms of rural literacy rates, Punjab was ahead of the other provinces in 1981 as well as in 1995-96. The gap was narrowed significantly in this period however, with marked progress in Balochistan (though the same caveat as in section 3.2 applies to data from the province).

3.4.3. *Health*

The infant mortality rate was the highest in Sindh, and the lowest in NWFP. The divergent rankings obtained for head-count ratios and health and education indices illustrate the limitations of using single indicators for poverty assessment. Differences in the distribution of income, consumption and wealth, in the availability of physical infrastructure and public goods, as well as other institutional factors that affect both the delivery and the utilisation of these services are likely to be important explanatory factors.

3.4.4. *Female disadvantage*

The female-male population ratio, and the relative rates of survival of female and male children are widely-used indicators of gender bias and female disadvantage. Pakistan has among the lowest female-male population ratios in the world, and the empowerment of women has to be one of the most critical
aspects of any anti-poverty agenda. According to the 1981 Census, there were 905 females per 1,000 males in Pakistan. In urban areas the ratio of 868 while in rural areas it was 920.

It might be argued that the lower female-male ratio in urban areas does not signify that females are at a greater disadvantage in these areas, but reflect the disproportionate in-migration of young male workers. One way of controlling for the effect of migration is to look at age-specific sex ratios. In the 0-10 age group (for which the sex ratio would not be distorted by migration effects) also the female-male ratio was higher for rural compared with urban areas (993 compared with 953 per 1,000). This rural-urban contrast is consistent also with relative infant mortality rates. According to the 1995-96 PIHS, the infant mortality rate (deaths per 1,000 live births) for females in rural areas was lower than for males (101 compared with 115), while they were higher in urban areas (85 compared with 77). Although the overall levels of mortality were higher in rural areas, in relative terms females fared better than their urban counterparts, and fared better, in fact, than rural males.

Table 4 reports a number of indices of female disadvantage for rural areas of the four provinces. Variations between the regions in different aspects of gender bias need to be studied further with reference, among other things, to social institutions and cultural patterns.

3.5. Conclusion

There are important contrasts between regions and urban and rural areas in the incidence of poverty. In general, urban areas are less poor, as expected, than rural areas. Intra-urban and intra-rural contrasts, however, are also important. Urban-rural disparity is quite sharp in Sindh, but not very marked in Punjab. This is due to the closer economic and social integration between rural and urban areas of Punjab compared to Sindh. While urban-rural disparity is an important feature of
poverty in Pakistan, it needs to be recognised that urban and rural poverty are closely inter-linked with one another. Moreover, the classification of localities as urban or rural is partly an administrative one, and not necessarily reflective of fundamental economic and social distinctions.

Intra-rural differences in the incidence of poverty are significant, not only along provincial lines, but there are wide variations within the largest province, Punjab. Lower Punjab is consistently found to have been the region with the highest incidence of poverty, while upper Punjab comes out, consistently, as the region with the lowest poverty ratio.

Analysis of poverty data indicates that some of the regions traditionally regarded as suffering from extreme deprivation (such as rural Sindh, Balochistan, and parts of rural NWFP), are not, indeed, among the poorest areas. Punjab, which, on the other hand, has long been regarded as relatively wealthy and better served with rural infrastructure, has pockets of extreme poverty. Part of the explanation for the disparity between 'received wisdom' and the results of data analysis might be due to sampling and non-sampling errors in the implementation of national surveys in physically remote, and socially inaccessible regions, particularly in Balochistan and NWFP.

Part of the explanation lies in the precise choice of method for poverty analysis. The sensitivity of regional poverty rankings in rural Sindh and Punjab was checked for methodological variations. These regions together comprise the agricultural heartland of Pakistan, and are relatively better integrated into the national economy, both in terms of physical infrastructure and the political-institutional framework. Some of the results, such as the finding that lower Punjab is a region of extreme poverty, while upper Punjab is the least poor region, are robust to the choice of welfare indicator and the choice of poverty line. In the case of Sindh the choice of poverty line and that of welfare indicator does matter. Sindh comes out as a region of relatively low incidence of extreme deprivation, but a region
with a relatively high incidence of moderate deprivation. Also, it is a region of relatively high income poverty, but one of relatively low consumption poverty.

Non-economic indicators of poverty, such as achievement in basic education, access to health, mortality rates, and female disadvantage, also rank the regions differently. Regional poverty rankings are, therefore, somewhat contingent on the type of poverty under consideration.

### 3.5.1. Policy implications

Two prominent approaches to regional targeting are: (a) priority to regions with the highest *incidence* of poverty, and (b) priority to regions with the highest *share* of the country's population that is poor. In principle, there might be some conflict in these approaches, since regions with the highest incidence of poverty might not be the regions with the highest share of the national poor.

To some extent this policy choice does not involve a sharp trade-off in Pakistan, since the region with the highest head-count ratio of poverty (lower Punjab) also accounts for the highest proportion of the country's poor. Besides lower Punjab, however, other regions with moderate to high poverty ratios such as middle Punjab and Sindh and urban Punjab ought to be the focus of regional targeting, given their high contribution to overall poverty. These high population areas are, clearly, not always the most backward in terms of remoteness, access, and physical and institutional infrastructure.

By and large, regional targeting has been focused on areas with relatively small populations, such as Balochistan, parts of rural NWFP, and the Northern Areas. Targeting towards these regions can be justified on the grounds that they face special problems due to remoteness, harsh environmental conditions, historical neglect, and the weakness of physical and institutional infrastructure, but not necessarily on the grounds that such targeting is the most effective way of reducing the
overall level of poverty in the country. In any case, our analysis of regional patterns of poverty indicates that regional targeting needs to be thought through more clearly than it has been done in the past.

Finally, there needs to be clearer recognition that regional rankings differ according to the type of poverty being considered. Variation in regional rankings by type of poverty, however, is not a source of confusion, but can provide invaluable insights for more precise targeting. Different types of policy instruments are required for addressing different types of poverty, and a detailed picture of regional variations in these different forms of deprivation offers the opportunity of greater precision in the deployment of policy instruments.
4. Economic and Social Situation of the Poor

This section goes beyond the broad regional distribution of poverty and identifies the correlation of poverty with specific sectors, types of economic activity, participation in labour markets, as well as other social and economic institutions. Section 4.1 begins with a description of regional patterns of economic activity for the population as a whole and for the poor in particular, for various regions and urban and rural areas. In section 4.2 some specific issues with relation to the agricultural sector, particularly concerning land tenure patterns are discussed. In section 4.3 credit arrangements are examined. Section 4.4 illustrates the limitation of existing poverty data when poverty is correlated with social oppression.

4.1. Livelihoods and Sources of Income

4.1.1. Data and method

Tables 5 and 6 provide an analysis of the sources of income for urban and rural households in various regions of Pakistan. Table 5 gives average income shares from various types of sources and activities for all households in the specific region or urban/rural area. Table 6 provides the same information for the poorest 20 per cent of the population in each area. Contrasts between regions in the sources of income for an average household tell us something about regional differences in types of economic activity. Contrast between the income sources of the poorest 20 per cent with the average household can offer insights into the specific economic conditions of the poor.

Table 5: Sources of Income (per cent), all Households, by Region/Province, 1987-88

<table>
<thead>
<tr>
<th>Region/Province</th>
<th>Wages</th>
<th>Salaries</th>
<th>Non-agricultural</th>
<th>Rental income</th>
<th>Remittance</th>
<th>Agriculture (home cons'n)</th>
<th>Agriculture (market)</th>
<th>Other income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Punjab</td>
<td>13</td>
<td>32</td>
<td>30</td>
<td>5</td>
<td>6</td>
<td>3</td>
<td>3</td>
<td>11</td>
</tr>
<tr>
<td>Sindh</td>
<td>10</td>
<td>44</td>
<td>31</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>NWFP</td>
<td>13</td>
<td>33</td>
<td>24</td>
<td>7</td>
<td>7</td>
<td>2</td>
<td>3</td>
<td>11</td>
</tr>
<tr>
<td>Balochistan</td>
<td>17</td>
<td>38</td>
<td>32</td>
<td>2</td>
<td>4</td>
<td>1</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Rural</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>Upper Punjab</td>
<td>11</td>
<td>18</td>
<td>10</td>
<td>3</td>
<td>17</td>
<td>16</td>
<td>15</td>
<td>11</td>
</tr>
<tr>
<td>Middle Punjab</td>
<td>11</td>
<td>12</td>
<td>11</td>
<td>3</td>
<td>7</td>
<td>17</td>
<td>21</td>
<td>19</td>
</tr>
<tr>
<td>Lower Punjab</td>
<td>16</td>
<td>12</td>
<td>9</td>
<td>2</td>
<td>2</td>
<td>19</td>
<td>29</td>
<td>12</td>
</tr>
<tr>
<td>Sindh</td>
<td>6</td>
<td>20</td>
<td>7</td>
<td>1</td>
<td>0</td>
<td>20</td>
<td>42</td>
<td>4</td>
</tr>
<tr>
<td>NWFP</td>
<td>10</td>
<td>14</td>
<td>9</td>
<td>4</td>
<td>17</td>
<td>15</td>
<td>15</td>
<td>17</td>
</tr>
<tr>
<td>Balochistan</td>
<td>5</td>
<td>19</td>
<td>7</td>
<td>0</td>
<td>8</td>
<td>15</td>
<td>41</td>
<td>3</td>
</tr>
</tbody>
</table>

Source: Author's calculations based on HIES 1987-88.
Table 6: Sources of Income (per cent), Poorest 20%, by Region/Province, 1987-88

<table>
<thead>
<tr>
<th>Region/Province</th>
<th>Wages</th>
<th>Salaries</th>
<th>Non-agricultural self-emp't</th>
<th>Remittance</th>
<th>Agriculture (home cons'n)</th>
<th>Agriculture (market)</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban Punjab</td>
<td>29</td>
<td>34</td>
<td>26</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Urban Sindh</td>
<td>19</td>
<td>46</td>
<td>26</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Urban NWFP</td>
<td>28</td>
<td>39</td>
<td>18</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Urban Balochistan</td>
<td>23</td>
<td>47</td>
<td>24</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Rural Punjab</td>
<td>28</td>
<td>19</td>
<td>6</td>
<td>1</td>
<td>13</td>
<td>13</td>
<td>12</td>
</tr>
<tr>
<td>Rural Middle Punjab</td>
<td>26</td>
<td>19</td>
<td>15</td>
<td>1</td>
<td>4</td>
<td>14</td>
<td>13</td>
</tr>
<tr>
<td>Rural Lower Punjab</td>
<td>35</td>
<td>12</td>
<td>8</td>
<td>1</td>
<td>2</td>
<td>16</td>
<td>20</td>
</tr>
<tr>
<td>Rural Sindh</td>
<td>8</td>
<td>22</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>21</td>
<td>39</td>
</tr>
<tr>
<td>Rural NWFP</td>
<td>18</td>
<td>21</td>
<td>8</td>
<td>1</td>
<td>12</td>
<td>12</td>
<td>16</td>
</tr>
<tr>
<td>Rural Balochistan</td>
<td>8</td>
<td>23</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>18</td>
<td>43</td>
</tr>
</tbody>
</table>

Source: Author's calculations based on HIES 1987-88.

Sources of income were classified under seven headings: wages, salaries, non-agricultural self-employment, property rent, remittances, agricultural production for own consumption, and agricultural production for the market. A final 'other' category was added to account for other sources not adequately classified. Tables 5 and 6 give the percentage share of total household income coming from each of these categories. This is a useful way of making inferences about the structure of the economy and economic opportunity, and regional variations in these opportunities.

Some explanation of the categories used in Tables 5 and 6 is required. Both 'wages' and 'salaries' are earnings of employees. The main difference between the two categories is that while the term 'wage' has been used in the data to record the earnings of casual workers, and unskilled and semi-skilled workers in non-formal employment, 'salaries' denote the earnings of workers in more formal sectors. The distinction between these two categories is not so much the distinction between 'blue-collar' and 'white collar' workers (though there is an element of that), but more about the form of employment (i.e whether it is secure and regular or casual) and the nature of the employer (a formal sector enterprise or a small scale informal operation). 'Non-agricultural self-employment' includes a wide range of self-employed activities from running a large business to hawking.
vegetables. 'Remittances' are cash or kind payments sent by household members residing away from home either within the country or abroad. The value of agricultural output is further classified into the proportion that is self-consumed, and that which is marketed, or more precisely, exchanged for cash or kind payment. Both the agricultural categories relate to self-employment in agriculture, either on owned land, or on land leased-in by tenants. These categories do not include wage labour in agriculture.

The data used for these tables comes from HIES 1987-88. This is, admittedly, somewhat dated. But this is the most recent large HIES data set that is available in raw data form.

4.1.2. All households (Table 5)

Urban

As expected, in urban areas, earnings from wages and salaries taken together were the main sources of income. Salaries were more important than wage earnings in all provinces. Non-agricultural self-employment was also an important source. The main issues of inter-provincial contrast in urban areas were that urban Sindh had the highest reliance on salaries, and in urban NWFP remittances were an important source, accounting for 7 per cent of average household income. The importance of salaries in Sindh is mainly due to the overwhelming presence of Karachi in the urban Sindh sample, and the importance of formal sector employment in this city.

Rural

In rural areas, also according to expectation, the two agricultural categories taken together accounted for the largest share of income in all the regions. There were important differences between the regions, and the proportion of income coming from agriculture ranged from a mere 30 per cent (rural NWFP) to 62 per cent (rural Sindh). NWFP was followed by upper and middle Punjab respectively in the diversification away from agriculture.
Balochistan and lower Punjab, like rural Sindh, were heavily dependent on agriculture.

The value of self-consumption of agricultural produce was high in all areas. In upper Punjab, middle Punjab and NWFP, it exceeded or nearly equalled the contribution of market-based agricultural production to average household income. Self-consumption is important in Pakistan not only for staple food crops such as wheat and rice, but also due to the importance of livestock. Dairy products form an important part of the diet. An interesting finding here was that the relatively 'backward' areas of Sindh, Balochistan and lower Punjab were involved in market-based agriculture to a very large degree. There is no major region in Pakistan where pure subsistence is practiced.

Salary earnings were more important than wages in all the regions except lower Punjab. Since 'salaries' denote more regular formal sector employment, in the government or private sectors, the relatively low share of salaries in lower Punjab indicates that such employment opportunities were relatively limited. Salaries were extremely important in upper Punjab, Sindh and in NWFP.

There was a strong regional pattern in the importance of remittances to the household economy. In upper Punjab and NWFP this was an extremely important source of income, accounting for over a sixth of total household income on average. This confirms the general impression that rural upper Punjab and NWFP have been regions with very high rates of worker out-migration within Pakistan and abroad. Worker migration and remittances played a key role in reducing poverty in these regions of otherwise unpromising agricultural potential. In Sindh and lower Punjab, remittances were not significant at all (though there are indications that this might have changes in the recent years).
4.1.3. Poorest households, (Table 6)

Urban

The poorest 20 per cent of the population in the urban areas was more dependent on wages and salaries than the population as a whole. Surprisingly, though, the share of salaries was higher in this group than the urban population taken as a whole. This implies that regular formal sector employment is, in fact, an important source of income for the poorest. Changes in formal sector employment patterns due to policy changes, therefore, would have a major impact not only on the middle income groups, but also the poor.

Wage employment, as expected, was more important for the poorest compared with the population taken as a whole. The poorest rely less on non-agricultural self-employment than the population at large.

Rural

In rural areas, the differences between the sources of income for the poorest and for the population as a whole are even clearer. Wage labour, in particular, is much more important as a source of livelihood for the poor in every region. There are interesting regional variations: in Sindh and Balochistan, though the poor rely more wage labour than the population as a whole, this reliance is still relatively small. In all three Punjab regions, however, wage labour was the most important source of income for the poor, and accounted for over a quarter of the poor's earnings. In lower Punjab it accounted for over a third.

In middle and lower Punjab, agriculture was a significantly smaller source of livelihood for the poorest compared with the population average. In upper Punjab and NWFP also, it was a less important source of earnings for the poor, though the difference between the poor, and the population at large, was not very wide. In Sindh and in Balochistan self-employment in agriculture continued to be the most important source of income for the poor. The low relative importance of agricultural self-
employment for the poorest in Punjab corresponded with greater involvement in non-agricultural self-employment in middle Punjab, and with much greater involvement in the casual labour market in lower Punjab.

The regional pattern of the importance of remittances was preserved for the poor, though remittances accounted for a much smaller proportion of the poor's income than they did for the population taken as a whole.

4.2. Access to Agricultural Land

4.2.1. Poverty rankings and land concentration

One of the striking features in the regional rankings presented above was the relative position of Sindh, particularly in comparison with lower and middle Punjab. The relatively favourable consumption poverty rankings of the region appear paradoxical given the extreme inequalities in land ownership, and the relatively low level of economic diversification away from agriculture. In terms of feudal relations also, Sindh would be at the opposite end of the spectrum from upper and middle Punjab, with a powerful landed gentry that dominates economic as well as political life. Although the possibility of sample bias cannot be completely discounted, it is useful to look for other possible explanations for the observed paradox.

Table 7: Distribution of Land Ownership and Operation

<table>
<thead>
<tr>
<th></th>
<th>Upper Punjab</th>
<th>Middle Punjab</th>
<th>Lower Punjab</th>
<th>Sindh</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Land Ownership</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Per cent households that own land</td>
<td>73</td>
<td>50</td>
<td>58</td>
<td>41</td>
</tr>
<tr>
<td>Mean size of holding (acres)</td>
<td>10.2</td>
<td>9.7</td>
<td>12.3</td>
<td>16.9</td>
</tr>
<tr>
<td>Gini coefficient</td>
<td>0.729</td>
<td>0.786</td>
<td>0.769</td>
<td>0.827</td>
</tr>
<tr>
<td><strong>Land Operation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Per cent households that operate land</td>
<td>65</td>
<td>52</td>
<td>67</td>
<td>68</td>
</tr>
<tr>
<td>Mean size of holding (acres)</td>
<td>11.3</td>
<td>10.1</td>
<td>11.7</td>
<td>11.4</td>
</tr>
<tr>
<td>Gini coefficient</td>
<td>0.705</td>
<td>0.714</td>
<td>0.661</td>
<td>0.634</td>
</tr>
</tbody>
</table>

Source: Calculated by author using published data from Agricultural Census 1980.
4.2.2. Importance of tenancy

Table 7 gives a summary of land distribution data for the four regions. These reveal that although Sindh was, indeed, the region with the highest rate of landlessness, it was also the region where the highest proportion of rural households operated land. Similarly, although the Gini coefficient (inequality index) for land ownership was the highest in Sindh, the Gini for land operation was the lowest. In other words, the inequality of land endowments did not translate into inequality in access to land. The high prevalence of tenant farming and share-cropping in Sindh compared with the other regions implied that a large proportion of the landless did have access to operational holdings. This point reiterates the observation (4.1.3) made with reference to Table 6 above, that the poor have relatively lower access to agricultural self-employment in the Punjab regions.

Land ownership is extremely unequal in Pakistan, and the proportion of the rural population that does not own any cropped area is relatively high. Two major attempts at redistributive land reforms (in 1959 and then in 1972) have not significantly altered this situation, though they might have broken up some large estates in parts of the country.

Share-tenancy and land leasing, therefore, have been the main means for access to agricultural self-employment for the landless. There has been a secular decline in the cropped area that has been made available to share-tenants by landowners. The causes of this decline are both demographic as well as technological. Pure tenant farms (i.e. farms operated by people who were otherwise landless), accounted for 39 per cent of total cropped area in 1960, 30 per cent in 1972, 21 per cent in 1980 and under 15 per cent in 1990.

4.2.3. Decline in tenancy

In Punjab this decline in the area going to landless tenants has taken the form of a sharp decline in the number and proportion
of tenant farms. This process began in earnest in the 1960s at the
time of rapid technological advances in agriculture in the region.
In Sindh these technological advances have come somewhat
later, and though the number of tenant farms is also declining in
this province, the rate of decline is less sharp.

It might be argued that the decline in landless tenancies ought
not to have any major impact on the position of the poor, since
under tenancy also, the landless are exploited. Under this line of
reasoning, it should not matter whether the landless are involved
in agricultural self-employment as tenants or work as
agricultural labourers (as is the case now in lower Punjab).
There are several reasons why the issue of protecting
agricultural self-employment is important from an anti-poverty
point of view.

Firstly, as shown above in Tables 5 and 6, home consumption of
agricultural produce is an important component of household
incomes in Pakistan. People without access to land (owned or
leased) would not only have no access to such produce, they
would also have limited ability to own or sustain livestock. A
more general point here is that being involved in the crop cycle
and having access to livestock etc. provides for greater
consumption security.

Secondly, those who are not directly involved in agricultural
production have limited opportunities of sharing in technological
gains in agriculture. It might be argued that productivity
increases in agriculture would be translated ultimately into
higher wages even for casual wage labourers in the sector. The
mechanism through which this might happen, however, is not
entirely clear.

Finally, the historical and ongoing process of reduction in
tenancy, and particularly in share-tenancy to the landless, was
almost entirely at the initiative of the landlords. Landless
families moved out of agricultural self-employment (and
continue to do so) mainly not because of ‘pull’ factors towards
casual labour or low-remuneration self-employment, but due to 'push' factors. The fact that the process has been one of 'push' rather than 'pull' indicates that the landless perceive economic advantage in remaining in agricultural self-employment.

4.2.4. Land reform

The decline of self-employment in agriculture among the landless will continue, and is likely to add to the numbers of actual or potential poor unless alternative employment opportunities are forthcoming. Other possible policy responses include land reform. There is a degree of pessimism about the possibility of redistributive land reform in Pakistan. This pessimism, however, is not entirely well-founded. While it is true that landowners would fiercely resist any attempt at the redistribution of property rights, other possible instruments have been untested in Pakistan. The government or an NGO might, for example, intervene not to carry out redistribution, but to act as an intermediary in the land lease market. Such as agency could lease-in land at market rates from landowners and then rent it out to on share-cropping leases to the landless. There is scope for further research into these areas.

4.3. Credit and Social Safety Nets

A share-cropping transaction can be regarded as part of a wider relationship between landlord and tenant. It is customary, for example, for the landlord to extend seasonal consumption advances to the tenant, which are then recovered at the time of the harvest. Credit transactions between parties that are engaged in other economic relationships are referred to as interlocking transactions. It has been widely argued that such transactions create a monopolistic situation for the lender and leave the borrower vulnerable to exploitation. As in the case of share-tenancy in the market for land, however, interlocking credit arrangements might be the only form of credit available to the poor and assetless.
Table 8: Borrowings and Sources of Credit

<table>
<thead>
<tr>
<th>Mean borrowings in previous year (rupees)</th>
<th>Upper Punjab</th>
<th>Middle Punjab</th>
<th>Lower Punjab</th>
<th>Sindh</th>
</tr>
</thead>
<tbody>
<tr>
<td>All rural households</td>
<td>3,643</td>
<td>8,276</td>
<td>5,569</td>
<td>6,826</td>
</tr>
<tr>
<td>Landowning households</td>
<td>4,679</td>
<td>12,086</td>
<td>8,993</td>
<td>12,033</td>
</tr>
<tr>
<td>Landless households</td>
<td>2,340</td>
<td>5,619</td>
<td>2,346</td>
<td>4,482</td>
</tr>
</tbody>
</table>

Sources of credit - landowning households
(per cent of total borrowing)

- Formal institution 4 55 30 73
- Trader/shopkeeper 4 4 7 14
- Family/friend/neighbor 80 36 56 10
- Landlord/employer 4 2 6 1
- Professional moneylender 10 0 0 1
- Other 0 3 1 1

Sources of credit - landless households
(per cent of total borrowing)

- Formal institution 25 15 0 11
- Trader/shopkeeper 0 10 18 23
- Family/friend/neighbor 52 62 69 19
- Landlord/employer 8 9 7 39
- Professional moneylender 0 0 0 2
- Other 15 4 6 6

Source: Calculated by author from PIHS 1991.

If so, this relationship, even though it is exploitative, might be protective of the tenant's minimum consumption requirements. Table 8 provides some evidence on the prevalence of interlocking credit in Sindh. The figures based on the PIHS 1991 show that while a majority of loans in all the Punjab regions were taken from friends, relatives or neighbours, the majority of the loans in Sindh were taken from landlords, employers and shopkeepers -- i.e. from sources with whom there were other economic transactions.

Table 8 also highlights the difference in access to formal credit between owners of land and the landless. In the absence of formal credit markets for the poor in rural areas, informal sources of credit, particularly, the seasonal interest-free consumption loans from landlords, are useful instruments for consumption smoothing. The prevalence of these credit arrangements might explain the observation that in Sindh, a given level of consumption appears to be sustained on the basis on relatively lower levels of income compared to other regions. While in Punjab informal credit arrangements are mostly on the
basis on social proximity between people who are likely to have similar asset positions, in Sindh there appears to be much greater, and indeed systematic, prevalence of patron-client relations.

The idea that these various relationships, such as tenancy and credit, provide some level of consumption protection to the poorest is consistent with the pattern of poverty rankings obtained in Sindh. In particular, while for higher poverty lines its head-count ratio shows signs of converging with lower Punjab, it is in the case of extreme poverty that the advantage over lower Punjab, and indeed middle Punjab, is more apparent. The paradox of relative protection to the poorest in a region known for its extremely unequal feudal agrarian relations is also consistent with an interpretation of several relationships as those between patrons and clients.

The role of informal ‘insurance’ arrangements, that act as safety nets for the poor and the vulnerable has been studied with reference to detailed case studies in different parts of the country by Beall et al (1993), as background to the World Bank Poverty Assessment.\(^{32}\) The range of such institutional arrangement included mutual support systems among kinship groups and families, between landlords and tenants, employers and workers, and patrons and clients in general. In the absence of formal insurance and credit markets for the poorest, and given the uneven and uncertain outreach of government safety net schemes, these institutional arrangements proved to be critical mechanisms for coping and survival.\(^{33}\)

### 4.4. Bonded Labour

It is important, however, that the existence of informal safety nets in land, labour and credit arrangements, or in the form kinship, family, and patron-client relations are understood in their proper context. These arrangements might be relatively benign in some instances (say, for example, mutual support amongst close relations), but extremely oppressive and
exploitative in others. The nature of these institutions and relations needs to be probed using research methods and instruments that are not normally available in large statistically representative household surveys such as HIES and PIHS.

The example of one group of workers in a particular sector provides a useful illustration of the limitations of such data. The conditions of bonded workers at brick kilns has received attention from time to time from human rights campaigners and legislators. Poverty analysis based on national statistical surveys, however, is unlikely to identify this group of people and their poverty for a number of reasons.

Firstly, such a survey, even if it did include data on labour bonding, is unlikely to generate a large enough number of observations on any particular type of sector, region or group, to make reasonable inferences. The 1991 PIHS which was based on an extremely detailed questionnaire on employment status and indebtedness also included a question about whether a worker was bonded. It yielded a total of fewer than 10 positive responses in a sample of nearly 5,000 households. It is difficult to judge whether this is representative of the prevalence of bonded labour. Primary field surveys suggest that brick kiln workers constitute up to five per cent of the workforce in some rural areas.

Secondly, even a fairly detailed questionnaire in a national survey cannot be designed to provide the information required to conduct an analysis of the economic and social relationships between different groups of people. In the brick kiln industry, for example, there are marked caste and social distinctions between employers and managers on the one hand and workers on the other. The social hierarchy and the political power exercised in these relationships can only be analyzed with the use of sector-specific studies.
Thirdly, some of the indicators of poverty, such as household consumption may not identify people living under extreme economic and social stress and under conditions of powerlessness, as particularly badly off. In the case of bonded labourers at brick kilns, for example, the average daily earnings are at par with, and often higher than, the wages of casual wage labourers in the same localities. Consumption levels are likely to be even somewhat higher, since bonded labourers have access to consumption credit from their employers. In other words, a ranking of households or individuals based upon food consumption levels alone may not identify the bonded labourers as the poorest.

4.5. Conclusion

Wages and salaries, i.e. employment in the casual labour market and the formal sector respectively, are the main sources of livelihood in urban areas. In rural areas, self-employment in agriculture remains the most important source of earnings. There are regional variations: formal sector employment is more important in urban Sindh (due to Karachi) than in other urban areas.

The importance of agricultural self-employment also varies widely between the regions, with it accounting for the largest shares of income in rural Sindh, rural Balochistan and lower Punjab, and lowest shares in rural NWFP and upper Punjab. Self-consumption of agricultural produce accounts for a relatively high proportion of the household budget in all areas.

The poor in both urban and rural areas rely much more on the casual labour market than the population at large. In urban areas, however, the contribution of formal sector employment to the earnings of the poor is considerable. In rural areas, the poor in all regions of Punjab have a high degree of dependence on the casual labour market, while in rural Sindh and Balochistan wage earnings account for a relatively small proportion of their household budgets.
4.5.1. Labour markets

Labour markets are highly differentiated and access to different types of labour markets is a close correlate of poverty.

There are strong regional patterns in the out-migration of workers both within the country and abroad. In rural NWFP and upper Punjab, participation in extra-regional labour markets (both with the country and outside) and the repatriation of savings is an extremely important source of income as well as economic mobility. In comparison, remittances play an insignificant role in the household economy of rural Sindh and lower Punjab. At least part of the explanation for these regional differences lies in historical patterns of employment and migration.

Casual labour is the 'bottom line' activity for people without tangible assets. In spite of the highest ratio of landlessness, however, casual labour is relatively unimportant in rural Sindh. In Punjab, however, participation in casual wage labour is an extremely close correlate of poverty.

Although in most developing countries participation in the casual labour market is a low-remuneration but 'free-entry' activity, for a large segment of the population in rural Pakistan, this 'free-entry' cannot be taken for granted. Bonded labour exists over a wide scale in particular sectors, but its incidence is not well-captured by household surveys.

4.5.2. Access to agricultural land

Although the relative importance of agriculture has declined in Pakistan over the previous four decades, this sector continues to be the largest employer. Agricultural self-employment remains an importance source of income in some regions but has declined in importance in others. The access of the landless to agricultural self-employment via tenancy has declined dramatically, particularly in Punjab.
The decline in agricultural self-employment has not occurred entirely as a result of positive economic and employment opportunities in non-agricultural sectors. Secular demographic and technological trends have led to the eviction of increasing numbers of landless tenants, and therefore increasing alienation of the landless from direct agricultural production. The consequence has been a corresponding rise in wage labour employment in lower and middle Punjab and non-agricultural self-employment in middle Punjab.

Access to agricultural land on the part of the landless has significant advantages (compared with, say, casual employment) for the poor for at least three reasons: (a) it allows for maintenance of livestock, (b) the poor can share directly in technological improvements in agriculture, (c) it provides consumption protection even in situations where landlords are able to capture any surplus income via rents.

4.5.3. Credit and insurance

Access to formal credit markets in Pakistan is highly correlated with initial asset endowments. The poor and the landless rely mainly on the informal sector for the credit needs.

Informal credit arrangements are part and parcel of transactions in other markets, such as markets for produce, inputs, consumer goods, labour and land. These arrangements can exploitative and oppressive in some cases, and mutually beneficial in others.

The value of informal credit arrangements to the poor lies not only, or even primarily, as a source of productive investment or asset creation, but in the smoothing of consumption over the crop (or other production) cycle, and in providing some level of insurance against adverse shocks. As such, anti-poverty micro-credit initiatives that are focused purely on asset creation are able to supplement informal credit arrangements only partially.
4.5.4. Policy implications

Changes in employment patterns, including changes in the formal sector, are likely to affect the poor, and not only the middle classes.

Long-term trends in migration patterns, particularly the narrowing of opportunities for international migration will have a strong regional impact. The poorest regions, and the poorest sections of the population benefit proportionately less from remittances. The main impact in these regions and these groups, therefore, would be the closure of future opportunities for economic mobility, rather actual declines in current incomes.

The growth in employment in the non-agricultural sector cannot be viewed only as the manifestation of positive economic opportunities. The growth in the importance of casual wage labour, for example, is a sign of the lack of such opportunities.

Even so, entry into casual labour cannot be taken for granted for a large section of the poor. The government needs to play an active part in ensuring that people are able to participate freely in these markets, and are not constrained through coercion or social discrimination.

Although agricultural self-employment will and should decrease in the long term in Pakistan through technological and demographic trends, there is a strong case for slowing down the alienation of the landless and the poor from direct agricultural production. Land reforms, therefore, must be part of an effective anti-poverty policy, though the precise modality need not be the traditional one which involves the redistribution of property rights. Innovative programmes, including public interventions in the leasing and tenancy markets ought to be actively considered.
5. Outlook and Policy Analysis

This section assesses the outlook for economic growth and for poverty reduction in the light of the preceding analysis of trends, and regional and sectoral correlates of poverty in Pakistan (5.1). Recent Government of Pakistan policy initiatives for poverty alleviation, and their possible impact on poverty are analyzed (5.2).

5.1. Outlook for Economic Growth and Poverty

5.1.1. Short-term and long-term issues

It was shown in section 2 above that the Pakistani economy has been faced with serious problems and constraints over the last ten years. This period has seen a slow down in growth compared with historical trends, and compared, in particular, with the preceding decade. The period since around 1995-96, in particular, has been marked with a serious recession in important sectors. There are two sets of related but distinct issues in assessing the outlook for economic growth and poverty reduction.

Firstly, the factors that are behind the current recession are, in principle, transitory ones. In the aftermath of the initial shocks of structural adjustment, growth could resume within a short period if a semblance of macro-economic stability is restored. The fact that these issues are, in principle, transitory ones, however, does not imply that recovery would be straightforward. There are real questions about the speed and effectiveness with which macro-economic stability can be restored.

Secondly, even if the immediate crises related to structural adjustment shocks, public finance and external balances are successfully negotiated within a reasonable time-frame, and the economy returns to a growth path, longer term issues about the quality and sustainability of that growth, and its effectiveness in reducing poverty still remain. Long term secular trends in employment patterns in key sectors such as agriculture and
manufacturing need to be reversed or moderated if growth is to be an effective mechanism for poverty reduction.

5.1.2. Impact of structural adjustment

It was reported in section 2 that there are serious concerns in Pakistan that the slow down in growth rates in the 1990s, and the policy response to public finance and external balance crises have led to increases in poverty. The evidence was examined in that section, and it was found that the 1990s have been a period of stagnation as far as poverty reduction is concerned. Income inequality is also thought to have increased. The extent to which this has been the result of a general economic slowdown or due to specific structural adjustment policies is difficult to ascertain. Some observations on the basis of the review of poverty in sections 2-4 are offered here.

Industrial recession induced by structural adjustment would have had a negative impact on formal sector employment. Furthermore, privatisation of government-owned enterprises and downsizing in those firms that remain in the public sector, would also have reduced formal sector employment opportunities. It has often been argued that in developing countries formal sector workers are not among the poorest, but rather, belong to middle income groups. As shown in section 4 above, in Pakistan this is not entirely valid. The reduction (be it short term) in formal sector employment opportunities is likely to have had an adverse effect on the poor, and on urban poverty in particular. These effects are likely to persist in the years to come until economic recovery takes shape.

Agricultural employment is relatively protected against structural adjustment of this type. Moreover, the impact of structural adjustment on the agricultural sector is likely to be ambiguous in the short term (as compared with manufacturing, where the impact was unambiguously negative). While agriculture might lose certain input subsidies, and even lose exemption from income tax, there are likely to beneficial effects from rises in prices of farm produce. Even if the overall effects
on the sector are positive (due to increases in the prices of produce), however, the impact on sections of the poorest is likely to be negative. This is because, as shown in section 4 above, the rural poor have a disproportionate reliance on wage labour, and these people are likely to be net consumers of agricultural produce.

Going by past record, the public finance crisis is likely to lead to further cuts in 'development' expenditure, as well as cuts in social spending, though the latter are to some extent protected under the Social Action Programmes which form part of IMF conditionality. The quality of public services might be affected, however, not merely due to direct reductions in social spending, but due to proposed and ongoing changes in the procedures for revenue allocation between the federal and provincial governments. Recent years have seen the erosion of provincial government control over public revenues, and reduction in provincial allocations on various pretexts, as part of the reform of public finances. Given that the main responsibility for running public services in health and education lie with provincial governments, these changes might lead to further deterioration of already poor services in these sectors.

### 5.1.3. Outlook over longer term

#### Agriculture

Although the relative importance of agriculture has declined in terms of its contribution to national income, agriculture remains the single largest sector. It should be noted that the agricultural sector underpins Pakistan's manufacturing sector through the supply of inputs and raw materials (mainly textiles), and forms the basis of the country's export economy. It is also the single largest employer, accounting for nearly one-half of the workforce.

According to some analyses, agricultural growth is likely to taper off in the absence of radical structural and institutional reforms in that sector. It needs to be added, however, that thus
far the evidence of a general slowdown in agricultural growth is not convincing. Apart from a disastrous harvest in 1992-93, mainly due to floods, agriculture has actually performed better in the first half of the 1990s than it did in 1980s taken as a whole (Economic Survey, 1996-97). This does not imply, of course, that agriculture has performed according to potential or that there are not serious problems in this sector. Technological changes and institutional reforms, particularly in the agricultural extension system are likely to open up new growth opportunities.

More importantly, from the point of view of poverty trends, however, is the issue of labour absorption in this sector. As noted in section 4.2 above, the poor are increasingly not in a position to participate in technological progress and rapid growth in the agriculture sector. These trends are likely to continue, and alongside Punjab, the poor in Sindh are likely to face increasing alienation from self-employment in this sector. Institutional reforms are needed, therefore, not only to improve the adoption of technological change, but also to ensure that gains from technological change are widely shared.

Non-agricultural employment

The manufacturing sector has faced recession in the recent years. As argued above, in principle it should be possible for this sector to be restored to a growth path relatively quickly. Longer trends have shown, however, that although the manufacturing sector has been the 'lead' sector in terms of growth (particularly in the 1960s and in the 1980s), its share in employment has not increased consistently. In the 1980s, in particular, growth in employment occurred largely in the service sectors.

The 1980s pattern of growth was considered, in some quarters at the time (including among policy-makers), to be sustainable both in terms of the growth trajectory as well as in terms of employment creation and poverty reduction. Subsequent developments have failed to bear this out. In a country of the
size of Pakistan, there is no alternative to the expansion of manufacturing output and employment in the long term.

The outlook for employment and poverty reduction would remain uncertain, therefore, if the longer term trends of decline in manufacturing employment (even during periods of growth in this sector) are not reversed. The role of the manufacturing sector is all the more important given two other ongoing changes in employment patterns:

Firstly, opportunities for the out-migration of workers to the Middle East and other countries are likely to narrow down even further. While the positive impact of worker migration to these countries on poverty reduction was shown to have been limited to certain regions, the loss of these employment opportunities will add to the labour supply in the domestic market.

It is clear that structural adjustment reforms involve not only temporary shocks to the economy but would lead to long terms changes in employment opportunities. In particular, formal employment opportunities in the public sector are likely to decrease, and are likely remain small in the foreseeable future.

5.2. Anti-Poverty Initiatives

The policy documents of the Task Force on Poverty Alleviation, and the Ninth Five-Year Plan Working Group on Poverty represent the flagship Government of Pakistan anti-poverty policies. The conceptualisation of poverty in the Task Force and Working Group reports has been discussed in some detail in Appendix A. It is argued there that although these reports make references to concepts such as human development and empowerment, their operational understanding of poverty is very much in terms of economic well-being. A number of suggestion have been put forward in these reports, ranging from setting up small scale industrial sectors, a 'national reconstruction corps', setting up various training institutes, and schemes for the eradication of child labour from hazardous industries. The key
proposal of the Task Force and the Working Group reports, upon which many of their other recommendations also rest, is the setting up of Rural Support Organisations (RSOs).

These organisations would be based on the model of rural development pioneered by the Aga Khan Rural Support Programme (AKRSP) in the Northern Areas, and subsequently implemented by the National Rural Support Programme (NRSP), and respective provincial rural support programmes. While the Task Force report contains detailed proposals, including staffing requirements, budget, coverage, and a five-year workplan for district-level rural support organisations, the Working Group report refers to divisional level organisations.

The implications for financial and administrative feasibility and cost-effectiveness are likely to be vastly different for district-based and division-based RSOs. While the former proposal has been spelled out in some detail (Task Force report), and is therefore amenable to limited assessment, the same is not true of the proposal for divisional RSO in the Working Group report.

The RSO approach, according to the Task Force and the Working Group, is based upon the model of community participation. It involves the setting up of local community organisations which would then undertake local economic initiatives as well as, eventually, monitor and coordinate the work of line departments. Although the reports make several references to the possible role of community organisations and RSOs in improving the implementation of SAP projects, the primary focus is on the disbursal of Pakistan Poverty Alleviation Fund (PPAF) resources for micro-credit schemes.

This focus on micro-credit is founded on the experience of NRSP as well as a number of other local and regional models of credit-saving schemes. These interventions view the problem of poverty largely in terms of a vicious cycle of assetlessness and lack of access to credit markets. While there is much evidence to
suggest that the formal credit market discriminates against the poor, and that existing credit subsidies are captured by the non-poor, the prioritisation of micro-credit schemes is not without problems. As discussed above, informal safety nets incorporate not only lending for productive investment, but are largely successful in Pakistan because they respond to consumption smoothing requirements. Most micro-credit initiatives, however, lend only for productive investment and asset-creation.

The RSOs would be set up as limited companies, with each of them having their own Board of Directors, who "would be responsible for establishing policy, selecting and appointing the General Manager, approving budgets and overseeing implementation of projects." The precise composition of the Board of Governors is not spelled out, though the Working Group report does make vague references to nominees of provincial governments and other development experts. The Working Group report also does not make any explicit reference to overall policy coordination of the RSOs. The structure envisaged for district RSOs in the Task Force report allows for a great deal of autonomy, with only financial accountability at the centre. The RSOs could, conceivably, pursue very different types of policies and programmes from one another without much coordination.

The issue of coordination with other structures and policies is also important in the role that RSOs might play in the anti-poverty agenda. Four areas of potential synergy (and conflict) stand out: SAP, budgetary transfers, elected local government, and existing community participation efforts.

The Social Action Programme, the first phase of which (SAP-I) is nearing completion arises out of the understanding that the priority needs to accorded to the social sectors and to human development in Pakistan's anti-poverty agenda. Although no official review of SAP-I has been published as yet, three main
lessons have been acknowledged and incorporated into SAP-II, the second phase of the program. Firstly, although SAP-I was successful in diverting resources and building infrastructure in the social sectors, actual performance has been far from satisfactory. Secondly, the key constraint has been in project implementation and service quality, which, in turn is related to poor monitoring and accountability. Thirdly, some form of community mobilisation and participation is essential for establishing ownership, countering corruption, and assuring quality. The instruments for community participation suggested for various SAP initiatives involve the setting up of community organisations.

There are existing cash transfer schemes to the poor under Zakat, Ushr and Bait-ul-Maal. The administration of some of these schemes, e.g. Zakat, is supposed to be handled by local committees. The Task Force and Working Group reports include proposals for new subsidies to the poor in the form of food stamps in urban areas. This food subsidy scheme is to be targeted at 'the indigent', though no clear operational definition of this term is made in these reports. It is not clear, for example, whether the beneficiaries will overlap with the target group of the other schemes, whether all the transfers would be integrated, and what the administrative mechanism would be.

Decentralisation of administration has been a topic of wide discussion in Pakistan. The government has indicated its support for the revival of elected local bodies and the possibility of devolution of extra powers to these bodies. Local government control over social service delivery would be a natural area of devolution. These are some of the areas in which RSOs might also be involved.

Although community participation is widely accepted as a model for development by NGOs in Pakistan, there is a wide range of approaches that have been used. Some of these are close to the RSO model while others are quite different. There is some
concern in the NGO community in Pakistan that if implemented, the RSO intervention might overwhelm and undermine the work of other organisations, rather than complement it.

In sum, there are a number of as yet unresolved problems in the government's anti-poverty agenda. There is insufficient clarity in the prioritisation of goals concerned with economic well-being, human development, and issues relating to the empowerment of women and other groups facing social discrimination. The formation of a Task Force on poverty, and a Working Group of the Planning Commission offered some potential for integrating these various policies under a broad anti-poverty agenda, but much more work needs to be done before a coherent agenda can emerge.

5.3. Poverty Definition and Anti-poverty Agenda

Leading contributions in the policy dialogue on poverty in Pakistan have come to a broadly consistent menu -- economic well-being, universal basic education and health--even if the precise emphasis on these aspects of poverty has been somewhat more varied. The concerns of this literature are also broadly consistent with conceptualisation of poverty in the White Paper, with one important exception. While the White Paper lays great stress on a political conception of poverty and poverty elimination (placing it within the context of human rights, for example), this dimension is almost entirely absent from the literature reviewed above.

The process whereby the problem of poverty is conceptualised is relevant to the formulation and implementation of anti-poverty strategy. This process is an important factor in determining the ownership of any anti-poverty agenda, the participation of the poor in this agenda, and thus the sustainability of such an agenda. The administrative importance of wider participation in the definition of poverty and the identification of the poor is well-understood. The issue of local information and monitoring is the main argument for community participation, for example, in the World Bank document.
A deeper significance of a participatory approach to the conceptualisation of poverty in Pakistan, however, is related to the politics of an anti-poverty agenda. There are at least two related ways in which a participatory approach can develop and promote an anti-poverty agenda.

Firstly, greater involvement of the poor themselves in the process of defining poverty, can in itself lead to a degree of empowerment. If poverty is to be understood in terms of unequal access to markets and public services or the violation of rights, the very articulation of these issues can give greater confidence to the disadvantaged, and suggest possibilities of action.

Secondly, a process of consultation and participation can be important in establishing wider ownership of an anti-poverty agenda. This is of critical importance in Pakistan, where enlightened policy statements are often matched with ineffective and indifferent implementation. Weak implementation, and 'political will' are identified in most policy assessments as the important constraint. For effectiveness and sustainability, any anti-poverty agenda would need to mobilise both the poor and the non-poor. It would need to involve wider sections of civil society, and social and political activists and organisations.

It can be argued that the Task Force and the Working Group documents are based on such a consultation, since the members of these bodies included representatives of prominent development NGOs in Pakistan. To some extent these documents have indirectly served the purpose of initiating debate on poverty in Pakistan.

5.4. Conclusion

5.4.1. Outlook for growth and poverty reduction

Issues in macro-economic management have dominated the policy agenda in Pakistan in the 1990s. Since around 1988, various governments have pursued programmes for economic stabilisation and structural adjustment, mostly under agreement
with the IMF and the World Bank. The main features of these programmes are: liberalization of trade and investment, deregulation, privatisation and down-sizing of public sector firms, reduction in uneconomic subsidies and concessions to various manufacturing sectors, and attempts at the reform of public finances. The record of implementing this program, and the effectiveness of these measures in restoring sustainable growth has been extremely uneven.

The outlook for economic growth and poverty reduction can be viewed at two levels: (a) issues that are, in principle, of a transitory nature, such as government control of public finances, initial negative impact of down-sizing, privatisation, loss of subsidies, and investor confidence, and (b) longer term issues concerning not simply the end of recession and the return to a growth path, but questions about the nature of the growth path, its potential for employment generation, and sustainable poverty reduction.

Issues of short-term impact and stabilisation, which are transitory in nature, are linked in Pakistan, nevertheless, to questions of political will. The progress of economic reforms and the outlook for the restoration of economic growth are linked crucially to the ability of the government to manage political and economic conflicts between powerful interest groups.

Over the longer term, in order to ensure that growth is substantially poverty-reducing longer trends in key sectors would have to be checked or reversed. The manufacturing sector will need to play a crucial role in expanding employment. In agriculture, there is scope for further technological improvement, and need for institutional reform in order to facilitate such improvement. Crucially, however, the role of agriculture in reducing poverty depends not so much on technological progress but on slowing down the alienation of the landless and the land-poor from direct cultivation.
5.4.2. Policy proposals for poverty alleviation

The government has recently initiated policy dialogue on poverty alleviation. This is a welcome departure from a long absence of an anti-poverty agenda in official thinking. The main initiatives in this regard are the Task Force on Poverty Alleviation, and the Working Group on Poverty for the Ninth Five-Year Plan.

Although these documents make references to different types of poverty, or different aspects of the problem of poverty, the main focus is on economic well-being. The key initiatives proposed in these documents are: (a) setting up rural support organisations (RSOs) at the district or divisional levels, which would, in turn, be responsible for setting up 'community' organisations at the village or locality levels; (b) micro-credit schemes for the poor through these RSOs; (c) targeted food subsidies through a food stamp scheme in urban areas, and school-feeding programmes in rural areas.

These proposals are partly based on recent development experience in Pakistan and neighbouring countries. The feasibility of these proposals, problems in their implementation, and their relevance to poverty-reduction, however, need to be scrutinised more carefully.

The proposals concerning RSOs, for example, fail to spell out adequately the governance structure in these organisations, their responsiveness and accountability to central and provincial governments, their relationship with existing 'community mobilisation' initiatives, and their relationship with elected local government.

The main proposed activity of the organisations created under this structure is the implementation of a micro-credit program. As the analysis in section 4 indicates, the standard micro-credit model responds only partially to the credit and insurance requirements of the poor.
The method for the selection of beneficiaries in these micro-credit schemes, or indeed, for the food stamp schemes, is not clear. It is well-known that public subsidies are often captured by officials, political functionaries, and local elites. The main issue in the success of any of these programmes, therefore, is likely to be the effectiveness with which they are implemented. Likewise, the functioning of a school-feeding programme is vulnerable to the corruption which is now endemic in the government schooling system.

A possible route for effective implementation might be broad-based political and social mobilisation behind an anti-poverty agenda, in order to establish wider ownership of this agenda by the poor as well as the non-poor. The recent government initiatives provide an opportunity, hitherto unrealised, for such mobilisation.

The Task Force and the Working Group documents have very little to say about possible policy interventions in the labour market (for example to tackle the problem of bonded labour), or about access to agricultural land. These documents are also largely silent on other aspects of an effective anti-poverty agenda such as basic education, health care, and female disadvantage.
Appendix A

Poverty Definition in Policy Dialogue

The conceptualisation of poverty has been and continues to be a subject of much discussion among academics, policy-makers and development practitioners alike. Various philosophical precepts sustain different definitions of what it means to be poor. Although much of this debate has been conducted in theoretical and ethical literature, there is also, alongside, an emerging consensus on the operational meaning of poverty. The DFID White Paper is part of this consensus. The next sub-section (A.1) highlights some key features of how poverty is approached in the White Paper, and how this corresponds with or differs from earlier concepts and approaches.

The conceptualisation of poverty in Pakistan, either explicitly stated in policy thinking and debate, or implied by this discussion, is reviewed in sections A.2-A.4. The approach to poverty advocated in the White Paper is taken as the reference point for this review. Three sets of influential contributions to the debate on poverty and development in Pakistan are selected: documents of two bodies charged by the Government of Pakistan (GOP) for formulating anti-poverty strategies -- Task Force on Poverty, and the Working Group for the Ninth 5-Year Plan -- (section A.2); key World Bank documents on poverty in Pakistan (section A.3); and a report on 'human development in South Asia' produced by the Human Development Centre (section A.4). Finally, in section A.5 some of the wider issues relating to the process of poverty definition in Pakistan are addressed.

A.1. White Paper

The White Paper adopts a relatively broad-based approach to the problem of poverty, which includes economic well-being, human development (improvement of basic health and education indicators), rights and empowerment, access to markets and public services, equality before the law, gender equality, and
freedom from other forms of discrimination. The anti-poverty agenda, according to the White Paper, must be based upon economic as well as environmental sustainability. The promotion of sound macro-management, efficient markets, effective public services, and good governance is seen as the way of achieving pro-poor growth and poverty elimination within a definite time horizon.

The focus on economic well-being corresponds with the concept of absolute poverty in conventional poverty analysis. The poverty line, defined as a minimal acceptable level of income below which a person is considered poor, therefore remains a key concern of the White Paper. Much of the discussion about the incidence of poverty uses a poverty line, first suggested by the World Bank, of $1 per day. The poverty line is seen as a useful instrument, both for targeting anti-poverty programmes, as well as for making comparisons between regions and over time.

Beyond economic well-being, the White Paper lays great stress on universal attainment in fundamental aspects of well-being that are not income-based. There are explicit targets for the achievement of basic literacy, the reduction in child and maternal mortality, and access to public services such as safe drinking water, and reproductive health facilities. Although some of these concerns have been part of earlier development agendas -- such as the 'Basic Needs' approach, and the 'Human Capital' approach -- the approach to poverty and human development advocated in the White Paper has both conceptual as well as operational differences from the earlier 'basic needs', 'human capital', as well as 'human development' approaches.

The agenda for the elimination of poverty and for the promotion of human development is placed, inter alia, within the context of 'human rights' and social equality. This goes beyond the conventional menu-based approaches (such as the Quality of Life approach, the basic needs approach, or even the human development index) where, although education, health, gender equality, and even civil and political rights are considered to be
important values, there is little explicit consideration of the institutions, processes, and the politics of poverty elimination.

Moreover, in contrast with the 'human capital' approach, where investments in education, health and sanitation etc, are viewed as instrumental for economic growth, the approach advocated in the White Paper views the achievement of basic education, health, sanitation, and gender equality as goals that are valued in themselves for individuals and for society as a whole (i.e. are of intrinsic value), besides being instrumental in promoting economic growth.

The White Paper approach to poverty elimination requires consideration of income as well as non-income aspects of deprivation not in terms of a composite weighted index of development (as is the case with the Human Development Index of the UNDP) but with each set of indicators as being important in its own right.

Poverty, and therefore anti-poverty strategy, cannot be considered in isolation from overall economic performance, macro-management, efficiency of markets and institutions, issues of governance and public sector performance, the political process, and the impact of social norms, practices and customs. Likewise, the issue of sustainability is addressed not merely in terms of the natural environment, but from the point of view of economic as well as social sustainability, and again in terms of the functioning of markets, institutions, and position occupied by various individuals and groups within these markets and institutions.

A.2. Task Force and Ninth 5-Year Plan

Two bodies were set up by the newly-elected government in 1997 to address the problem of poverty in Pakistan. The Task Force on Poverty Eradication, was commissioned by the Finance Minister, Mr Sartaj Aziz barely three weeks after the government assumed office. It submitted its report in May 1997. A Working Group on Poverty Alleviation was formed in the summer of 1997, and it submitted its draft report in October 1997. Both bodies were
Appendix A

chaired by Dr. Akmal Hussain. There was also some overlap in the membership of the two bodies. The former consisted almost entirely of prominent individuals connected with NGOs, while the latter also included officials from the Planning Commission, Planning and Development departments of provincial governments, and from other federal departments. The two reports are similar, and in some instances almost identical, and will be reviewed jointly.

While the Working Group report is clearly a document of the Government of Pakistan, it can be argued that the Task Force report also enjoys government support, since parts of its agenda have received official endorsement in policy announcements. These documents mark a watershed, being the very first instances (at least over the past two decades) of policy discussion on poverty in Pakistan.

Although both documents refer to broad-based definitions of poverty such as the capability approach of Amartya Sen, and the "reconstruction of the community and a group identity", the main operational emphasis in both the documents is on absolute poverty as understood in terms of deprivation of food and other 'basic' commodities, and therefore on private income or private consumption shortfalls.

The Working Group document reports poverty estimates on the basis of poverty lines calculated using caloric standards. The fact that these poverty lines have been worked out specifically for the Working Group document, and that they have been reproduced in this official report indicates some ownership by the Government of Pakistan. Although the Working Group report also makes use of other time series on poverty (with different estimates of poverty indices), the Working Group's own poverty lines are used in statements relating to policy objectives and plan targets.
The anti-poverty strategies advocated by the Task Force and the Working Group also indicate that they understand poverty primarily in terms of economic well-being. There are, however, three specific sets of points raised in the Task Force report that might be interpreted as concern for a broader definition of poverty. These are discussed further below. For the most part, although the two documents engage in fairly wide-ranging discussion of issues as diverse as macro-management, economic performance, support for small industries, rural infrastructure, employment programmes, targeted food subsidies, and most prominently, micro-credit schemes, the overarching theme is economic well-being, and income-based poverty.

Issues such as basic education and public health are mentioned in passing, but are not regarded as explicit components of an anti-poverty agenda. Similarly, while the issue of power relations and empowerment is discussed in relation to the model of participatory development advocated by the reports (particularly the Task Force document), these issues are not analyzed either in the conceptual parts of the reports or in their policy recommendations. Questions of gender bias, social oppression and inequality receive no attention whatsoever.

The three points in the Task Force report that might, conceivably, be interpreted as indicating concern for a wider definition of poverty are the following: Firstly, the Task Force report (and the Working Group) argue for the setting up of rural support organisations at the district level, and the formation of community organisations at the level of village or locality. The main intervention of these organisations is supposed to be the organisation of micro-credit schemes and other economic activities, but the authors of the two documents envisage these organisations as playing a wider role in the delivery of public services subsequently. Secondly, the Task Force proposes a school feeding programme for rural areas. Although this is conceived primarily as a nutritional support scheme, international and regional experience suggests that such schemes can have a beneficial impact on school participation. Finally, the Task Force
Appendix A

report includes specific proposals for ending child labour. While it is important to make a note of these issues for the record, it ought to be reiterated that the emphasis of the Task Force and the Working Group is overwhelmingly on economic well-being, and income-based definitions of poverty.

A.3. World Bank's Pakistan Poverty Assessment

The World Bank's 'Pakistan Poverty Assessment', published in 1995, can be regarded as one of the key 'donor' documents on poverty in Pakistan.\(^5\) It provides an authoritative account of Pakistan's recent record of economic management and performance, as well as an array of information on poverty-related issues. The report is based upon a large number of specially-commissioned background studies and papers.

Two aspects of poverty have been clearly distinguished in this report: consumption poverty, and human development. Consumption poverty is deprivation measured in terms of private incomes or consumption expenditure. Much of the analysis of consumption poverty is conducted with reference to a poverty line suggested in one of the background studies for the report. Consumption poverty, therefore, is understood in terms of absolute poverty, and corresponds with the indicators for economic well-being used in the White Paper. The empirical findings presented in the report are based upon the analysis of household budget surveys from the mid 1980s to the early 1990s.

The report recommends the institution of an official poverty line by the Government of Pakistan. It might be argued that the Working Group paper goes some distance in that direction.

The other aspect of poverty, viz. human development, is defined in terms of achievements in basic education, and health indicators such as mortality rates and the incidence of under-nutrition. The report argues that Pakistan's failure in terms of human development is particularly conspicuous in the light of the relatively good performance with respect to consumption poverty.
in the 1980s. The main anti-poverty strategy proposed in the report relates to the development of the social sector, specifically in terms of expanding and deepening the Social Action Programme (SAP).

For dealing with consumption poverty, the World Bank report suggests a combination of economic reforms and budgetary transfers. These proposals are based upon an interpretation of Pakistan's recent economic history, in particular an analysis of economic performance and poverty trends over the 1970s and 1980s, studies on sectoral patterns of labour use, and a detailed review of budgetary transfers under various schemes.

Political and institutional issues such as 'community participation' and 'good governance' are discussed in the World Bank report as part of an anti-poverty agenda, though the emphasis here is quite different from the human rights approach advocated in the White Paper. References to such issues in the World Bank report emanate from the instrumental value of participation and governance to service delivery and economic efficiency respectively. The perspective of viewing poverty as exclusion, disempowerment or the denial rights, and therefore poverty elimination as a process of both economic and social change is missing from the World Bank report.

A.4. ‘Human Development in South Asia’

An important contribution to the policy dialogue on poverty-related issues in Pakistan is the report of the Human Development Centre, authored by Dr Mahbub ul Haq, entitled \textit{Human Development in South Asia, 1997}.\textsuperscript{56} The conceptualisation of poverty and development is based mainly to the work done earlier by the author on the Human Development Reports of the UNDP. The report provides a specific regional and country focus to existing indices such as the Human Development Index (HDI) and the Gender-related Development Index (GDI).
The main innovation suggested here is a 'Human Deprivation Measure' (HDM), which is a composite index of the following variables: lack of access to safe water, malnourishment among children aged five years or less, adult illiteracy, child non-participation in schooling, and income poverty. This is defined as 'human poverty' in contrast with the conventional measurement of 'income poverty'.

The objectives of an anti-poverty agenda are defined in the following terms:

"For policy purposes, the relevant concept must increasingly become human poverty, not just income poverty[...] The emphasis must be on building human capabilities and enabling people to stand on their own feet so that they are able to compete in the market-place." (p. 17)

While the widening of the definition of poverty from income-based approaches is in line with the emerging consensus on this issue (and indeed is in line with the approach proposed in the White Paper), empowerment is seen here primarily in terms of access to markets.

The 'composite index' approach advocated in this document is useful for making certain types of inter-country, inter-regional or inter-temporal comparisons. It is not particularly useful, however, in the pursuit of an anti-poverty agenda where each aspect of human well-being and development is accorded intrinsic importance in its own right. Composite indices also detract from the possibility of drawing lessons from divergent performance along different variables.
Appendix B

Poverty Data
B.1. Sources of Data for Poverty Analysis

Most of the empirical work on poverty in Pakistan has been carried out with reference to absolute poverty in the income or consumption spaces (i.e. using the 'economic well-being' definition of poverty). Much of this work is aimed at arriving at statistical estimates of poverty indices. As such, the predominant interest has been with sample surveys that can provide statistical information on income and consumption distributions.

The first set of nationally representative sample surveys which included information that could be used for distributional analysis were carried out in 1960-61 and 1961-62 under the National Sample Survey. This series was renamed the Household Income and Expenditure Survey (HIES) in 1963-64, and these surveys were conducted on a fairly regular basis till the early 1970s. Surveys were carried out in 1963-64, and 1966-67, and then for each consecutive year till 1971-72. After this, there was a gap of eight years and the next survey was conducted in 1979. This was followed by another gap of five years and HIES resumed on an annual basis for three consecutive years between 1984-85 and 1987-88. In 1990-91 the series was renamed yet again as the Household Integrated Economic Survey (conveniently retaining its old acronym HIES), and there have been surveys in 1990-91, and then every year since 1992-93. The 1992-93 HIES is the latest one which has been used in a disaggregated format for the purposes of poverty analysis.

One of the first of these data sets to be made available in its raw computerised format to researchers was the 1979 HIES. The analysis of poverty based on data-sets before this date relies on published aggregated data. The 1979 HIES was not widely available and required a great deal of time and effort in data cleaning. The HIES series from 1984-85 onwards has been more accessible for researchers.
The HIES data-sets are designed to achieve statistical representation at the provincial levels. The sampling frame for the 1979 survey was the 1972 Population Census. The surveys from 1984-85 onwards have been based on the 1981 Population Census. The sample sizes have ranged between 15,000 and 18,000 households, except for the survey in 1990-91, which was based on a smaller sample of around 6,400 households.

HIES questionnaires have detailed information on demographics (i.e. age, gender, relationship to the household head, educational level, and economic status of household members). The surveys until 1987-88 focused mainly on income and expenditure by source. Information on household expenditure, in particular, is based on a narrow breakdown into commodity groups and individual items. Information on sources of income are less detailed, and data on asset ownership is quite limited. The survey in 1990-91 was based upon a much smaller sample than before, but had a much more detailed questionnaire. From 1992-93 the size of the sample was restored (at around 14,600 households) and that of the questionnaire truncated.

Pakistan Household Integrated Survey (PIHS) was conducted in 1991 by the Federal Bureau of Statistics, Islamabad (FBS) and the Population and Human Resources Department of the World Bank. Based on a stratified national sample of around 4,800 households (of which around half were in rural areas), this survey collected data on the economic, demographic and other characteristics of the sample households. This survey provides much greater detail on characteristics of household members, such as their employment and level of education, and on the ownership of economic assets. The PIHS also included information on the nutritional status of children (using anthropometric indicators) and mortality rates (based upon the recall of birth histories of women in the survey). Data on access to basic amenities and public services, such as schools, health centres, clean drinking water, sanitation, etc. were also collected.
While the 1991 PIHS was based on the same sampling frame as the HIES series (i.e. the 1981 Population Census), and was implemented by the same agency (FBS), there were a number important differences, not only in the sample size and the composition of the questionnaire, but also in survey methodology. For example, the PIHS solicited information separately from male and female household members using separate questionnaires. Furthermore, a set of 'community' questionnaires were administered in order to obtain location-specific information on infrastructure.

A new series of the PIHS started in 1995-96, and continued in 1996-97. This differed considerably from the 1991 PIHS in that detailed information on household income and consumption was dropped, though some basic data on income and assets were retained. The size of the sample was considerably expanded to around 14,000 households. The main focus of the new PIHS series is measurement of human development (education, health etc.), and access to a wide range of public services such as schools, health facilities, immunisation, clean drinking water and reproductive health services. The PIHS series is designed as a monitoring survey for the Social Action Programme, which involves government initiatives on education, health, sanitation, rural infrastructure, and water supply. Although some limited information on income is collected in the new PIHS series, this is not as detailed as the HIES, or indeed, the earlier PIHS.

There has been discussion within the Federal Bureau of Statistics on the possible merging of the HIES and PIHS series. These issues, and the details of the recent rounds of the two series are discussed in Jafri (1996b). The merger of these two data series makes a great deal of sense, given that they employ similar (if not identical) sampling criteria, and already have some overlap. From the analytical point of view, merging the two questionnaires can provide a range of new insights, particularly, the relationship between the income, wealth and private consumption of a household, and the 'non-income' well-being of its members. These advantages need to weighed up against the potential costs in terms of the quality of response to large and unwieldy questionnaires.
A one-off survey that was also designed to be statistically representative, and which collected a great deal of information on household demographics and other well-being indicators, is the *Demographic and Health Survey 1990* (DHS). This survey is mainly focused, as the title suggests, on health and demographic issues, particularly on the fertility behaviour of women. It also contains valuable information on immunisation, the incidence of disease, mortality, and utilisation of health facilities, as well as benchmark data on education and school participation. There is some information on access to public services, and selected household assets, but not very detailed information on household income or consumption. The DHS also includes valuable new (though under-utilised) information on a number of issues of sociological interest: e.g. patterns of family relations, reach of mass media, male-female differences in attitudes to family size and composition.

Other less recent surveys that have been used for poverty-related analysis include the *National Nutritional Survey 1985-87*, and a panel survey conducted as part of a study by the International Food Policy Research Institute (IFPRI) in several districts between 1986 and 1989. The former was designed to statistically representative at the provincial level, while the latter is based on selected localities in the sample districts.

### B.2. Sample Biases in HIES and PIHS

Given the predominant focus on statistically representative household surveys in the literature, it is useful to examine some issues in the relevance of these data for poverty analysis with reference to the HIES and PIHS data-sets.

One common complaint about large sample surveys is that they tend to underestimate inequality in the distribution due to sample selection bias. Both the upper and the lower tails of the distribution tend to be poorly captured in these surveys. There are straightforward institutional reasons for the lack of representation of the poorest. The sample is, after all, a sample of *settled*...
households. It purposefully excludes some of the poorest such as the homeless or nomadic people. At the other extreme, most such surveys also tend to under-represent the wealthiest households due to various sampling and non-sampling constraints.

If the aim of the analysis is to compare poverty and inequality across regions, the presence of sample biases that lead to underestimates of inequality is not of critical importance if this bias affects estimates for all regions in the same way. On the other hand, if there are regional biases in the sample, these can affect the validity of the results.

One way of checking for regional sample biases is to compare the regional profiles of indicators that are known to be highly correlated with income or consumption, and for which information is available from independent enumerations. Comparison with census-based data, for example, can be informative.

Table B1 presents three sets of comparisons: literacy rate for females, literacy rate for males, and the incidence of land ownership. Since the surveys and the censuses are separated by a number of years, and because there might be differences in the precise definitions used and the way data are collected, it is quite reasonable to expect the percentages to vary. Regional rankings, however, are likely to be more robust to such variations. The rankings obtained for female literacy between regions are quite similar for the census and the surveys. For male literacy, however, 1987-88 HIES sample appears to be richer than the population in Sindh and lower Punjab, and the 1991 PIHS sample appears to be richer than the population in Sindh. In terms of land ownership the regional rankings in the PIHS correspond exactly with those obtained using the agricultural census. Overall, the evidence for regional sample bias is not conclusive -- out of the three indicators two give consistent rankings for census and survey data.
B.3. Other Limitations for Poverty Analysis

*Regional disaggregation*

Most of the large sample surveys including the HIES and PIHS data-sets are designed to be representative down to the province level. In the case of Punjab, which according to the sampling frame of the 1981 Census accounted for nearly 60 per cent of the total population, sub-provincial disaggregation is possible and has been used in poverty analysis. 61 This level of regional disaggregation, however, is not fine enough for a number of issues related to poverty analysis and policy. In order to obtain statistically acceptable data at finer regional disaggregation (say at the level of District or even Division), sample size would have to be increased substantially.

The issue of sample size for regional disaggregation is of particular importance for distributional analysis. Part of the problem with regional disaggregation has been that analysts have sought to obtain regionally disaggregated estimates of distributional variables (such as poverty indices). Statistically significant estimation of these distributional variables requires relatively large samples, and regional disaggregation can be very costly. There might be other less resource-intensive methods of obtaining finer regional disaggregation of poverty profiles by making use of prior information relating to institutions such as the market for casual labour. It has been observed, for example, that standardised daily wage rates apply for casual labour within localities. It has also been observed that casual wage labour is a relatively low income (but also low entry-cost) activity resorted to by the poorest. Location-specific variations in casual wage rates could provide a useful index of regional variations in the conditions of the poorest. A study of the casual labour market across locations should be able to establish whether such use might actually be made of location-specific wage data. 62
Gender bias and intra-household issues

The HIES and PIHS data-sets, and household-based surveys in general, are not particularly good at capturing intra-household inequality and deprivation. This is, indeed, a general problem with any analysis of poverty that is based on household income or consumption. Although there are innovative econometric techniques to disentangle the effects of gender and other individual characteristics such as age on intra-household allocation of consumption, individual well-being is not easily measured using household level information. There are other problems too: reporting by male household members to male enumerators (this problem has been overcome in the PIHS data by the use of male as well as female enumerators and gender-specific questionnaires); valuation of women's economic activities; limiting the 'economic activity' part of the questionnaire to household members above a cutoff age (in the case of the HIES and PIHS data this cutoff age is 12 years), hence missing out on child labour.

These sources of data are not particularly powerful instruments for the analysis of institutions and processes. A number of assumptions that go into the construction of these data (for instance the implicit valuation of home-production) need to make prior assumptions about well-functioning markets. Similarly, social disadvantages such as those relating to caste, kinship, and ethnicity are not captured well.

Table B1: Sample cross-checks on HIES 1987-88 and PIHS 1991

<table>
<thead>
<tr>
<th></th>
<th>Upper Punjab</th>
<th>Middle Punjab</th>
<th>Lower Punjab</th>
<th>Sindh</th>
<th>Sindh</th>
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<tbody>
<tr>
<td><strong>Literacy rates (10+)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Female</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Census 1981</td>
<td>13.5</td>
<td>10.4</td>
<td>6.4</td>
<td>5.2</td>
<td></td>
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<tr>
<td>HIES 1987-88</td>
<td>19.1</td>
<td>13.5</td>
<td>9.2</td>
<td>4.4</td>
<td></td>
</tr>
<tr>
<td>PBS 1991</td>
<td>16.0</td>
<td>16.7</td>
<td>11.4</td>
<td>9.0</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Census 1981</td>
<td>40.9</td>
<td>30.4</td>
<td>24.1</td>
<td>24.7</td>
<td></td>
</tr>
<tr>
<td>HIES 1987-88</td>
<td>55.7</td>
<td>40.6</td>
<td>38.2</td>
<td>43.7</td>
<td></td>
</tr>
<tr>
<td>PBS 1991</td>
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<td>46.4</td>
<td>32.5</td>
<td>44.9</td>
<td></td>
</tr>
<tr>
<td><strong>Proportion of land owning rural households</strong></td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Agricultural Census 1980</td>
<td>73.3</td>
<td>50.2</td>
<td>57.7</td>
<td>41.1</td>
<td></td>
</tr>
<tr>
<td>PIHS 1991</td>
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<td>43.6</td>
<td>47.3</td>
<td>32.3</td>
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</tbody>
</table>

Source: Table 5, Gazdar (forthcoming).
Appendix C

Methodology of Poverty Measurement

Within the conventional income-based (or economic well-being) approach, there has been a great deal of disagreement over empirical methodology in Pakistan. These methodological disagreements have been responsible for different researchers obtaining diverse results from the same data source. Methodological issues in conventional poverty analysis are examined in some detail in this section.

The importance of the precise methodology used in arriving at poverty estimates can be illustrated with the help of an example. Table C1 shows the different head-count ratios which various authors have obtained all using the same data set, the 1984-85 HIES. The head-counts derived for Pakistan as a whole range from 8 per cent to 45 per cent. Urban-rural breakdowns of poverty ratios are similarly diverse. The head-count ratio for rural areas varies from 20 per cent to 36 per cent, and for urban areas from 19 per cent to 49 per cent.

The most obvious source of discrepancy in these results is the use of different poverty lines. There are also other sources of variation. The poverty line used by Havinga (1989), for example, is close to the 'high' poverty line used by Malik (1988) - 214 and 215 rupees respectively. Even so, the two studies report obtaining very different head-count ratios. Closer scrutiny of their respective methodologies reveals that while Havinga was counting the number of 'adults equivalents' Malik was counting the number of households falling below the poverty line.

In fact, poverty analysis using household budget survey data requires decisions and choices regarding a large number of issues including those related to data-cleaning, unit of analysis (households, individuals, or as in the case of Havinga, 1989,
Appendix C

‘adult equivalents’), method of adjustment for cost of living differences and changes, welfare indicator to be used (income, expenditure or consumption) and the choice of poverty line. As the above example illustrates, these decisions have non-trivial consequences for the interpretation of results of poverty measurement exercises.

A more recent example where divergent results are obtained from the same data source is the set of poverty estimates presented in the Working Group report. For HIES 1992-93, the Working Group reports four different estimates for the head-count ratio of poverty, based on four different poverty lines. These estimates range from 22 per cent to 45 per cent -- i.e. a margin of over 100 per cent (Table C2). There is, of course, no harm in having a range of estimates corresponding with different cut-off points and different poverty lines. There does need to be some clarity, however, in what the precise method was, particularly if inferences need to be made about poverty profiles for the purposes of policy. There is considerable variation not only in the level of poverty estimated, but also in the relative ranking of types of area and region. Two out of the four sets of estimates reported in the Working Group report show that the head-count ratio was higher in rural than in urban areas, while the other two show the reverse. Furthermore, the same document reports results from another study, which, using the same HIES data for 1992-93, arrives at yet another set of estimates (Table C2).

C.1. Construction of Poverty Line

Most empirical work on poverty in Pakistan has been carried out with reference to a poverty line or a set of poverty lines. One of the most popular approaches has been to define poverty in terms of the ability of a household or individual to attain a certain level of calorie intake. Although 'fixing' a unique poverty line does have merit in the political economy of public policy, it is of limited use as an analytical construct, and does not add very much to the conduct of poverty analysis. A
more eclectic approach that involves using a range of poverty lines and focuses on relative poverty rankings of different population groups can be more informative of the nature of income and consumption poverty.

One reason for the continued relevance of the conventional approach is that the results of poverty analysis based on this approach can themselves assume wider political importance. This has been the experience in India where (unlike Pakistan) poverty lines and poverty indices are published in official sources on a regular basis as relevant development indicators. By officially endorsing the poverty line, and by publishing poverty indicators, the Indian government implicitly accepts that poverty alleviation is an important policy objective. Likewise, the official poverty line is often used by anti-poverty activists and organisations as a means of influencing public debate.

Arguments about the construction of poverty lines cannot be ignored, also, because much of the applied work on poverty analysis in Pakistan has been concerned first and foremost with these issues. Moreover, barring a few exceptions, all applied poverty analysis takes caloric standards as the starting point.

The basic idea behind caloric approaches is that the poverty line (in the income or consumption spaces) needs to be set with reference to minimum recommended standards of calorie intake. It is assumed that there is a stable functional relationship between income or consumption and calorie intake. The recommended caloric requirements for healthy living are derived from clinical nutritional tests under controlled conditions. The poverty line is simply that level of income or total consumption expenditure which is consistent with achieving the recommended daily intake of calories. The popularity of the calorie-based approach rests on its apparent scientificity, and the ease of interpretation. Neither of these
two suppositions, however, turn out to be durable under scrutiny.

While it is true that clinical nutritional tests lie behind the recommended calorie standards, on which poverty lines are then based, the interpretation of these norms as immutable basic requirements is open to question. Nutritional tests are carried out for controlled groups of subjects and under controlled conditions of physical exertion. There is a great deal of inter-personal variation in calorie requirements, as well a great deal of variation in the calorific requirements of a person under different circumstances. The poverty line, on the other hand is a summary benchmark indicator, and poverty analysis is usually carried out using data sources that are unable to provide detailed information about a person's precise physiological condition or quantify her normal level of physical exertion. The possibility of wide inter-personal and inter-temporal variations in minimum caloric requirements is further complicated by the fact that there is no consensus among poverty analysts on which caloric norm to use for constructing poverty lines. Operationally, the norms that have been used vary between 2,000 to 2,550 kcal per day -- a range of over 20 per cent. Even the apparently simple task of assigning minimum calorie norms on the basis of physiological testing rests to a great extent on the exercise of choice and judgement on the part of the analyst.

The mapping of caloric norms onto household incomes or consumption presents another set of problems. The most common method in this regard is based upon the estimation of a calorie-expenditure function. The relationship between total income or expenditure and caloric intake estimated statistically using household budget survey data, which typically include information on the quantities of various food items consumed. The poverty line is then set as that income or expenditure level at which the expected calorie consumption (based on parameter estimates) is just equal to the
recommended caloric norm. Recent exponents of this approach in Pakistan have been Ercelawn (1991) and Malik (1991, 1994). A variation on this approach was suggested by Lanjouw (1994) where the consumption patterns of the poorest groups were used rather than those of the entire sample as in Ercelawn (1991) and Malik (1991, 1994). The basic idea here is that the consumption patterns of the sample itself are used to determine the level of total expenditure which is consistent with achieving the caloric norms.

Calorie consumption depends, however, on a whole range of variables and not simply on household purchasing power. For any given level of income, for example, a household whose members are involved in relatively arduous physical labour is likely have a higher consumption of calories compared to a similar household whose members have relatively sedate work or leisure activities. A poverty line which is based upon the statistical relationship between calorie consumption and household expenditure is a rough average over households made of individuals of very differing physiologies and with very different rates of expending energy. To interpret such a poverty line as marking off potentially well-nourished individuals from potentially malnourished ones would require extremely stringent and untenable assumptions about the distribution of these other attributes.

Even seemingly 'objective' ways of arriving at poverty lines, therefore, are fraught with a large number of 'subjective' choices and decisions such as: which caloric norm to use? whether to set the poverty lines according to the consumption pattern of the entire sample or a subset of it? and, how precisely to map calories to expenditure or income?

As noted above, there are few exceptions to calorie-based approaches to the construction of poverty lines. These exceptions (including Gazdar, Howes and Zaidi, 1994a, Mushtaq Ahmad, 1993) are based on the argument that the poverty line could be interpreted as a 'minimum' or 'basic'
The precise composition and value of the basic needs bundle depends on the specific economic and social context under considerations. One way of thinking about the poverty line is that it represents the minimum level of income or consumption below which a person ought to be regarded as socially disadvantaged. Ahmad (1993) arrives at this minimal bundle on the basis of a consultative exercise involving not only policy makers but also members of the public. His results were used by GHZ 1994a.

These approaches have been criticised on the grounds that they are arbitrary and 'subjective'. This criticism reveals some confusion about the status of methods such as consultative exercises and opinion surveys. The main difference between such methods and statistical methods that estimate parameters from survey data is that the latter are based upon revealed behaviour while the former are based on express evaluations of social states. Surveys that collect data on opinions about social states are neither more nor less subjective than those which collect data on actual consumption. They are, in fact, attempting to answer different questions.

Any particular method for the derivation of a poverty line involves a number of choices and judgements that need to be made by the analyst or the policy maker. The quest of a 'pure' scientific or 'objective' poverty line, therefore, is likely to remain unfulfilled. Rather than expend further intellectual resources in this quest, it would be better if researchers chose from existing poverty lines in order to take analysis further, or worked with a range of poverty lines without worrying too much about their pedigree. Alternatively, the government ought to endorse a benchmark poverty line for a particular year, and endorse such a poverty line by incorporating it explicitly in policy objectives.

The contrast between poverty analysis in India and Pakistan is quite interesting in this regard. The original rural poverty line
in India was, indeed, referenced around a daily intake of 2100 calories per person, while the urban line was based originally on 1900 calories per day. This was done for 1960-61 in an influential study by Dandekar and Rath.\textsuperscript{75} The difference between the rural and urban calorific norms was explained in terms of the higher energy needs of the rural population due to their more physically exacting work and lifestyles, but no reasons were given for the precise difference of 200 calories per day between the two groups.\textsuperscript{76} In the subsequent updating and adjustment of the Indian poverty line, however, the reference to calorie standards was dropped, and standard price indices were used. Although the poverty line in use currently is based on a poverty line that was first estimated with calorific standards in mind, no attempt has been made to refer the subsequent updating of this poverty line to calorific standards.

For purposes of research into poverty as well as for policy matters the precise origin of a poverty line does not really matter, since any poverty line would be based at least partly on normative criteria, and there is some measure of arbitrariness in its choice. What is important is not how the benchmark poverty line was specified in the first place, but the methods which are used for updating it over time, across regions, and for rural and urban areas.

C.2. Inter-Regional and Inter-Temporal Adjustments

The issue of adjusting a benchmark poverty line for different regions and over time -- even a poverty line that might have been chosen completely arbitrarily in the first place -- is an important one. There is a case, of course, for updating the initial bundle from time to time in order to reflect long-term changes in the economy and in consumption patterns. The poverty line is, after all, to a great extent, socially constructed. In other words, the socially acceptable minimum standard of living can and does change as economic conditions change. Updating the poverty line for medium to long term changes in economic conditions, individual preferences and social norms, however, is not the same as adjusting the poverty line to account for changes in the
cost of living over time, or to account for differences in the cost of living between different regions.

If the poverty line is regarded as the value of a minimum bundle, the appropriate method for adjusting it for different regions and for different time periods is the same as the method for making such adjustments for any other value that is expressed in money terms -- i.e a price index. The main issue is to find the appropriate adjustment factors for differences in the cost of living (or the cost of acquiring that bundle), and applying these adjustment factors to the benchmark poverty line.

While there is a fair degree of agreement over this method, some practitioners, particularly those who have favoured calorie-based approaches to the construction of the poverty line, have taken a different route. Ercelawn (1991), for example, estimates separate calorie-expenditure functions for each province and, indeed, for cities, towns and rural areas respectively within each province. Malik (1991, 1994) conducts a similar exercise with the rural sample, and simply uses the poverty line thus obtained for the entire sample. This method requires a brief comment, because it is popular among some poverty analysts and because its use is premised on the unfounded presumption of scientific objectivity.

**Urban-rural differentials**

The problems with interpreting any calorie-based poverty line as marking off actual or potential malnourished households or individuals from the rest were discussed above. Using estimates of separate calorie-consumption functions in order to make regional and temporal adjustments to the benchmark poverty line is fraught with even greater difficulties. One serious problem has been encountered in the separate estimation of calorie-consumption functions in rural and urban areas, and the use of a unique caloric norm for the type of area. If the rural sample includes a much higher concentration of workers involved in physically demanding labour (as is, indeed, plausible) and if the rural lifestyle, in general, requires
a greater consumption of calories than the urban lifestyle (due to the need to walk longer distances to fetch water, for example), then for any given level of income, the rural households are likely to consume more calories, on average, than their urban counterparts. Estimating the poverty line from a calorie-expenditure function using a unique caloric standard for the urban and rural sub-samples would have the effect of over-estimating the urban poverty line in comparison with the rural.

This, indeed, has been the case for studies that make rural-urban adjustments on the basis of separate calorie-consumption functions for each type of area. See Ercelawn (1991). Another recent study that comes up with much higher estimates for poverty indices in urban areas compared to rural areas is Jafri and Khattak (1995). This study too, uses a unique caloric standard (in spite of the claim that it uses the 'basic needs approach') for urban and rural areas in order to obtain the poverty lines. These results, based on flawed methodology (see also Jafri, 1996a), give an entirely misleading picture of urban-rural poverty differentials.

One way around such estimation biases has been to designate different caloric standards for urban and rural areas. It is not clear, however, as to what the precise difference between the caloric standards for urban and rural areas ought to be. Often the difference is based on a judgement on the part of the analyst in order to produce plausible rural and urban estimates of relative poverty. In the case of poverty line adjustments also, therefore, the calorific approach has the appearance of 'objectivity' while relying, ultimately, on reasonable but subjective judgement in order to arrive at results that are plausible.

C.3. Welfare Indicator: Income or Consumption?

Thus far, in the discussion of poverty lines and methods for making adjustments for regional and temporal variations, the indicator of welfare has not received attention. Income,
expenditure and consumption have been mentioned interchangeably as possible welfare indicators. Household budget data do, typically, allow for choice between various definitions of income, expenditure and consumption.  

The implications of the choice of welfare indicator require attention for the sake of comparability with previous studies of poverty where choices of this nature have been made. There are, broadly speaking, two sets of choices that have been made in earlier work. Firstly, whether to use income or consumption as the relevant welfare indicator, and secondly, in the case of consumption, which heads of expenditure to include in ranking households for poverty analysis.

On the first issue, the preference in studies of poverty in Pakistan has been for consumption rather than income as the welfare indicator. This choice has been guided by a number of considerations. It has been argued, for example, that the real variable of interest is neither current income nor current consumption but some measure of permanent income, and since current consumption is more likely to reflect permanent income it is considered preferable over current income which is subject to wider variability and shock. In the event of a negative income shock, for example, households might be able to maintain their consumption levels in accordance with their realistic expectations about future flows of income by borrowing or by dissaving. Another argument draws attention to the fact that in an economy like Pakistan's where most of the economically active population are not in salaried remuneration but are either self-employed or work in family farms or other family businesses, the reporting of consumption expenditures is likely to be more reliable than that of incomes.

Further questions arise with respect to the precise definition of aggregate consumption. For many expenditure items (such as food and fuel), there is no doubt that they should count towards total consumption. But others are more controversial. For instance,
should expenditure on taxes or on durable items be counted as part of consumption expenditure or not? The approach followed in the empirical analysis presented in section 6 below falls in line with Gazdar, Howes and Zaidi (1994a), in that taxes and durable items are excluded. In addition, housing expenditure is also excluded. This is done because a large proportion of rural households own their dwellings, and for these households, housing expenditure is imputed on the basis of a fairly thin sample.

C.4. Individuals, Households and Equivalence Scales

The final set of methodological issues discussed here refer to the unit of analysis and the method of obtaining rankings. There are, broadly speaking, two questions of interest here: who to count, and how to rank? On the first question, or ‘who to count’, it can be stated from the outset that the relevant unit of interest is the individual and not the household or any other composite. This needs to be reiterated because a number of recent studies on Pakistan report their results in terms of the number or proportion of poor households (or even adult equivalents) rather than individuals in the population.

Since the basic unit of observation for many of the relevant variables in a household budget data-set is, indeed, the household, the main non-trivial issue is: what are the criteria that need to be used in order to rank households for the purposes of poverty analysis? The head-count ratio of poverty, for example, counts the number of individuals who reside in households whose income or consumption is below the poverty line. In order to do this households need to be ranked by their income or consumption. Since households vary from one another not only in terms of their income or consumption, but also in terms of their size and composition, the precise ranking depends on the method by which household income or consumption are adjusted for size and composition. A common practice is to divide household income or consumption by the number of household members and rank households according to per capita income or expenditure.
Studies based on grouped aggregated data have relied on the rankings of households by income group published in tabular form. Published tables for the HIES use household income rather than, say per capita income, for grouping households. This practice is not particularly helpful for the construction of poverty indices, and contrasts with the practice in other countries where published tables provide groupings on the basis of per capita income or expenditure. Studies that rely on published income groupings in order to obtain household rankings fail to make any adjustment to household size or composition. A household with ten members and a per capita income of 1,000 rupees would appear in the same income class as a one-person household with an income of 10,000 rupees. The results of these studies ought, therefore, to be interpreted with caution since they do not correspond with any conventional method of ranking households for poverty analysis.

A common way of accounting for differences in household demographics is to simply divide household income or consumption by the total number of household members (i.e. work in per capita terms). While this avoids some of the extreme distortions in ranking due to household size, it does not make any adjustment for household composition. Two households with the same total income or consumption and with the same number of members, for example, would be given equal welfare ranking, even if one of the households is dominated by adults and the other by children. The lower consumption requirements of children compared with adults are not taken into consideration. Various equivalence scales have been used in the literature in Pakistan. Finally, an issue that has received some attention in the analysis of household budget data is that of scale economies. It has been argued that there are scale economies to be realised in consumption or certain goods and services that are, in effect, public goods within the household (say, for example, a water connection). Furthermore, larger household might face lower per capita costs even for goods that are typically privately consumed.
goods (food, for example) because they might be able to obtain lower prices due to high volume purchases.

C.5. Working Group Methodologies

The Working Group report, as mentioned above, suggests four different methodologies for estimating poverty indices. Given that the Working Group report represents the only official attempt at constructing poverty lines, the methodologies suggested in this report deserve further attention. One of the methodologies is described as the 'calorific approach' while the other three are variants on a 'basic needs approach'. It is worth noting that the task for coming up with poverty lines was not taken up as a consultative exercise by the Working Group, but was instead, handed over to the Federal Bureau of Statistics.

The 'calorific' approach is based upon bivariate regression of the caloric value of food consumption on food expenditure. The poverty line is thus defined in terms of food expenditure. This is obtained by inverting the calorie-expenditure function at 2550 calories per adult equivalent in rural areas, and at 2230 calories per adult equivalent in urban areas. The problems with interpreting the parameter estimates of calorie-expenditure functions have been discussed above. The different calorie cut-off points for urban and rural areas are necessary in order to obtain reasonable urban-rural rankings, but are not explained or justified in the report.

The other three approaches to estimating poverty lines are described in the report as 'basic-needs approaches'. In these cases also, however, instead of costing a pre-determined bundle of commodities, the approach taken is to cost the caloric norms of 2550 and 2330 calories per adult equivalent per day in rural and urban areas respectively. To this is added the non-food expenditure of the income group that just about satisfies the caloric norm (on the strength of the assumption that "the income group which consumes more than the cost of the minimum required level of calorific intake will first seek to
satisfy its other basic needs”, 6-7). Such methods, as discussed above, are highly problematic, particularly with respect to making inter-regional and inter-temporal adjustments.

Although the Working Group has moved in the right direction by setting out poverty lines, and incorporating these into policy objectives, more careful consideration is required for both, arriving at a benchmark poverty line, and for adjusting that line to differences in cost of living between regions, urban and rural areas, and over time. A way forward might be to initiate wider public discussion over what the minimal social norm ought to be, and to seek expert advice on how this norm might be translated, using consistent methodology, into money terms across regions and over time.

C.6.  Consistent Time Series

The construction of poverty trends in Pakistan using household budget data has been dogged by problems of consistency in data series and estimation method. The use of published aggregated data is problematic in the case of Pakistan since published data are ranked and grouped by total household income or expenditure rather than income or expenditure corrected for household size and composition. The poverty indices obtained from using such rankings cannot be interpreted in the same way as standard poverty indices.

Some of the recent work on poverty trends does, unfortunately, make use of grouped aggregated data in order to construct time trends. A notable example is the study by Amjad and Kemal (1997) which claims to compile a consistent time series on poverty data dating from the early 1963-64 till 1992-93. While the authors do produce a consistent time series, the indicator of poverty obtained in this series is based on a ranking of households by total income, rather than per capita, or adult equivalent income. The consequence is that the series reported in Amjad and Kemal (1997), and cited in the reports of the Task Force and the Working Group does not conform
with the conventional method of constructing poverty indices. Although the authors go on to test some interesting hypotheses regarding poverty trends, it is difficult to comment on their findings, given the reliance on a non-standard poverty index.

The 'Human Development in South Asia' report also provides estimates of time trends in absolute poverty (Table 1.6, Haq, 1997), though the methodological or empirical bases of these estimates are not clear. The table, which reports a quinquennial series starting in 1960 and going up to 1995, is taken from Burki (1996), where no citation about the source of the data is given. It is likely that the series is based on interpolations carried out using existing time series (based again on grouped aggregated data), since for a number of years reported, there was no household survey which could have provided distributional information.

Table C1: Head-count ratios, HIES 1984-85

<table>
<thead>
<tr>
<th>Source</th>
<th>Pakistan</th>
<th>Rural</th>
<th>Urban</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ahmad &amp; Ludlow (1989), individuals</td>
<td>low</td>
<td>8 (126)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>31 (174)</td>
<td></td>
</tr>
<tr>
<td>Havinga et al (1989), adult equivalents</td>
<td>low</td>
<td>31 (171)</td>
<td>20 (144)</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>45 (199)</td>
<td>36 (171)</td>
</tr>
<tr>
<td>Malik, M.H (1988), households</td>
<td>low</td>
<td>24 (159)</td>
<td>19 (185)</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>29 (172)</td>
<td>26 (207)</td>
</tr>
</tbody>
</table>

Source: Gazdar, Howes and Zaidi (1994).
Notes: Head-count ratios are the percentage of individuals, adult equivalents or households below the poverty line. The description of the poverty line (low or high) refers to its designation by the author concerned. Figures in parenthesis refer to the poverty line (rupees per capita per month).

Table C2: Head-count ratios, HIES 1992-93

<table>
<thead>
<tr>
<th>Source</th>
<th>Pakistan</th>
<th>Rural</th>
<th>Urban</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working Group estimates</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food poverty, caloric</td>
<td>22.3</td>
<td>26.2</td>
<td>21.7</td>
</tr>
<tr>
<td>Income poverty, basic needs</td>
<td>45.4</td>
<td>49.1</td>
<td>41.8</td>
</tr>
<tr>
<td>Consumption poverty, basic needs</td>
<td>39.5</td>
<td>37.5</td>
<td>41.0</td>
</tr>
<tr>
<td>Real poverty, basic needs</td>
<td>33.1</td>
<td>32.0</td>
<td>34.4</td>
</tr>
<tr>
<td>Amjad and Kemal (1997)</td>
<td>22.4</td>
<td>23.4</td>
<td>15.5</td>
</tr>
</tbody>
</table>

Source: Government of Pakistan (1997c), Tables 1-4, 6.
Notes: Head-count ratios are the percentage of individuals below the poverty line.
### Table C3: HIES-based analyses of poverty in Pakistan in the 1980s and 90s: a literature survey

<table>
<thead>
<tr>
<th>Author</th>
<th>Data Set</th>
<th>Def'n of H'hold</th>
<th>Def'n of Con'n</th>
<th>Equivalence Scale</th>
<th>Individual or H'holds poor?</th>
<th>Regional decomposition</th>
<th>Calculation of poverty line (Z&lt;sub&gt;P&lt;/sub&gt;)</th>
<th>Method of calculating poverty line</th>
<th>Adjustments for urban/rural/ provincial differences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malik, M. (1988)</td>
<td>HIES 84-85</td>
<td>HIES def'n</td>
<td>HIES def'n</td>
<td>Calorific</td>
<td>Both</td>
<td>Urban and rural</td>
<td>2550 per adult equivalent (a.e.)</td>
<td>Cost of acquiring minimum calories using food weight of poorest groups gives food Z&lt;sub&gt;P&lt;/sub&gt;. This is scaled up by average non-food share of same poorest groups to give total Z&lt;sub&gt;P&lt;/sub&gt;.</td>
<td>Z&lt;sub&gt;P&lt;/sub&gt; calculated as described for urban and rural areas.</td>
</tr>
<tr>
<td>Ahmad &amp; Ludlow (1989);</td>
<td>HIES 84-85</td>
<td>HIES def'n</td>
<td>HIES def'n</td>
<td>Per capita</td>
<td>Both</td>
<td>Urban and rural</td>
<td>n.a.</td>
<td>Four arbitrarily-chosen Z&lt;sub&gt;P&lt;/sub&gt;'s for 79; updated to 84-85 using GDP deflator. For each Z&lt;sub&gt;P&lt;/sub&gt;, 10 Rs added for urban areas.</td>
<td>Z&lt;sub&gt;P&lt;/sub&gt; calculated as described for urban and rural areas.</td>
</tr>
<tr>
<td>Havinga et al. (1989)</td>
<td>HIES 84-85</td>
<td>HIES def'n</td>
<td>HIES def'n</td>
<td>Wages</td>
<td>Individuals, H'holds and a/e's</td>
<td>Urban and rural</td>
<td>Low: 1500-2000 per a.e.; High: 2000-2550 per a.e.</td>
<td>Average consumption expenditure in two calorie ranges (low and high)</td>
<td>Z&lt;sub&gt;P&lt;/sub&gt; calculated as described for urban, rural and combined.</td>
</tr>
<tr>
<td>Ercelawn (1991)</td>
<td>HIES 84-85</td>
<td>HIES def'n</td>
<td>HIES def'n</td>
<td>Calorific</td>
<td>H'holds</td>
<td>4 provinces, each rural and urban (urban also sub-divided into cities and towns)</td>
<td>2550 per a.e.</td>
<td>Calorie-consumption function (CCF): regression of calorific intake against total expenditure to find expenditure level compatible with minimum required calorific intake. Estimates CCF using: no dummies; city/town/rural dummies. city/town/rural/provincial dummies. Preference is for second. Also gives urban Z&lt;sub&gt;P&lt;/sub&gt; adjusting rural Z&lt;sub&gt;P&lt;/sub&gt; for price differences only.</td>
<td>Z&lt;sub&gt;P&lt;/sub&gt; calculated as described for urban and rural areas.</td>
</tr>
<tr>
<td>Mahmood et al. (1991)</td>
<td>HIES 84-85</td>
<td>HIES def'n</td>
<td>HIES def'n</td>
<td>Calorific</td>
<td>H'holds</td>
<td>Urban and rural</td>
<td>n.a.</td>
<td>CCF: regressing calories on food expenditure only</td>
<td>Z&lt;sub&gt;P&lt;/sub&gt; calculated as described for urban and rural areas.</td>
</tr>
<tr>
<td>Author(s)</td>
<td>HIES</td>
<td>Def'n</td>
<td>Scales</td>
<td>Household Size</td>
<td>Per provincial rural poverty lines</td>
<td>Estimates of basic bundle of goods (basic needs approach)</td>
<td>Province-specific base year ( Z )’s equal to Ercelawn’s province-specific rural poverty lines and province-specific deflators</td>
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<tr>
<td>Malik, S. (1991)</td>
<td>HIES</td>
<td>As per</td>
<td>GoP scales</td>
<td>Punjab (with 5 geoclimatic divisions, each rural/urban); Sindh (with 2 geoclimatic divisions, each rural/urban); NWFP and Balochistan (each rural/urban)</td>
<td>2550 per a.e.</td>
<td>Takes Ercelawn’s 84-85 rural ( Z )’s overall ( Z ) and updates for inflation</td>
<td></td>
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<tr>
<td></td>
<td>84-85</td>
<td>Ercelawn (1991)</td>
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<td>87-88</td>
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</tr>
<tr>
<td>Ahmad (1993)</td>
<td>HIES</td>
<td>HIES def'n</td>
<td>HIES def'n</td>
<td>5 child (&lt;18y) + 3 adult</td>
<td>Urban and rural</td>
<td>Estimates cost of basic bundle of goods (basic needs approach)</td>
<td>Cost of basic bundle allowed to vary between rural and urban areas.</td>
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<td></td>
<td>87-88</td>
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<tr>
<td>Malik, S. (1994)</td>
<td>HIES</td>
<td>As per</td>
<td>GoP scales</td>
<td>4 provinces, each urban and rural</td>
<td>2550 per a.e.</td>
<td>Estimates CCF in each year using dummies for provinces.</td>
<td></td>
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<tr>
<td></td>
<td>84-85</td>
<td>Ercelawn (1991)</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td></td>
<td>87-88</td>
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</tr>
<tr>
<td>Gazdar, Howes and Zaidi (1994a)</td>
<td>HIES</td>
<td>As per</td>
<td>GoP scales</td>
<td>4 provinces, each urban and rural; rural Punjab further divided into north and south</td>
<td>n.a.</td>
<td>Modification of Ahmad (1993) Basic bundle adjusted for purchasing power parities</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>84-85</td>
<td>Ercelawn (1991)</td>
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<td>90-91</td>
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</tr>
</tbody>
</table>

**Source:** Table 2.2, Gazdar, Howes and Zaidi (1994a), with slight modifications.

**Notes:**
1. Ercelawn (1991) excludes some 1,000 households to calculate his poverty line. However, his exclusions for the actual poverty analysis are fewer, though not actually specified (see p.13).
2. In some cases, where choices were not specified (‘Unsp.’), we assumed the relevant convention used in similar studies had been followed.
3. All authors except for Ahmad and Ludlow (1989) and Ahmad and Alison (1993) use grossing up weights (expansion factors) to make the samples nationally representative.
**Table C4:** Amjad and Kemal Series: Head Count Ratio 1963-64 to 1992-93

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>Rural</th>
<th>Urban</th>
</tr>
</thead>
<tbody>
<tr>
<td>1963-64</td>
<td>40.2</td>
<td>38.9</td>
<td>44.5</td>
</tr>
<tr>
<td>1966-67</td>
<td>44.5</td>
<td>45.6</td>
<td>41.0</td>
</tr>
<tr>
<td>1969-70</td>
<td>46.5</td>
<td>49.1</td>
<td>38.8</td>
</tr>
<tr>
<td>1979</td>
<td>30.7</td>
<td>32.5</td>
<td>25.9</td>
</tr>
<tr>
<td>1984-85</td>
<td>24.5</td>
<td>25.9</td>
<td>21.2</td>
</tr>
<tr>
<td>1987-88</td>
<td>17.3</td>
<td>18.3</td>
<td>15.0</td>
</tr>
<tr>
<td>1990-91</td>
<td>22.1</td>
<td>23.6</td>
<td>18.6</td>
</tr>
<tr>
<td>1992-93</td>
<td>22.4</td>
<td>23.4</td>
<td>15.5</td>
</tr>
</tbody>
</table>

*Source: Amjad and Kemal (1997).*
Endnotes
1. This monograph is based on a report which was submitted in April 1998, and includes the material available till that date.
3. Refer to Appendix B for a detailed review.
4. Refer to Appendix C for a detailed review of methodological issues in the measurement of poverty in Pakistan.
6. See, for example, Burki (1996), World Bank (1995) and studies cited there.
7. This does not imply, of course, that agriculture has performed according to potential or that there are not serious problems in this sector. More importantly, from the point of view of poverty trends, however, is the issue of labour absorption in this sector. This is discussed further below.
10. This is based on Gazdar, Howes and Zaidi (1994a), referred to, henceforth, as GHZ 1994a. This time series is also reported in World Bank (1995).
11. Problems with making poverty line adjustments in this way are discussed in Appendix C.
12. See, for example, Gazdar, Howes and Zaidi (1994b).
13. Urban wages are calculated as the simple average of wages in Karachi and Lahore.
14. These trends, estimated from published official data on wages and prices, appear to be at odds with the findings of Chaudhry and Chaudhry (1992) who report that agricultural wages grew at over 10 per cent per year in real terms in the 1980s. Since detailed information was not available on Chaudhry and Chaudhry's (1992) data source it was not possible to account for this discrepancy.
15. Working Group report.
16. Other studies based on earlier data sources which make this claim included Ercelawn (1991).
17. Some care is needed, however, in interpreting rural-urban migration as simply augmenting the problem of urban poverty. People who are able to migrate from a particular rural area, are those who are, ceteris paribus, relatively better off than their non-migrating rural
neighbours in the first place. Migration requires endowments of both human as well as physical capital.

18. The sampling frame of all the household surveys to date is the 1981 Population Census, in which urban areas are defined as "all Municipalities, Civil Lines, Cantonments and any other area inhabited by not less than 5,000 persons and consisting of a continuous collection of houses". Pakistan Statistical Yearbook 1992-93, Explanatory Note 2.7.

19. These points are particularly important to keep in mind given that 'anti-urban' and 'anti-rural' slogans have been used alternatively with increasing frequency for various political mobilisations. Political divisions of this nature can have the effect of concealing intra-urban and intra-rural inequalities, and thus undermine any national anti-poverty agenda.

20. Provinces are divided into administrative divisions, and these are further divided into districts. The regions chosen for this study refer to district and division boundaries as they were in the early 1980s.

21. The poverty lines are, respectively, 203 rupees per person per month in 1987-88, and 280 rupees per person per month in 1991. Both figures are in current terms.

22. In GHZ (1994a), for example, where for 1990-91, HIES data rather than PIHS data are used, the poverty rankings of both urban and rural NWFP actually worsened.


24. See, for example, Ahsan (1997).

25. Agricultural output data for 1986 are used here for comparability with household-level data which date from 1987-88.

26. These indices were calculated by the author from Population Census 1981 data as reported in Pakistan Statistical Yearbook, various.

27. Table 3.12, FBS (1997).

28. Share-tenancy has been the traditional form of land tenure relations between landlords and the landless.

29. These figures are based on successive Agricultural Census results, reported in Economic Survey 1996-97.

30. So much so, that the term commonly associated with this process is 'eviction'. See, for example, Hussain (1980).

31. This result also provides some support for the high priority that a number of anti-poverty interventions have accorded to credit and saving schemes for the poor.


33. Another recent study that comes to similar conclusions about informal credit markets is the survey of professional money-lenders
in rural Sindh (see Smith and Stockbridge, 1997, and Stockbridge et al, 1997). It is worth noting that nearly all such studies stress the 'insurance' as well as the 'consumption smoothing' role of informal credit systems, yet nearly all micro-credit interventions limit their scope to 'asset creation'.

34. The Beall et al (1993) report also includes a case study on this group of workers.

35. Observations about labour systems in brick kilns are based upon unpublished field work conducted by the author in five districts of Punjab in June 1997.

36. The creeping erosion of provincial fiscal control is also inconsistent with the widely-recognised need for decentralisation.

37. See, for example, Burki (1996), World Bank (1995) and studies cited there.

38. It is not clear in the report that these recommendations are based on any background study or analysis. The exception is the discussion on child labour which does provide a number of extremely useful insights based on past work. There remain unanswered questions about some crucial aspects of the problem: what are the factors that lead to the demand for and a supply of child labour? what is its overall incidence and its incidence in hazardous industries? what is the relationship between child labour and schooling?

39. The district is basic unit of administration in Pakistan. There over 115 districts under 23 divisions in the four provinces.

40. For a recent study of the role of RSOs (namely the NRSP) in the implementation of the rural water supply component of SAP, see Khan (1997).

41. For a review of arguments see Johnson and Rogaly (1997).


43. It is not clear, for example, what role the Planning Commission would play in this process.

44. See World Bank (1995) and section 2.3 above.

45. According to PIHS 1995-96 (FBS, 1997), interventions in water supply, and in immunisation have been relatively successful, while those in other aspects of health care and in schooling have had indifferent results.

46. The education strategy, for example, has been thought out in some detail (see World Bank, 1996, 1997). This involves setting up School Management Committees made up of teachers and local parents.

47. These have been reviewed in detail in World Bank (1995).

48. This goes beyond the standard issue of asymmetrical information.
49. It is worth noting, however, that a number of the original participants dissociated themselves from the final reports amidst complaints that these reports did not adequately represent their views and contributions.

50. The Advocacy and Development Network (ADN), for example, which constitutes a coalition of a number of development NGOs has held public discussions of these documents. These documents have also been the subject of detailed discussion at a 'National Convention on Poverty', held in Multan in December 1997.

51. This poverty line is based on 1 US dollar per day in 1985 prices and converted using purchasing power parities.

52. In fact, these are among the very few documents associated with the Government of Pakistan in the recent years where any mention of poverty is made. There are some earlier papers, such as Ahmad (1993), that do make suggestions about poverty estimation.

53. The Working Group suggests four alternative poverty lines. The methodology of obtaining these poverty lines and the resulting poverty indicators are discussed in detail in Appendix C below.

54. This series, due to Amjad and Kemal (1997), is also used in the Task Force report, and is discussed below in Appendix C.


57. The PIHS 1991 was part of the Living Standards Measurement Surveys series of the World Bank.

58. PIHS 1991, for example, included detailed questions about many aspects of well-being as well as details of economic activities. A number of important variables, however, could not be used due to poor data quality. Part of the problem was, reportedly, the length of the questionnaire.

59. The Demographic and Health Survey 1990 was designed and implemented by Macro International, for the East-West Center, Honolulu, as part of a programme of surveys across the developing world.


61. See Malik (1991), Gazdar, Howes and Zaidi (1994b), and Gazdar (forthcoming), for example.
62. It might be added that studies of the casual rural labour markets in neighbouring countries tend to support this view. See, for example, Drèze et al (1997) and the literature cited there.
63. The head-count ratio is a widely used poverty statistic, and will be referred to extensively in the present study. It is the proportion of the total population with incomes less than a designated poverty.
64. The head-count ratio measures population below the poverty line as a proportion of the total population.
66. See Atkinson (1993), for example, for a discussion of the possible impact of instituting a poverty line on public policy. The World Bank (1995) poverty assessment also recommends the institution of a poverty line in Pakistan.
67. The Working Group report provides one of the first instances of official endorsement of a set of poverty lines for Pakistan.
68. See Table C.3.
69. In the case of Pakistan, the caloric standards that have been in wide use are based on WHO norms. See Ercélawn (1991) for details.
70. For detailed arguments about the difficulties with such interpretation, see Osmani (1993). See also Subramanian and Deaton (1996) on the implausibility of a nutrition-based poverty indicator even in relatively poor countries.
71. Food quantities can be readily converted into caloric values using the relevant conversion tables.
74. In fact, Ali (1995), who is also interested in the basic needs approach, but regards the Ahmad (1993) method as being 'subjective', uses household budget data to estimate linear expenditure systems. He posits that the intercept term in relationship between overall consumption and the consumption of any particular commodity (or group of commodities) can be interpreted as the basic need parameter. The use of linear expenditure systems, however, imposes unnecessary and untested extra conditions on the nature of the utility function, and is in itself open to the charge of 'subjectivism'.
75. Dandekar and Rath (1971).
76. See for example, EPW Research Foundation (1993) for a comprehensive summary of the Indian literature on the issue, and Government of India (1993) for the official view of the process. It
should be noted that no attempt has been to update the poverty line with reference to nutritional criteria.

77. This, indeed, was the strategy for the estimation of the original Indian poverty line (see EPW Research Foundation, 1993).

78. The identification of the poor, and poverty measurement are sensitive to the choice of indicator. See, for example, Glewwe and van der Gaag (1990).

79. These issues are reviewed in Deaton (1995).


81. See Naseem (1973, 1977) for studies where the ranking is the one based upon total household income. More recent examples are to be found in Kemal and Mahmood (1997), and Amjad and Kemal (1997). Distributional data reported in the Economic Survey (Government of Pakistan, 1997a, pp 6-7) appears, similarly, to be based on ranking households by household income, rather than per capita income.

82. Published data from the Indian National Sample Survey data is a case in point. These data can be, and have been, used for reconstructing the distribution of per capita expenditure (see Datt and Ravallion, 1995).

83. Both Naseem (1973) and Kemal and Mahmood (1997) who rely on published grouped data from various HIESs respectively, find that 'poorer' household are smaller than 'richer' ones. Given that the HIES income groups are based upon total household income regardless of household demographics, this result is more an artefact of the way observations have been grouped than an insight into a useful economic relationship.

84. See Lanjouw and Ravallion (1995) for a review of the theory of household scale economies. The empirical basis of the study was, interestingly, household budget data from Pakistan.

85. This series is reproduced for the record in Table C4.

References


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