Macroeconomic Policies and their Impact on Poverty Alleviation in Pakistan

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The paper provides a consistent time-series of poverty estimates for the period 1963-64 to 1992-93 for both the rural as well as the urban areas, examines the influence of macroeconomic policies on the poverty levels, analyses the impact of Structural Adjustment Programmes on the levels of poverty, and suggests a strategy for poverty alleviation in Pakistan. The paper explores in particular the influence on poverty of such factors as economic growth, agricultural growth, terms of trade for the agriculture sector, industrial production, rate of inflation, employment, wages, remittances, and the tax structure. While the paper cautions that on account of the limited number of observations the results of the study should be interpreted cautiously, the study does suggest that the growth above a threshold level of about 5 percent, increase in employment, and remittances are the most important variables explaining the change in poverty over time. The paper also comes to the conclusion that the policies pursued under the Structural Adjustment Programme have tended to increase the poverty levels mainly because of decline in growth rates, withdrawal of subsidies on agricultural inputs and consumption, decline in employment, increase in indirect taxes, and decline in public expenditure on social services. The paper also outlines a strategy for poverty eradication and argues that besides the safety nets, the employment programmes, as well as promotion of informal sector enterprises, are essential.

INTRODUCTION

For those seeking to explore the relationship between economic growth and poverty alleviation, Pakistan makes a fascinating case-study. As a low-income developing country, Pakistan has witnessed, over the last three decades, periods of high economic growth accompanied with increasing poverty levels, periods of low growth, and reductions in poverty levels, as well as periods in which economic growth has had a positive impact on poverty alleviation. There have also been significant differences in poverty levels between rural and urban areas. An important part of the explanation for the differential impact of economic growth on poverty has to be found in the basic structural characteristics of the economy and the way in which this structure has

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changed over time. Since economic policies play an important role in shaping changes in the economic structure and in the resulting growth process, an important part of the explanation must also be found in the economic policy regimes which were dominant during these different time periods.

The main aim of this study is to identify those economic policies, especially at the macro level, which can play an important part in ensuring that the process of economic growth and development translates itself into real improvements in peoples' lives—not just in reducing poverty as measured in meeting the minimum nutritional needs but also in ensuring adequate access to education and health services so as to combat early mortality, high rate of disease, and very high levels of illiteracy. Indeed, it has been the very slow progress in these latter areas which has stood in sharp contrast to Pakistan's otherwise respectable growth performance. The slow progress in improvements in education levels, especially of women, and the high infant and child mortality rates, reflected in the very high rate of population growth, has hindered the achievement of a higher sustained rate of growth of per capita income and of a much faster reduction in nutritional poverty levels. Pakistan's economic performance in fighting poverty cannot, therefore, be divorced from its meagre efforts, so far, at improving the overall human development indicators, even though a more concerted attempt is now being made to improve the situation.

Economic policies which can have a favourable impact on poverty alleviation, both directly and indirectly, can be named by first identifying the key economic variables which most closely explain changes in the level and trends in poverty over time in Pakistan. Based on this analysis, lessons can then be drawn as to the best way in which economic policies which influence these key correlates of poverty and human resource development need to be formulated and implemented so as to ensure a more favourable impact of economic growth on poverty alleviation and to improve the welfare of the people.

As we shall see, however, the task is not an easy one. Not only are there severe data limitations, but the correlates themselves are not always open to easy and clear-cut interpretation. Not surprisingly, very few studies have attempted such an exercise based on the Pakistan experience. It is important, therefore, to emphasise the exploratory and, indeed, tentative nature of the study, and to exercise extreme caution in interpreting some of its main findings.

The study, however, is based on the firm premise that economic policies, and especially macroeconomic policies, can significantly alter economic performance not only in terms of increasing efficiency and growth trends but also in ensuring a more equitable distribution of the gains of economic development. This can be achieved primarily through ensuring that economic growth has the maximum impact on the creation of remunerative and productive employment opportunities in a labour-surplus economy, as well as through investing in human resource development, especially education and health services.

FRAMEWORK AND STUDY OUTLINE

The first task in the exercise is to develop a consistent series of poverty estimates over time and to supplement this with other indicators of human development. Most of the studies on poverty in Pakistan are based on estimating the expenditures and income required for meeting basic minimum nutritional requirements (normally 2550 calories per adult equivalent or percentages of this amount), although some of the more recent studies have attempted to broaden this definition to cover per capita requirements for meeting minimum basic needs.

As is well known, both the levels and trends in poverty are extremely sensitive to the choice of the poverty-line. However, within these data limitations, we have used the more recent available data to extend the results of earlier studies to establish a consistent series of poverty estimates for the period 1963-64 to 1992-93, which then forms the basis of subsequent analysis. Fortunately, better data sources are available over time to establish trends for other indicators of human development, and these are presented separately.

The time-frame for the study has been dictated by the availability of the Household and Income Expenditure Surveys (HIES) conducted by the Federal Bureau of Statistics (earlier the Central Statistical Organisation), which is the basic source for almost all studies conducted on poverty covering the entire country. Only thirteen surveys have been conducted in selected years between 1963-64 and 1992-93, and to add to these difficulties, these surveys have also been carried out at irregular intervals. While such surveys were carried out in the three consecutive years 1969-70, 1970-71, and 1971-72, no such survey was carried out until 1979. Since the poverty levels show significant changes over a time-period rather than in a single year, we have been able to utilise only eight of these surveys because the remaining five surveys were carried out in a space of just one or two years of the previous survey. For the last year, 1992-93, the preliminary results were made available to us, on the basis of which poverty estimates could be made, but not the measures of income distribution (Gini coefficients). The availability of only 8 estimates of poverty over thirty years, and these too at irregular intervals, clearly limits any attempt to establish with any real confidence the correlates of poverty through time-series analysis.

HIES data are also available separately for rural and urban areas and can also be broken down for the four provinces in the country. While we have estimated poverty levels and trends separately for the urban and rural areas, we have not done so at the provincial level because the coverage of two of the provinces (NWFP and

¹There are, of course, a number of micro studies at the city or village level or a slightly larger geographical area based on field surveys which provide interesting insights into the characteristics of the poor as well as changing trends in poverty amongst different groups living in these areas. But since this study is primarily investigating the relationship between macro-policies and poverty alleviation, these are not covered in the study.

Balochistan) in the HIES is not fully representative as they do not cover significantly large areas in these provinces where poverty is known to be high. However, this is an area which needs to be further explored in any future study, especially given significant differences in poverty levels amongst the four provinces.²

The time-frame, i.e., 1963-64 to 1992-93, for which data are available, however, does cover a major part of Pakistan's almost fifty years of existence. Also, it lends itself to breaking up into four distinct periods as represented by both the forms of government as well as the economic regimes which existed during these periods. The 1960s were characterised by a military dictatorship which transformed itself into a Presidential form of government based on indirect franchise. The period witnessed high rates of economic growth at 6.8 percent per annum, primarily as a result of a strategy of economic development which provided generous incentives for private sector development and large increases in foreign capital inflows, especially during first half of the 1960s. Economic policies also displayed a distinct bias in favour of the large-scale manufacturing sector, which grew rapidly through tariff protection and generous fiscal incentives, though the later part of the 1960s also saw the advent of the Green Revolution, leading to large increases in agricultural production and especially in wheat production. The period of the 1970s, which lasted till 1977, witnessed a return to parliamentary democracy, an increasing role of the state in economic development through the nationalisation of the banking and insurance sectors, in selected industries, and in the foreign trade in cotton and rice. The period was characterised by a considerable slowing down in economic growth, to 4.8 percent per annum, as private sector investment declined sharply in both industry and agriculture; there was a high rate of inflation (accentuated by increases in oil prices) and the start of large-scale overseas migration to the Middle-East. However, reforms in the labour sector increased the strength and bargaining position of organised labour, and although land reforms were marginal, greater protection to tenant-farmers provided them with greater security of tenure. Reforms were also introduced in the education sector, including state takeover of schools and colleges and free primary education, but these did little to improve the quality of education and may in fact have contributed in the long-run to the deterioration of educational standards.

In the next period, between 1977 and 1988, which saw a return to military dictatorship till 1985 and more restricted parliamentary democracy till 1988, there was a strong revival of economic growth as GDP increased by 6.7 percent per annum. This was done by rehabilitating the private sector, gradual dismantling of state controls, including denationalisation, deregulation of industrial activity, introduction of economic and welfare measures to Islamise the economy, and achieving a rapid increase in

²Certain studies have also tried to break down the data further at the division or district level, or broken down the Punjab province into North and South Punjab. We have been informed, however, by the FBS that the overall sample is not representative when broken down beyond the province level.

remittance flows into the economy. Finally, the post-1988 period saw the revival of complete parliamentary democracy (based on adult franchise and participation of political parties), and although there has been a quick succession of changes in governments and sharp fluctuations in economic growth, which slowed down to 4.2 percent per annum between 1987-88 and 1992-93, the overall economic policy framework has been characterised by further deregulation, trade liberalisation, privatisation of public sector enterprises, and attempts at reducing the fiscal deficit through reduction in subsidies and increases in indirect taxes and duties. These measures were undertaken as part of a structural adjustment programme agreed between the Government and the IMF and the World Bank which covers the post-1988 period, although the degree to which the reform programme was actually implemented varied during this period. To improve the poor human development indicators, the Government launched the Social Action Programme in 1992-93 to address limited access to education, health, and family planning especially among poor rural women and girls as well as to improve the quality of services in these sectors.

In order to identify the key economic variables which have influenced poverty levels and human development indicators in the overall period, we have undertaken three lines of enquiry especially to make up for the extreme data limitations. The first is to identify the main correlates of poverty through simple regression analysis for the overall period 1963-64 to 1992-93, based on the data available. The second part examines in depth the pace and content of economic reforms in the post-1988 period in order to establish their impact on the incidence of poverty. The results of these analyses, together with the evidence presented in the third part of the study on the progress made in improving the country's human development indicators, are then pooled together to present a plausible explanation of the movements in poverty and social welfare indicators in the different time-periods, and also for the main economic developments and policies responsible for these changes. This explanation then provides the basis for recommending future policy directions, which would help more effectively in reducing poverty and in improving overall human development.

DEFINITION OF POVERTY

Poverty may alternatively be defined as the proportion of population whose incomes fall below a specified poverty-line, generally known as head counts; the income gap, i.e., the income required to bring all the poor above the poverty-line; income inequality among the poor known as the FGT index, etc. Whatever measure of poverty is employed, the poverty-line—consumption levels essential to meet the food and other basic needs of the common man—plays a crucial role in the estimation of poverty. Since the assessment of basic needs of the poor is subjective, different authors have used different poverty-lines. For example, Malik (1988) defined the poverty-line

with reference to a calorie requirement of 2550 for the adult,³ and the revealed expenditure pattern of the poor between food and non-food expenditures. He estimated the poverty-line for 1984-85 and deflated it by the Consumer Price Index to determine the poverty-line for the earlier years. In the present study, it has been inflated to determine the poverty-line for later years. The basic needs of the poor may also be estimated on the basis of educated guesses of knowledgeable persons. For example, see Ahmed (1995). Basic needs may also be defined with reference to 2550 calories for adults and the average coefficient of non-food expenditures of the poor regressed against food goods see FBS (1994). Linear expenditure systems approach may also be used to determine the basic needs of the poor, reflecting the norm of the society relating to basic needs of the people in a particular year see Ali (1995).

REVIEW OF LITERATURE

A striking feature of the studies conducted on poverty in Pakistan, starting with Naseem's (1973) pioneering work, is that with some rare exceptions, almost all have concentrated on estimating poverty levels without seriously addressing the factors responsible for changes in their magnitude and trends over time. Of the earlier studies, only Irfan and Amjad (1984) attempt a comprehensive explanation of the trends in rural poverty in the 1960s and 1970s. More recently, World Bank (1995) broadly examines poverty trends from the 1970s to the 1990s in relation to economic policies during these periods, although it does not attempt to establish or identify directly the key economic factors explaining changes in poverty levels over the period.

Two recent studies, Ahmed (1995) and Gazdar *et al.* (1994), have made the task of a literature review somewhat easier by presenting in summary form the main results of earlier studies. While Ahmed (1995) presents the results of all the major studies since 1963-64, Gazdar *et al.* (1994) cover only the period from 1984-85 to 1990-91.

To assist in the task of establishing trends in poverty over different time-periods, we divide, to the extent possible, the results of the earlier studies into the four broad periods identified earlier. We first examine the 1960s based on the HIES data for 1963-64, 1966-67, 1968-69, and 1969-70. These studies can be divided into two types. The first used a poverty-line arbitrarily fixed in terms of a given per capita expenditure or income. In this category are the studies by Naseem (1973); Allaudin (1975) and Mujahid (1978). While the first two studies showed that both rural and urban poverty had declined between 1963-64 and 1969-70, Mujahid, after correcting for a methodological error in these two studies, howed that poverty levels had declined in urban areas but increased in rural areas during this period. The second set of studies

³He used adult equivalence scales to adjust for the gender and age considerations.

⁴These studies had ignored variations in the size of households belonging to the same income group and, therefore, included households as poor, which were not, and otherwise.

relate the poverty-line to the absorption of a minimum diet based on nutritional requirements, taking as a norm the Planning Division-recommended 2550 calories per day per adult equivalent [Khan and Khan (1980)]. These studies, by Naseem (1977); Irfan and Amjad (1984) and Malik (1988), all showed that rural poverty levels had increased whether one defined the poverty-line in terms of a consumption basket yielding 2,100 calories (or 95, 92 or 90 percent of this amount), as was done by Naseem (1977), or by an intake of 2,550 calories per day per adult equivalent, as was done by Irfan and Amjad (1984) and Malik (1988). For urban areas, which were covered by Malik (1988) only, poverty levels declined over the period.

The fact that there has been no HIES survey between 1971-72 and 1979 places a major handicap in analysing poverty trends in the 1970s period. The major study which also covers this period, by Irfan and Amjad (1984), is, however, limited only to the rural areas. Malik (1988) also covers the same years as Irfan and Amjad (1984) but extends it to the urban areas as well as to an all-Pakistan basis. Of the other studies covering this period, we report the results of Kruijk and Leeuwen (1985). The results of all these studies are unanimous in showing that there was a dramatic decline in poverty in the 1970s, overall as well as in the rural and urban areas, based on a caloric norm or monthly household expenditure.

For the period of the 1980s, the availability of the complete HIES data tapes for the surveys conducted in 1984-85, 1987-88, and 1990-91 has allowed researchers to conduct a more varied analysis of poverty estimates. Also, for the first time, attempts have been made to measure the poverty-line in terms of meeting basic minimum needs. The two major studies for the period 1984-85 to 1990-91 are Malik (1994) and Gazdar *et al.* (1994). Malik (1994) used a 2550 per adult equivalent calorie-based poverty-line calculated by regressing caloric intake against total expenditure. His results showed that while poverty, both overall and in rural and urban areas, declined between 1984-85 and 1987-88, it then marginally increased between 1987-88 and 1990-91.

Gazdar *et al.* (1994) argued that for Pakistan, the nutritional approach is not the most appropriate one and that in a country where only 50 percent of expenditure goes on food even among the poor, non-food as well as food needs should be explicitly recognised. Developing further the basic-needs approach, suggested first by Ahmad (1993), they estimated poverty-lines for rural and urban areas based on an explicit listing of the cost of meeting basic needs.⁵ Their results confirm an unambiguous fall in poverty between 1984-85 and 1987-88, as well as a continuing though much less decline till 1990-91. However, they clearly point out that whether this favourable trend may or may not have continued into the early 1990s, "depends on one's precise assumptions about inflation, the poverty-line, and the poverty measure," [Gazdar *et al.* (1994), p.

⁵Gazdar *et al.* (1994) also show that their modified Ahmad (1993) poverty-line comes out well in terms of its implied caloric intake and is comparable with other poverty-lines used for Pakistan.

45]. Their major explanation as to why the Malik (1994) results differ from theirs in showing different trends between 1987-88 and 1990-91 is that Malik "allows the poverty-line to rise more than the rate of inflation" (*Ibid*, p. 34).

The availability of the complete HIES tapes for the post-1984-85 period also makes it possible to use other measures of poverty. Using the "poverty gap" concept as a measure of the depth of poverty and the Foster-Green-Thorbeck index as a measure of the intensity of poverty, the results of both studies, by, show a significant fall in poverty between 1984-85 and 1987-88. In the subsequent period, 1987-88 and 1990-91, while Gazdar *et al.* (1994) show a very slight fall in the poverty gap indicator and little change in Foster-Green-Thorbeck index, Malik (1994) shows that both indicators increased marginally in this period.

The main conclusions that one may draw from a survey of the literature based on HIES data for the period 1963-64 to 1991-92 is that whereas the magnitude of poverty is very sensitive to the choice of the poverty-line as regards the trends, the weight of the evidence suggests that (i) poverty levels were higher in 1969-70 as compared to 1963-64 overall as well as in rural areas but they declined in urban areas; (ii) that between 1969-70 and 1979 poverty declined both overall as well as in rural and urban areas; and (iii) that this decline continued from 1979 till 1986-87. The major differences in the results as regards the trends in poverty are between 1987-88 and 1990-91, where Malik (1994) shows a rise in poverty overall as well as in urban and rural areas but Gazdar *et al.* (1994) show a fall in poverty overall as well as in rural areas but a slight increase in urban poverty. It is, however, acknowledged by Gazdar *et al.* (1994) that these results are very sensitive to the choice of the poverty-line.

CONSISTENT TIME SERIES ON POVERTY

Since almost every researcher has used a different poverty-line, it becomes difficult to ascertain the trends in poverty and assess the impact of different policies on the alleviation of poverty. Malik (1988) used consistent poverty-lines for the 1963-64 to 1984-85 period to estimate the trends in poverty. His estimates refer to the poverty-line which allows consumption of 2250 calories per day. In the estimation of the non-food consumption of the poor, he used the average ratio of food to non-food consumption of the poor. The methodology proposed by Mujahid (1973) has been used by Malik to estimate the number of persons below the poverty-line. By inflating the poverty-line for 1984-85 by the consumer price index, and using the same methodology, a consistent time series has been estimated and is reported in Table 1.

⁶The "poverty gap" indicator takes into account the average income of the poor and its distance to the poverty-line. The Foster index takes into account inequality amongst the poor.

Table 1

Trend in the Proportion of the Poor: Head Counts

Year	Total	Rural	Urban
1963-64	40.24	38.94	44.53
1966-67	44.50	45.62	40.96
1969-70	46.53	49.11	38.76
1979	30.68	32.51	25.94
1984-85	24.47	25.87	21.17
1987-88	17.32	18.32	14.99
1990-91	22.11	23.59	18.64
1992-93	22.40	23.35	15.50

Source: Malik (1988) and Present Study Estimates.

CORRELATES OF POVERTY

In our analysis, we distinguish between four broad categories of factors which can have an important impact on the levels and trends in poverty.

The first may be defined in relation to the basic structural characteristics of the These include, amongst others, the structure of output, the sectoral distribution of the labour force, and the pattern of ownership of the means of production, especially in agriculture, but also in other key sectors of the economy. The other important set of structural characteristics are in terms of the major features of the prevalent economic regime, for this greatly determines the overall macro-policy environment and the resulting economic incentive structure. These structural features of the economy have a decisive impact not only on the efficient use of resources but also on the distribution of output and incomes, particularly through influencing the returns to and utilisation of the labour resources in the economy. In Pakistan, these basic structural characteristics have changed over time, and especially the economic regimes and the macro-policy environment have changed considerably in the four different time-periods outlined earlier. Especially important in the context of the incentive structure has been the trade regime and other fiscal and monetary concessions which have biased growth in favour of manufacturing at the expense of the agriculture sector, domestic production at the expense of the export sector, and the greater use of scarce capital at the expense of better and higher level of utilisation of labour resources.

The second set of factors relate to available output for current consumption as reflected in the level of per capita income or output in real terms. Quite important here is the availability of food at stable prices, given the nutritional norms underlying the specification of the poverty-line. We would normally expect a faster growth of per capita income to be associated with a lower level of poverty unless a significant

deterioration in the distribution of income has taken place. Also, a higher level of inflation or price increases of essential commodities would adversely impact upon poverty levels, by reducing real incomes of wage earners and the self-employed in urban areas and landless labour in rural areas. The latter two categories account for a major portion of those living below the poverty-line.

The next set of factors relate to foreign inflows into the economy. These could consist of official flows in terms of grants and loans from bilateral and multilateral sources (especially the World Bank and the regional banks) and private flows covering foreign investment (both FDI and portfolio investment) and remittances from nationals living abroad. These flows can impact upon poverty levels both through directly supplementing incomes and consumption levels, particularly as a result of remittances, as well as through increasing the capital stock, resulting in higher levels of output growth and employment generation in the economy. In Pakistan, remittance flows have been especially important after 1975, reaching a peak in 1982-83, when they were 11.3 percent of the GDP and equivalent to about 70 percent of the country's total export earnings from goods and non-factor services.

The final set of factors would relate to the existing safety nets for the poor in the form of micro-interventions and welfare programmes, which either supplement the assets of the poor or are given in the form of direct income and consumption support for those selected groups from amongst the poorest. It could also include subsidies provided by the Government to keep prices for essential commodities low, as well as subsidies for key inputs which would result in increasing the output of key commodities, especially in the agricultural sector. As regards social protection arrangements in Pakistan, private voluntary transfers far outweigh government support programmes. The major government programmes are *zakat*⁷ and *ushr*⁸, introduced in 1980-81, and the Pakistan *Bait-ul-Mal*⁹ programmes which pool resources from the population at large and redistribute them to the neediest throughout the country. According to the World Bank (1995), *zakat* and *ushr* accounted for about 0.2 percent of GDP in 1993-94, and the *Bait-ul-Mal* was 0.05 percent of the GDP in 1994-95.

TIME-SERIES ANALYSIS

How do we try to best relate the levels of poverty which we have established for the selected years in the form of a consistent series earlier and the major correlates of poverty outlined above. This is attempted in the first instance through simple regression

 $^{^{7}}$ A religious levy in Islam of 2.5 percent of total wealth of those who have minimum wealth equivalent to 87 grams of gold.

⁸A religious levy in Islam of 10 percent of the gross produce of non-irrigated land and 5 percent of the produce of irrigated land.

⁹Essentially means treasury, but is used at present as a fund out of which subsidies are provided to the poor.

analysis. With respect to the major correlates of poverty, we have identified some of the economic indicators which can best capture them. These are:

- (i) real per capita GNP (YPER);¹⁰
- (ii) real wages in manufacturing (WAGE);
- (iii) per capita availability of food-grains (CERL);
- (iv) agricultural productivity (AGPR), i.e., value-added in agriculture divided by total employment in agriculture;
- (v) inflation rate as percentage change over the previous year (INFL);
- (vi) total labour force as a percent of total population (LFP); this variable is meant to capture the supply pressures on the labour market;
- (vii) Gini coefficient separately for Pakistan (GINP), rural areas (GINR), and urban areas (GINU);
- (viii) share of total labour force in agriculture (IFAgr);
- (ix) real net foreign inflows per capita (INFL) and real net foreign inflows as percent of GNP (INFLY);
- (x) real remittances per capita (REMT) and real remittances as percent of GNP;
- (xi) real subsidies per capita (SUB1) and real subsidies as percent of GNP (SUBSY); real subsidies include both current and development subsidies;
- (xii) terms of trade between agriculture and manufacturing goods (TOT); this was calculated as the relative increase in implicit GDP deflator for agriculture to that of the manufacturing sector.

The basic hypothesis that we are testing is that in terms of the structural characteristics of the economy: (i) the more even the distribution of income, the more favourable will be the impact of growth of output on poverty alleviation; (ii) an improvement in the terms of trade in favour of the agriculture sector, on which the major part of the population is still dependent, will lead to a decline in overall and especially rural poverty; and (iii) a decline in the proportion of the labour forces dependent on agriculture should favourably impact upon agricultural productivity and per capita agricultural incomes and lead to a decline in overall and rural poverty levels. In terms of available output for current consumption, we would expect (i) the higher the per capita income, the lower would be poverty level, (ii) the higher the per capita availability of food-grain, the lower would be the poverty levels, (iii) the higher the level of real wages, the lower will be the poverty levels, (iv) the higher the level of

¹⁰Since there are no other wage series available which may cover the entire period for rural wages or for other sectors, real wages in manufacturing are also taken as a proxy to indicate movements in wage levels in other sectors of the economy on the premise that they also reflect the state of the labour market in other parts of the economy.

agricultural productivity, the lower would be poverty levels especially in rural areas, and (v) the lower the level of inflation, the lower will be the level of poverty. In terms of foreign capital inflows, we would expect, (i) the greater the real inflows of foreign loans and grants, the lower would be level of poverty; and (ii) the higher the level of remittance per capita, the lower would be the level of poverty. In terms of welfare benefits, the higher the level of available subsidies, the lower would be the level of poverty.¹¹

We would expect overall poverty levels (POVP) to be negatively correlated with YPER, CERL, LFAgr, INFL, REMIT, REMTY, SUB1, and SUBSY and WAGE, and positively correlated with GINP, LFP, INF, and TOT. We would also expect the same relationship to hold for rural poverty (POVR) and urban poverty (POVP), and also expect POVR to be negatively related with AGRP and LFAgr.

Given the very small number of observations, it was decided to run only simple regression analysis, taking the logs of the independent and dependent variables. The only variables which came out as significant for poverty levels all-Pakistan (POVP), urban areas, (POVU) and rural areas (POVR) were real per capita GNP (YPER), remittances (REMT and REMTY), real wages (WAGE), labour force as a share of total population (LFP), and labour force engaged in agriculture (LFAgr). The variable, real subsidies per capita (SUB1) is significant only for overall poverty (POVP). Per capita availability of food-grains (CERL) has the expected sign (negative) but is significant only in relation to the level of urban poverty. Agricultural productivity (AGPR) is significant only in relation to rural poverty. As regards the other variables, the Gini coefficient (GINP, GINR, GINU) and the terms of trade (TOT) have the expected sign but are not significant. Real net foreign inflows (INFL and INFLY) and the rate of inflation (INFL) have the wrong sign but are also not significant (see Table 2).

How should we interpret these results? Clearly, the strongest message which emerges from these results is that besides the level of per capita income, the flow of remittances has been the single most important factor in explaining changes in the poverty levels in the economy. Also important are the level of real wages and agricultural productivity. The per capita availability of food-grains was expected to show a stronger relationship but is significant in relation only to the levels of urban poverty. Also, a decline in the labour force engaged in agriculture as well as a decline in the total labour force as a percent of the total population had a favourable impact upon the level of poverty.

The results regarding some of the other variables need to be interpreted with extreme caution. The fact that the level of inflation is not significant may have far more to do with the way it has been defined and used in this analysis. Since it is picking up only the level of inflation in that year and the poverty levels are based on observations

¹¹Unfortunately, we cannot test the impact of *zakat* and *ushr* and *Bait-ul-Mal* on reducing poverty as these only commenced in the post-1982 period.

Table 2

Determinants of Poverty Levels

Determinants of Poverty Levels				
(i) Log POVP =	11.59 – 1.005 Log YPER **	$R^2 = 0.84$	Adj. $R^2 = 0.81$	
	(1.447) (0.178)			
(ii) Log POVP =	4.271 – 0.197 Log REMT**	$R^2 - 0.75$	Adj. $R^2 = 0.70$	
	(0.213) (0.047)			
(iii) Log POVP =	3.603 – 0.232 Log REMTY**	$R^2 = 0.68$	Adj. $R^2 = 0.63$	
	(0.087) (0.065)			
(iv) Log POVP =	8.744 – 0.221 Log WAGE**	$R^2 = 0.89$	Adj. $R^2 = 0.87$	
	(0.707) (0.082)			
(v) $Log POVP =$	4.157 – 0.221 Log Sub1*	$R^2 = 0.48$	Adj. $R^2 = 0.40$	
	(0.326) (0.09)			
(vi) Log POVP =	-2.103 + 4.567 Log LFP**	$R^2 = 0.63$	Adj. $R^2 = 0.56$	
	(4.8955) (1.4412)			
(vii) Log POVP =	-9.001 + 3.129 Log LFAgr	$R^2 = 0.58$	Adj. $R^2 = 0.51$	
	(2.768) (4.487)			
Urban				
(i) Log POVU =	12.39 – 1.11 Log YPER	$R^2 = 0.80$	Adj. $R^2 = 0.76$	
	(1.863)			
(ii) Log POVU =	8.809 – 0.58 Log WAGE	$R^2 = 0.72$	Adj. $R^2 = 0.68$	
	(1.38) (0.146)			
(iii) Log POVU =	4.28 – 0.22 Log REMT	$R^2 = 0.70$	Adj. $R^2 = 0.65$	
	(0.265) (0.059)			
(iv) Log POVU =	3.542 – 0.255 Log REMTY	$R^2 = 0.64$	Adj. $R^2 = 0.57$	
	(0.1061) (0.0788)			
(v) Log POVU =	-14.135 + 5.142 Log LFP	$R^2 = 0.61$	Adj. $R^2 = 0.55$	
	(2.493) (3.081)			

Continued—

Table 2—(Continued)

(vi) Log POVU =
$$11.283 - 1.547$$
 Log CERL* $R^2 = 0.54$ Adj. $R^2 = 0.47$ (2.951) (0.574)

Rural

(i) Log POVR =
$$11.08 - 0.94$$
 Log YPER* $R^2 = 0.78$ Adj. $R^2 = 0.74$ (1.644) (0.204)

(ii) Log POVR =
$$85.55 - 0.541$$
 Log WAGE ** $R^2 = 0.86$ Adj. $R^2 = 0.84$ (0.825) (0.087)

(iii) Log POVR =
$$4.249 - 0.184$$
 Log REMT** $R^2 = 0.69$ Adj. $R^2 = 0.64$ (0.229) (0.05)

(iv) Log POVR =
$$3.625 - 0.217$$
 Log REMTY* $R^2 = 0.60$ Adj. $R^2 = 0.57$ (0.091) (0.068)

(v) Log POVR =
$$-10.993 + 4.25$$
 Log LFP* $R^2 = 0.60$ Adj. $R^2 = 0.53$ (5.064) (1.490)

(vi) Log POVR =
$$12.774 - 1.074$$
 Log ARGP $R^2 = 0.52$ Adj. $R^2 = 0.44$ (3.445) (2.529)

Figures in parenthesis are standard errors.

Where POVP = Poverty level in Pakistan.

POVU = Poverty level in urban areas.

POVR = Poverty level in rural areas.

YPER = Real per capita GNP (Rs per annum).

REMT = Real remittances per capita.

 $REMTY \quad = \quad Real \ remittances \ as \ percent \ of \ GNP.$

WAGE = Real wages in manufacturing (Rs per annum).

Sub1 = Real subsidies per capita.

LFP = Total labour force as percent of total population.

LFAgr = Percent of total labour force in agriculture.

CERL = Per capita availability of food grains.

AGRP = Agricultural Productivity, i.e., value-added in Agriculture divided by Labour Force in Agriculture.

^{**} Significant at 1 percent level.

^{*} Significant at 5 percent level.

with widely different time intervals and, hence, reflect changes over that time-period as well as economic developments in that particular year, it would be difficult to isolate the impact of inflation in that year unless it was dramatically high. The same is true of the changes in the Gini coefficient and the terms of trade variables.

The other major weakness in this analysis is that the limited number of observations makes it impossible to run any multiple regression analysis. Clearly, in a number of cases, the variables reinforce each other's impact or negate it in a significant manner. However, running any multiple variable regressions, given the number of observations, would not be very meaningful.

STRUCTURAL ADJUSTMENT AND POVERTY

With a view to examining the impact of the Structural Adjustment policies on poverty, two periods, viz., 1984-85 to 1987-88, immediately before the Programme and in the 1987-88 and 1990-91 period when Pakistan operated the first such programme, have been chosen for detailed analysis.

Table 3 shows wide variation in the proportion of poor in a given year depending on the choice of the poverty-line; the proportion of the poor ranges between 14.0 percent and 40.6 percent 12 of the population in 1990-91. Nevertheless, poverty seems to have declined over the 1984-85 to 1987-88 period, irrespective of the definition of poverty employed. Similarly, all the studies show an increase in poverty in the 1987-88 to 1990-91 period, except the World Bank study, which shows a decline in consumption poverty; albeit decline in consumption poverty slowed down over the 1987-88 to 1990-91 period.

Rural poverty also shows a decline over the 1984-85 to 1987-88 period irrespective of the definition employed. However, over the 1987-88 to 1990-91 period, the proportion of the very poor increased but the proportion of not so poor in the rural areas seems to have declined somewhat. Urban poverty also fell in the 1984-85 to 1987-88 period but increased substantially in the 1987-88 to 1990-91 period according to all the poverty-lines. Only the consumption poverty-line estimated by the World Bank shows a decline in poverty.

Why did poverty fall in the 1984-85 to 1987-88 period but increase in the 1987-88 to 1990-91 period? In the rural areas, why poverty increased if a low poverty-line was used but fell if a higher poverty-line was used has been examined in detail in this section by focusing on the following issues:

- (i) trends in growth and income inequality,
- (ii) remittances,

¹²We have not used the Ali (1995) estimates, because the poverty-line in his analysis shows changes in it over time.

Table 3

Poverty in Pakistan

	Income	i I anisian			
	Consumption- based	Basis of Estimation	1984-85	1987-88	1990-91
Pakistan					
Malik (1988)	Income	Grouped Data	24.5	17.3	22.1
Malik (1994)	Income	Micro Data	18.3	16.6	17.2
World Bank Study	Consumption	Micro Data	46.0	37.4	34.0
Ali (1995)	Income	Grouped Data	48.9	54.2	51.4
Federal Bureau of Statistics	Income	Micro Data	60.0*	35.7	40.6
Federal Bureau of Statistics	Income	Micro Data	20.0	13.0	14.0
Rural					
Malik (1988)	Income	Grouped Data	25.9	18.3	23.6
Malik (1994)	Income	Micro Data	21.1	19.6	20.6
World Bank	Consumption	Micro Data	49.3	40.2	36.9
Federal Bureau of Statistics	Income	Micro Data	55.0*	33.3	32.5
Federal Bureau of Statistics	Income	Micro Data	22.0	14.0	16.0
Urban					
Malik (1988)	Income	Grouped Data	21.2	15.0	18.6
Malik (1994)	Income	Micro Data	11.1	8.7	9.8
World Bank	Consumption	Micro Data	38.2	30.7	28.0
Federal Bureau of Statistics	Income	Micro Data	67.0*	44.8	56.3
Federal Bureau of Statistics	Income	Micro Data	16.0	10.0	11.8

^{*}The poverty-line in 1984-85 is roughly ten percent higher than that in 1987-88 and 1990-91.

- (iii) rate of inflation,
- (iv) wages, employment and functional income distribution,
- (v) taxation policy,
- (vi) subsidies,
- (vii) structure of public expenditure,
- (viii) transfers to the poor.

(i) Growth and Income Inequality Trends

Growth accompanied with a decline in income inequality is both a necessary and a sufficient condition for reduction in poverty. Gross domestic product registered a growth rate of 6.2 percent over the 1984-85 to 1987-88 period, and 5 percent over the 1987-88 to 1990-91 period. While the growth rate of the manufacturing sector also declined from 8.3 percent to just 5.3 percent, the growth rate of the agricultural sector increased from 4.0 percent to 4.9 percent over the two time-periods. Because of the backward and forward linkages of the manufacturing sector, the slow-down of the manufacturing sector resulted in lower level of output in all the other sectors of the economy. While the slow-down of the manufacturing sector may be attributed to a host of other factors as well, the structural adjustment programme seems to have played a major role as such programmes are invariably deflationary. Compared to an expansion of money supply of 46.5 percent in the 1984-85 to 1987-88 period, the money supply expanded by 40.6 percent in the 1987-88 to 1990-91 period. Even more significantly, the expansion of credit to private sector slowed down from 67.8 percent in the first period to 43 percent in the second period.

The increase in rural poverty may be attributed to the removal of subsidy on agricultural inputs and compensation of the farmers through an increase in the prices of output. The farmers who had very little marketable surplus were at a disadvantage because their input cost increased but they could hardly draw any benefits from the increase in the prices of agricultural products. In the urban areas, the poverty increased despite a growth rate of GDP per capita of 2 percent per annum, mainly because the employment opportunities decreased significantly and wages of the unskilled workers declined.

The higher growth of GDP in the 1984-85 to 1987-88 period was accompanied with falling income inequalities; Gini coefficient fell from 0.369 in 1984-85 to 0.348 in 1987-88. On the other hand, slower growth of the GDP in 1987-88 to 1990-91 was accompanied with rising income inequality; Gini coefficient increased to 0.407. A similar pattern is observed in the Gini coefficients of the rural areas; Gini coefficient went down from 0.34 to 0.31 over the 1984-85 and 1987-88 period but increased to 0.41 by 1990-91. In the urban areas, the Gini coefficient showed a relatively small change as it went

down from 0.38 in 1984-85 to 0.37 in 1987-88 and increased to 0.39 in 1990-91.

The impact of growth of output and changes in income inequalities on poverty may be examined by decomposing the reduction in poverty due to changes in the growth of output, income inequalities, and other factors. World Bank (1995) presents such estimates for consumption poverty over the two time-periods. These estimates show that unless growth is sufficiently high, it does not compensate for the poverty-inducing effect of increasing income inequalities. Consumption poverty reduced by 18.6 percent over the 1984-85 to 1987-88 period because both growth and income distribution reinforced the tendencies to alleviate poverty. On the other hand, in the latter period, because of the increase in income inequalities, the effect of growth on poverty reduction has been largely diluted by the increase in income inequalities (see Table 4).

Table 4

Consumption Poverty Change due to Changes in Growth and Inequality

(Percentage Change in the Head-count)

	1984-85	1987-88
	to	to
	1987-88	1990-91
Total Change in Consumption Poverty	-18.6	-9.1
Change Due to:		
growth	-15.7	-16.4
inequality	-2.5	5.6
residual	-0.4	1.8

Source: World Bank (1994).

(ii) Remittances

Remittances influence poverty levels in two ways. First, most of the emigrants prior to migration have been below the poverty level, but after migration such households can no longer be classified as poor. Secondly, the emigrants also helped the poor and the needy in the family and, as a result, a voluntary system of social security in the private sector has emerged.

Remittances have shown a consistent decline since the mid-eighties. At constant prices, remittances have declined by about 41.8 percent over the 1982-83 to 1995-96 period. Per capita remittances over the same period declined from Rs 353 to Rs 140, and as a percentage of the GDP from 9.0 percent to 2.9 percent. Similarly, over the 1984-85 to 1987-88 period, remittances as a percentage of the GDP declined from 7.27

to 5.20, and further to 4.07 by 1990-91; and the per capita remittances declined from Rs 297 in 1984-85 to Rs 225 in 1987-88, and further to Rs 182 in 1990-91. This only shows that while the decline in remittances may have been compensated with the increase in growth in the 1984-85 to 1987-88 period, a further decline in remittances in a period of slowing down of GDP growth may have also led to an increase in poverty.

(iii) Inflation

Wages tend to adjust with a lag to inflation and, as such, in the period of inflationary tendencies real wages tend to fall and poverty increases. The Structural Adjustments and Stabilisation Programmes, because of their focus on reducing fiscal deficit and monetary expansion, are expected to constrain the rate of inflation. Fiscal deficit in Pakistan increased from 7.8 percent of GDP in 1984-85 to 8.5 percent in 1987-88, and further to 8.7 percent in 1990-91. While money growth slowed down from 13.6 percent in the 1984-85 to 1987-88 period to 12.0 percent in the 1987-88 to 1990-91 period, the inflation rate increased from 4.7 percent over the 1984-85 to 1987-88 period to 9.5 percent in the 1987-88 to 1990-91 period. The food prices increased at even faster rate; i.e., by 4.8 percent and 10.5 percent in the two periods.

(iv) Wages and Employment

Employment grew at a rate of 2.5 percent during the 1984-85 to 1987-88 period, but at a rate of just 1 percent in the 1987-88 to 1990-91 period. Both the decline in growth rate of output as well as employment elasticity, reflecting capital intensity in the production process, have been responsible for the slow growth of employment. Whereas GDP growth fell from 6.2 to 5.0 percent over the two time-periods, employment elasticity declined from 0.325 to 0.211.

Higher growth rates of employment in the 1984-85 to 1987-88 period led to growth of wages at the rates of 8.4 percent in the large-scale manufacturing sector, of 5.4 percent in the agricultural sector, and of 1.8 percent of the unskilled workers. While the wages in the large-scale manufacturing and agriculture also increased at the rates of 5.6 and 2.8 percent respectively in the 1987-88 to 1990-91 period, the wages of unskilled workers, which form the bulk of the poor in both the rural and the urban areas, declined.

(v) Taxation Policy

The share of indirect taxes in total tax revenue increased from 84.1 percent to 86.8 percent over the 1984-85 to 1987-88 period but fell to 84.0 percent by 1990-91. The tax-GDP ratio increased from 13.0 in 1984-85 to 13.8 percent in 1987-88 but declined to 12.7 percent in 1990-91. Similarly, public revenues increased from 16.4 in

1984-85 to 17.3 percent in 1987-88 but declined to 16.1 percent in 1990-91. Poverty is expected to fall when the total tax burden as well as the share of indirect taxes fall, and tends to rise when both show a tendency to fall. Therefore, one had expected that changes in the taxation structure would result in higher levels of poverty in the 1984-85 to 1987-88 period and to lower levels of poverty in the 1987-88 to 1990-91 period. But poverty, in fact, fell in the first period and increased in the second. Considering that the sales tax net was widened even to essential commodities and the increase in direct taxes was in the form of turn-over tax, withholding taxes on imports, exports, and contractors with final assessment, etc., which are essentially an indirect tax and are passed onto the consumers, the changes in the tax structure turned the system regressive in the 1987-88 to 1990-91 period. The tax incidence increased most for the lowest income group and the incremental burden went on falling with increases in the incomes rise, and the tax incidence for the highest income group in fact declined. Compared to a decline of 4.3 percent in the tax burden for the richest section of the population, the tax burden on the poorest class has increased by 10.3 percent see Kemal (1994).

(vi) Subsidies

The Structural Adjustment Programme calls for elimination of both the development and the current subsidies. While development subsidies were provided for fertiliser, tubewells, pesticides, etc., the current subsidies have been provided for consumption of wheat and vegetable ghee, etc. The current and development subsidies grew at the rates of 10.1 and 8.1 percent in 1984-85 to 1987-88. Over the 1987-88 to 1990-91 period, however, the current subsidies grew by only 4.8 percent while development subsidies declined substantially. Total per capita subsidies at constant prices increased from Rs 54.9 in 1984-85 to Rs 64.4 in 1987-88 but fell down to Rs 53.2 by 1990-91. Similarly, as a percentage of GDP, subsidies increased from 1.35 to 1.49 over the 1984-85 to 1987-88 period, but declined to 1.19 by 1990-91.

Withdrawal of subsidies on agricultural inputs increased the production cost of farmers but were compensated through an increase in the prices of agricultural products. This had two adverse impacts on poverty. First, the subsistence farmers were constrained to use a smaller amount of agricultural inputs and their production fell, which resulted in higher levels of poverty. Second, higher production costs resulted in an increase in the prices of food products and thus reduced the real incomes of the poor even further. The fall in current subsidies on food products also led to a further increase in food prices.

(vii) Incidence of Public Expenditures

Pakistan's expenditure on social sectors has been falling over the 1984-85 to 1990-91 period relative both to the total public expenditures and the GDP. The share of

social sector public expenditures in GDP went up slightly from 2.5 to 2.6 percent over the 1984-85 to 1987-88 period, but went down to 2.3 percent of the GDP by 1990-91. Similarly, social sector expenditures as a percentage of total expenditure increased from 9.0 to 9.6 in the 1984-85 to 1987-88 period but declined to 9.3 percent by 1990-91.

While no information is available on the beneficiaries of the social services, the possible benefits of the public expenditures to the poor can be gauged by focusing on the education and health facilities. Since the richer sections of the society prefer to send their children to somewhat expensive private primary schools, it can be safely assumed that public expenditures on primary education ¹³ benefit mainly the poor and the lower middle-income class. Since the fees charged by the government education institutions are a very small proportion of the total cost of education, there is significant subsidy in the provision of such services.

Expenditure on education at constant prices of 1980-81 increased from Rs 7.0 billion in 1984-85 to Rs 10.9 in 1987-88 but declined from Rs 10.60 billion in 1990-91. The expenditure increased to Rs 15.7 billion by 1995-96. Expenditure on primary education increased from Rs 2.6 billion in 1984-85 to Rs 4.3 billion in 1987-88, but marginally rose to Rs 4.6 billion by 1990-91. The expenditure, however, increased sharply to Rs 7.9 billion by 1995-96. As a percentage of GDP, expenditure on education increased from 1.96 in 1984-85 to 2.51 in 1987-88, 2.12 in 1990-91, and 2.49 in 1995-96. Similarly, expenditure on primary education increased from 0.71 in 1984-85 to 0.99 in 1987-88 but fell to 0.91 in 1990-91. However, it has increased to 1.25 in 1995-96. Per capita expenditure increased from Rs 73.9 in 1984-85 to Rs 104.5 in 1987-88 but fell to Rs 93.2 in 1990-91. It increased to Rs 119.2 in 1995-96.

Health facilities show marked differences across urban and rural areas, gender, and various sections of the society. While the public health facilities have increased, though the increase has been modest, the benefits to common man are minimal; long queues with less than a minute of doctor's time per patient and virtually no medicine for the poor may be contrasted with air-conditioned rooms at the subsidised rates, specialised doctors in waiting, and the availability of standardised medicine from these hospitals for the rich and influential. Most of the public health expenditures either end up with the health administrators or accrue to the rich. Health facilities are particularly bad in the rural areas.

Expenditure on health at constant prices of 1980-81 increased from Rs 1.8 billion in 1984-85 to 2.9 billion in 1987-88, and further to 3.00 billion in 1990-91. The expenditure increased further to Rs 4.7 billion in 1995-96. As a percentage of GDP, health expenditure increased from 0.51 in 1984-85 to 0.67 in 1987-88 but declined to 0.60 percent in 1990-91. It increased to 0.75 percent of GDP by 1995-96. Per capita expenditure on health increased from Rs 19.1 in 1984-85 to Rs 27.8 in 1987-88 but declined to Rs 26.3 in 1990-91. This increased to Rs 36.1 by 1995-96.

¹³While the poor may also be participating in the secondary school education, they hardly benefit from the university education due to lack of resources and the relatively high opportunity cost. Benefits of higher education to the low-income groups are even lower.

(viii) Income Transfers

There are transfers of income both at the individual level as well as the state level. That 30 percent of the households have been the recipients of private transfers, forming 26 percent of their consumption, shows a wide network of income transfers on voluntary basis. As many as 48 percent households of the lowest income group were the recipients of such transfers, and almost half of their consumption was financed through the transfers see World Bank (1995).

At the state level, the system of *zakat* and *ushr* and *Bait-ul-Mal* have been instituted to transfer the income to the poorer section of the society. Out of *zakat* funds, each individual is provided with a monthly stipend of Rs 225 and there is a rehabilitation grant of Rs 3000 as a one-time transfer. However, the impact of these measures has been relatively small because the number of beneficiaries as compared to the number of the poor is small, and also because there have been problems in the distribution of *zakat*. The government has been able to collect a very small amount of *zakat* revenue, which reduces both the number of beneficiaries and the amount of the stipend. It may be noted that in 1993-94, total collection of *zakat* revenue was Rs 2844 million, i.e., 0.2 percent of the GDP. It is estimated that if all those liable to pay *zakat* on Fixed and Savings accounts had paid the *zakat*, the yield could have been Rs 4,762 million.

The *Bait-ul-Mal* was established in 1992 and its two most important schemes are the Food Subsidy Scheme and the Individual Financial Assistance Scheme. A person who does not receive *zakat* and has an income of less than Rs 1500 can receive the grant from *Bait-ul-Mal*. Those having shelter receive Rs 500 plus Rs 50 for each child per month, and those without shelter receive Rs 300 plus Rs 50 for each child per month.

SOCIAL ACTION PROGRAMME

While poverty seems to have declined at least upto 1987-88, the quality of life indicators show negligible improvements over time. Pakistan ranks 134 in the Human Development Index; the participation rate at primary education level of about 70 percent; almost 50 percent of the students drop out by the fifth grade; literacy is around 38 percent; 32 percent of population does not have access to potable water; and sanitation facilities are available to only 38 percent of the population. Similarly, health facilities are not only inadequate, the quality of the service is also generally poor.

The Government of Pakistan initiated a Social Action Programme (SAP) in 1992-93 with a view to improving primary education, primary health, nutrition, family planning, and rural water supply and sanitation on a priority basis. In pursuance of this programme, public expenditure under SAP has increased from 1.96 percent of GDP in 1992-93 to 2.55 percent of GDP in 1995-96. The programme aims at promotion of

primary education especially of the girls; the participation rate at the primary level would increase from 68 to 88 percent, and the enrolment of girls from 53.7 to 81.6 percent over the 1992-93 to 1997-98 period. The programme envisaged an increase in the literacy rate from 35.7 in 1992-93 to 45 percent by 1998, and in the female literacy from 22.3 to 40 percent over the same period.

The programme has been effectively implemented and, as a result, the social indicators, as reported in the Table 5, show significant improvements.

Table 5

The Social Indicators of Pakistan

	Social In	dicators
Indicators	1992-93	1995-96
Population Growth Rate (%)	3.0	2.8
Total Fertility Rate (%)	5.9	5.6
Life Expectancy (Years)	57.7	61.5
Contraceptive Prevalence Rate (%)	14.0	19.4
Primary School Enrolment (%)	69.0	77.0
Adult Literacy (%)	35.7	37.9
Access to Safe Drinking Water (%)	60.0	68.5
Water Supply (% of Rural Population)	47.0	57.0
Access to Sanitation (% of Rural Population)	30.0	39.0

The programme places an emphasis on preventive health-care and makes a concerted effort to bring down the infant mortality rate from 99 to 65 over the programme period through an increase in the ORS distribution from 13.5 million to 23.5 million persons, alongwith an increase in immunisation coverage from 55.5 to 92.5 percent by 1988. The programme particularly aims at removing the imbalances in gender staffing and 100,000 Lady Health Workers are to be trained-recruited by 1998. SAP emphasises the expanded participation of primary health facilities in the delivery of family planning, and such services are expected to be made available to 75 percent of the population.

Through an improvement in the service delivery network, the population growth rate is expected to be brought down from 3.0 to 2.7 percent by 1998. Family planning services are to be extended to 100 of urban and 70 percent of rural areas by 1998 and, accordingly, the current prevalent rate is to improve from 12 percent in 1992-93 to 28 percent by 1998, and the user level from 3.8 million to 7 million. Fertility rate would

reduce from 6.0 to 5.6 percent by 1998, and Crude Birth Rate from 39 to 35 by 1998.

Water supply coverage would rise from 47.1 to 70.5 percent by 1998, and sanitation from 13.5 to 31.5 percent in the rural areas. Water supply coverage would increase from 81 to 95 percent in urban areas. Sanitation coverage is expected to increase from 54 to 60 percent in urban slums by 1998.

The role of communities in all aspects of project development is being enhanced, and methods for the participation of community in planning, implementation, and management of the RWSS system are being formulated. The participation of non-governmental organisation (NGOs), community-based organisations (CBOs), and rural support programmes (RSPs) is being encouraged in the implementation of the programme.

EXPLAINING TRENDS IN POVERTY—1963-64 TO 1992-93

In terms of the broad trends, we need to fundamentally explain (i) the overall increase in poverty during the 1960s, mainly as a result of rising rural poverty, as urban poverty marginally declined; (ii) the dramatic decline in the subsequent period till 1987-88 when poverty levels almost halved especially in the rural areas; and (iii) the subsequent reversal of this trend in the post-1987-88 period when rural poverty again increased back to the 1984-85 level and urban poverty fluctuated around the 1987-88 level. However, before we attempt an explanation, let us first review the explanations given by the few earlier studies on the subject.

In explaining trends in rural poverty between 1963-64 and 1979, Irfan and Amjad (1984) emphasised structural changes in the rural economy, especially as regards the size distribution of holdings, as well as the start of large-scale overseas migration in the post-1975 period. The basic argument which they put forward is that there took place in this period significant changes in the size distribution of holdings with large landowners resuming formerly rented-out land for self-cultivation, which led to an eviction of tenant farmers and corresponding increase in the ranks landless labourers and non-agricultural households whose incomes did not increase during this period. As distinct from the 1960s, during the 1970s, however, the impact of these changes was mitigated by changes outside the farm sector, mainly high levels of overseas remittance flows to the rural economy which led to a decline in rural poverty.

In explaining the results of their study for the 1970s, which had shown that while poverty declined income inequalities increased, Kruijk and Leeuwen (1985) also drew attention to the large-scale emigration of workers to the Middle-East and to the resulting remittances from the workers to their families, which increased the incomes of a large section of the population. According to them, this additional income was spent not only on consumer goods but also for productive purposes. This led to an increase in the demand for labour while, at the same time, labour supply decreased due to emigration,

leading to an increase in real wages not only of skilled workers but also of unskilled workers. The resulting rise in wages together with remittances reduced poverty but also increased inequalities because, according to them, remittances and the rise in labour earnings were not spread evenly among households.

The World Bank (1995) report treats the entire post-1979 period till 1990-91 as one in which poverty levels declined significantly and attributes this decline mainly to improved economic policies which started in 1977 and continued thereafter. The report also acknowledges favourable external factors, especially the emigration of labour to the Middle-East, as having significantly contributed to this good performance. The World Bank (1995) study, which used the results of the Gazdar *et al.* (1994) poverty analysis (reviewed by us earlier), does not adequately analyses trends in the post-1987-88 period, which they cover only till 1990-91; but they acknowledge that the short-term impact of some of the structural reforms could have had an adverse impact on poverty.

Our analysis, and the correlates of poverty identified here, would tend to broadly support the findings of the earlier studies. It would, however, suggest that overseas migration and remittances may have played a much more central role in the process, especially in negating the continuous adverse impact on the labour market of structural changes in the rural economy which were identified by Irfan and Amjad (1984). This explanation is in no way intended to minimise the role of economic growth, especially in 1980s, and sound economic policies which spurred this growth process to contribute to the decline in poverty. It mainly highlights the fact that once remittances have slowed down, we have lost a very important means and mechanism for fighting poverty, which now needs to be suitably substituted. What is clear is that in the post-1987-88 period, expected economic growth and the favourable impact of structural adjustment reforms have not materialised. On the one hand, growth has slowed down, and on the other hand, income inequalities have increased. Taxation structure has also shown a shift towards regressivity and public expenditures on the services used by the poor have also declined. Employment has grown very slowly and wages have declined. Accordingly, the declining trend in poverty observed earlier has been revised. Indeed, the rural poverty has increased considerably in the post-1987-88 period and has returned to the 1984-85 levels.

That the concentration of landholding and operated areas between 1960 and 1980 analysed by Irfan and Amjad (1984) has further increased, has been shown by Mahmood (1991) by comparing the results of the 1991 and 1980 Agricultural Censuses. The latter's results confirmed that not only has the concentration increased over these three decades, but that it has happened at an increasing rate of growth (*ibid.* p. 777). While Mahmood (1991) did not conduct an analysis of changes in tenurial distribution between 1980 and 1991, as data were not available to him, he still argued, *a priori*, that given the reduction of share-cropped area, associated with an increase in concentration in operated area between 1960 and 1972, a similar explanation for increasing

concentration between 1980 and 1991 may be expected.

Clearly, one would need to analyse in greater detail the results of the 1991 Agricultural Census to see the impact on the rural labour market of land resumption, eviction of tenant farmers, and the resulting increase in landless labour in the 1980s, as well as the considerable evidence of continuing substitution of capital for labour in agricultural farming, especially the increasing use of tractors and threshers during this period. What is interesting, however, is that despite these structural changes real wages of agricultural workers and casual labour increased during the 1980s. The World Bank (1995, Table 1.3, p. 51) shows a significant increase between 1983-84 and 1989-90 (data for earlier years are not available) and a slightly slower growth till 1993-94. Similarly, wages of construction workers show a sharp increase in the period between 1974-75 and 1986-87 and subsequent slowing down till 1993-94 (*ibid.* p. 51).

It is in the context of the demand for labour that overseas migration and remittances had a far-reaching impact on the economy. In the first period, between 1974-75 and early 1980s, the major impact on the labour market was the result of the large outflows of migrant workers which is reflected in the sharp increase in wage rates in this period. In the post-1983 period, the direct labour market impact declined as net migration especially to the Middle-East fell, but the large increases in remittance flows, which had started in the late 1970s and continued till the mid-1980s, led to both increases in incomes as well as keeping the labour market buoyant as remittance expenditures were directed to employment-intensive sectors, notably small-scale manufacturing construction, transport and communications, and wholesale and retail trade see Amjad (1986) for details.

A combination of favourable economic policies which reduced price distortions and encouraged the growth of private sector investment, together with overseas migration and remittance flows, therefore, can explain to a large extent the dramatic decline in poverty levels from the late 1970s till 1987-88. In the subsequent period, however, government fiscal deficits, which had helped fuel this growth but which were no longer tenable and had to be drastically cut to avert financial collapse, accompanying structural reforms (including privatisation and loss of employment for redundant workers, cut in subsidies, and increases in sales taxes), and declining remittances all combined to not just slow down but reverse the decline in poverty.

STRATEGY FOR THE FUTURE

While remittances have played a major role in reduction of poverty in Pakistan, they are not expected to play a major role in the future as they are continuously falling. Accordingly, attention would have to shift to growth, reduction in income inequalities, employment, wages, taxation structure, and income transfers if poverty is to be alleviated over a not very distant future.

While the taxation structure and the social expenditures need significant improvement, and an income transfers programme needs to be instituted, poverty can be significantly reduced through adoption of policies which tend to promote growth and productive employment. Such a strategy may have four major ingredients:

- (i) maximisation of growth rate by encouraging savings and foreign capital inflows in the form of private investment;
- (ii) promotion of labour intensive technology by pursuing export development strategy;
- (iii) withdrawal of all such subsidies which cheapen the capital, such as subsidy on mechanisation, and of fiscal incentives, such as tax holidays to the industries; and
- (iv) promotion of small-scale activities by removing constraints such as credit, skills, demand, differentials of import duties between the large and the small units, etc.

Investible resources are the binding constraint on investment in Pakistan and, as such, savings need to be promoted and foreign private investment encouraged. No doubt, foreign investment tends to be more capital-intensive, yet if the incentives are not distorted, the country can encourage foreign investment in labour-intensive economic activities.

Tariff rationalisation, a major component of the Structural Adjustment Programme, is expected to remove anti-exports bias, but it may not be sufficient to reorient the economy to export markets. ¹⁴ Since export-oriented industries are scaleneutral, the small firms can successfully compete with large firms provided they have sufficient information of the demand, design, and pattern in the export market. This may be provided through establishment of an information dissemination centre in the private sector from public sector seed money.

The problem of employed educated youth has grown worse in recent years especially after the privatisation. This group has always been looking for "soft jobs" in the public sector and the ban on employment in the government sector and privatisation of public enterprises have led to a shrinking of employment opportunities for them. At the same time, various skills are in short supply and as such re-training of these workers can increase their employability. In particular, the Social Action Programme can provide a lot of white-collar jobs. Similarly, critical shortages have been observed in para-medical staff, medical technologists, and middle-level technicians. Training in these can help in alleviating their problems and those of the respective professions.

Relaxing the constraints on informal sector enterprises can generate more jobs. Credit is the main constraint in expansion of these enterprises. However, instead of

¹⁴Unless it is ensured that exporters have duty-free excess to the imported raw materials, it is difficult to conceive promotion of export-oriented industries.

subsidising credit, the availability of credit needs to be ensured. Until recently, the government focused on subsidising credit rather than easing the collateral requirements, with the result that the credit programmes have not been very successful. It is being recognised now that the banks would need a larger spread both because of higher risk of default¹⁵ and the higher transaction costs of the advances made to small businesses. Accordingly, there is a need to subsidise the banking operations if the cost of credit to small producer is not to be any higher than that to the large producers. Alternatively, the banks would charge a higher interest rate which is commercially viable for the requisite advances to the micro enterprises.

With a view to improving the skills of the producers, mobile training facilities coupled with credit without collateral would be quite useful. The policies to promote small enterprises and rural industries needs to be matched with the effective measures such as developing the package to fill the gaps relating to market identification, quality control, linkages, as well as training and technology. The provincial Small Scale Industries Corporation needs to identify viable projects and standardise the demand for exports to help small industrialists.

Pakistan is pursuing a policy of mechanisation to improve agricultural productivity, notwithstanding the fact that it may displace labour with consequent implications for both unemployment and poverty. On the other hand, bio-technology will generate more output and employment and would help in eradicating poverty.

Increase in employment opportunities would also tend to increase the wage rate and, as such, functional income distribution would improve, with positive implications for poverty. On the other hand, the Structural Adjustment Programme should aim at a tax reform which reduces the incidence on the poorer sections of the society. Finally, *zakat*, *ushr* and *Bait-ul-Mal* need to be made more effective; if transparent methods are employed to select the recipients, then the revenues from *zakat* may also increase.

Even though the data do not permit estimation of poverty across genders, yet the fact remains that women relatively suffer more from poverty than men. There is some targeted credit for women. In Pakistan, The First Women [sic] Bank is providing credit to micro enterprises run by females. The bank provides advisory and consultancy services on different projects and even helps in the identification of viable projects for women; in developing the technical and managerial skills of women, and in the development of national and international markets. The Bank also organises exhibitions for the work of women artists and producers. Even though the Bank's operations are limited to the urban areas, it makes an effort to reach rural women through other commercial banks, cooperative banks, and the NGOs operating in these areas.

This bank demands suitable collateral for each of the loans. Sometimes the assets financed through credit are also taken as collateral. Nevertheless, to accommodate

¹⁵Whereas it is perceived that the small loans involve a higher default risk, the recovery rate in small loans has been relatively higher in Pakistan.

women entrepreneurs who cannot offer collateral, loaning against group guarantees has been introduced by the bank. This is specially encouraged in rural areas.

While, this bank in general provide credit at market rates, it also provides concessional credit at an interest rate of ten percent. These concessionary loans are advanced against a credit-line provided by the government. The loan is utilised to provide small loans for micro businesses with a maximum limit of Rs 25,000. No collateral is required for these loans. However, the bank demands two personal guarantees, or the group guarantees mentioned above. The Bank also operates small loan schemes for agricultural, industrial, commercial, and transport sectors and the loans are advanced to those unemployed persons who would like to be self-employed. These loans are provided at the concessional rates prescribed by the State Bank of Pakistan, and they range between 11 to 16 percent, depending on the time of repayment.

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