Decomposition of Changes in Poverty Measures: Sectoral and Institutional Considerations for the Poverty Reduction Strategy Paper of Pakistan

ALIYA H. KHAN and ALI SHAN AZHAR

I. INTRODUCTION

Two extremely significant empirical questions on the relationship between growth, distribution and poverty have remained the focus of attention for researchers and academicians. First, how does a change in aggregate poverty reflect intrasectoral gains/losses versus intersectoral shifts in population? Second, how much of an observed change in poverty can be attributed to the changes in the distribution of income, as distinct from growth in average incomes? Standard inequality measures like the Gini coefficient can be misleading in this context. At any rate, the change in an inequality measure can be a poor guide to its quantitative impact on poverty.

Ravallion and Huppi (1991) proposed decomposition formulae to throw light on the contributions of sectoral gains and population shifts (on the one hand) and economic growth and changes in inequality (on the other) to aggregate changes in poverty. They found that both population shifts and gains to the urban and rural sectors alleviated aggregate poverty in Indonesia over the 1984–87 period. In addition, they obtained estimates of the relative contributions of growth and greater equity to poverty alleviation in Indonesia. Datt and Ravallion (1992) extended the analysis to study poverty in Brazil and India during the 1980s. Kakwani (1993) explored the relation between economic growth and poverty for Cote d'Ivoire from 1980–85. He developed his own methodology to measure separately the impact of changes in average income and income inequality on poverty. Kakwani (2000) applied the same methodology to analyse changes in poverty in Thailand covering the period from 1988–94. Recently, Contreas (2003) examined the evolution of poverty and inequality in Chile between 1990 and 1996. Using the "Datt-Ravallion decomposition", he computed that economic growth accounted for over 85 percent of the poverty reduction in Chile.

Aliya H. Khan and Ali Shan Azhar are respectively Associate Professor and MPhil student at the Department of Economics, Quaid-i-Azam University, Islamabad.

Over the last decade, we have witnessed some pioneering work on the relationship between growth, poverty and inequality in Pakistan. Amjad and Kemal (1997) identified economic indicators, which can best capture the major correlates of poverty. Their finding is that the overall poverty levels in Pakistan (1963–1993) are positively correlated with the Gini coefficient and negatively correlated with real per capita GNP. Ali and Tahir (1999) analysed the long-run relationship between growth, poverty and inequality in Pakistan. They estimated the long-run elasticities of poverty with respect to growth and inequality.

A number of recent studies indicate that poverty, which declined rapidly in the 1970s and 1980s, returned to Pakistan in the late 1980s. In the late 1980s, government fiscal deficits (which had previously helped fuel growth but which were no longer tenable) had to be drastically cut to avert financial collapse, accompanying structural reforms[1] and these along with declining remittances combined to not just slow down but reverse the decline in poverty [Amjad and Kemal (1997)]. The increasing incidence of poverty in Pakistan since the late 1980s and continuing throughout the 1990s has severely damaged the growth potential of the economy through a variety of channels. Not least is the manifestation of poverty through the emergence of lawlessness, sectarianism and ethnic conflicts, which have collectively jaundiced the investment climate in Pakistan.

The renewed focus on poverty reduction as the principal goal of Pakistan's development policy framework emphasises the increasing need to quantify the relative contribution to changes in poverty measures of growth versus redistribution on one hand and the role played by intrasectoral gains/losses versus intersectoral shifts in population on the other. The present study contributes to the existing literature on the relationship between growth, poverty and inequality in Pakistan by rigorously quantifying the contribution of distributional changes to poverty alleviation, controlling for growth effects, and the contribution of growth, controlling for relevant distributional changes. The study also provides a decomposition of the changes in poverty in Pakistan into intrasectoral effects, intersectoral population shifts and their interaction.

The plan of the paper is that Section II discusses the decomposition of a measured change in aggregate poverty into constituent parts that indicate intrasectoral gains versus intersectoral shifts in population. Empirical results for Pakistan are also presented. Section III briefly reviews and uses the "Datt-Ravallion decomposition" to try to better understand the sources of the measured change in aggregate poverty in Pakistan. Finally, the last section concludes the paper and suggests broad policy measures, specifically in the context of the Poverty Reduction Strategy Paper (PRSP) of Pakistan.

---

[1]Structural reforms included privatisation and loss of employment for redundant workers, cut in subsidies, and increase in sales tax.

II. SECTORAL DECOMPOSITION OF CHANGES IN POVERTY

The "sectoral decomposition" of changes in poverty aims at assessing the relative gains to the poor within specific sectors and the contribution of changes in the distribution of the population across these sectors. Suppose that we have poverty measures (P) for each of two dates t and $t+n$ (say), and two sectors, i ($i = u$ and r for urban and rural). The change in aggregate poverty between the two dates can be decomposed into intrasectoral effects, population shifts and interaction effects, as follows:

$$P_{t+n} - P_t = (P_{u,t+n} - P_{u,t})\, n_{u,t} + (P_{r,t+n} - P_{r,t})\, n_{r,t}$$

Intrasectoral effects:

Change in urban poverty at the population share at date t Change in rural poverty at the population share at date t

$$+ \sum_{i=u}^{r} (n_{i,t+n} - n_{i,t}) P_{i-t} + \sum_{i=u}^{r} (P_{i,t+n} - P_{i,t})(n_{i,t+n} - n_{i,t}) \quad \dots \qquad \dots \qquad (1)$$

The population shift effect: Change in poverty arising from population shifts   The interaction effect: Interaction between sectoral changes and population shifts

Where $P_{i,t}$ denotes measured poverty in sector i at date t with corresponding population share $n_{i,t}$. Intuitively, the "intrasectoral effects" is the contribution of gains/losses to the poor within the urban sector and the rural sector corresponding to the change in aggregate poverty. The "population shift effect" shows how changes in the distribution of the population across sectors contributed to the change in aggregate poverty. The "interaction effect" can be interpreted as a measure of the correlation between the population shifts and the intrasectoral changes in poverty.

Estimation results of Equation 1 in Table 1 give the urban-rural sectoral decomposition of the aggregate poverty changes in Pakistan over the 1979—1987-88 period. We find that both population shifts and gains to the urban and rural sectors alleviated aggregate poverty. These improvements were dampened slightly by the negative "interaction effect". The gains to the rural sector accounted for the vast majority of aggregate poverty alleviation and clearly more than the sector's population share. Gains to the urban sector and population shifts from the rural to the urban sector did contribute to poverty alleviation, but were quantitatively less important than the direct gains to the rural poor.

Table 2 provides a sectoral decomposition for the 1987-88—1998-99 period for Pakistan. Both the urban and rural sectors contributed to the increase in aggregate poverty. Though the "interaction effect" and the "population shift effect" alleviated poverty, the overall impact was negligible. The quantitative importance of the sectoral loss to the rural population is notable. A whopping 86.3 percent of the poverty increase in Pakistan from 1987-88—1998-99 can be attributed to the rural sector.

Table 1

Decomposition of Change in Poverty into Intrasectoral Effects, Intersectoral Population Shifts, and their Interaction between 1979 and 1987-88, Pakistan (Percentage of Total Poverty Reduction)

| Poverty Measure | Components of Poverty Alleviation | | | |
| | Intrasectoral Effects | | Intersectoral | Interaction |
	Urban	Rural	Population Shifts	Effect
Headcount Index	22.78	76.68	1.03	− 0.51

Source: Authors' calculations based on Amjad and Kemal (1997) and *Census Report of Pakistan, 1981 and 1998.*

Table 2

Decomposition of Change in Poverty into Intrasectoral Effects, Intersectoral Population Shifts, and their Interaction between 1987-88 and 1998-99, Pakistan (Percentage of Total Poverty Increase)

| Poverty Measure | Components of Poverty Alleviation | | | |
| | Intrasectoral Effects | | Intersectoral | Interaction |
	Urban	Rural	Population Shifts	Effect
Headcount Index	13.33	86.30	−0.28	− 0.87

Source: Authors' calculations based on Amjad and Kemal (1997); *Economic Survey 2002-03* and *Census Report of Pakistan, 1981 and 1998.*

III. GROWTH-EQUITY DECOMPOSITION OF CHANGES IN POVERTY

We can decompose the change in poverty into the change in the mean consumption level of a given distribution, and a change in the distribution of consumption around the mean. We may call this the "growth-equity decomposition" of a change in poverty. For this decomposition, we confine attention to poverty measures which can be fully characterised in terms of the poverty line, the mean income of the distribution, and the Lorenz curve representing the structure of relative income inequalities. The poverty measure P_t at date t is written as

$$P_t = P\left(z / \mu_t, L_t\right) \quad \dots \qquad \dots \qquad \dots \qquad \dots \qquad \dots \qquad \dots \qquad (2)$$

Where, z is the poverty line, μ_t is the mean income/consumption and L_t is a vector of parameters fully describing the Lorenz curve at date t. The level of poverty may change due to a change in the mean income/consumption μ_t relative to the poverty line or due to a change in relative inequalities L_t.

The "growth component" of a change in the poverty measure is defined as the change in poverty due to a change in the mean while holding the Lorenz curve constant at some initial level. The "redistribution component" is the change in poverty due to a

change in the Lorenz curve while keeping the mean income constant at some initial level. To resolve the issue empirically, let $P_{t+n}{}^*$ denote the poverty level that would have occurred at date $t+n$ if the change in mean consumption since date t had not been associated with any change in relative consumption levels. In other words, $P_{t+n}{}^*$ is obtained by applying the mean at date $t+n$ to the Lorenz curve at date t. Similarly, let $P_{t+n}{}^{**}$ denote the poverty level that one would have found at date $t+n$ if only the Lorenz curve had shifted since date t, leaving the mean unchanged; that is, $P_{t+n}{}^{**}$ is computed by applying the Lorenz curve at date $t+n$ to the mean at date t. The observed change in poverty over dates t and $t+n$ can then be decomposed as follows:

$$P_{t+n} - P_t \; = \; (P_{t+n}{}^* - P_t) \; + \; (P_{t+n}{}^{**} - P_t) \; + \; \text{residual} \quad \dots \quad (3)$$

Growth effect:	Distributional effect:	Interaction between
change in poverty given	change in poverty given	effects of growth
change in mean	shifts in the Lorenz curve	and changes in
consumption holding	holding mean consumption	distribution
Lorenz curve constant	constant at date t	
at date t		

The two simulated poverty measures, $P_{t+n}{}^*$ and $P_{t+n}{}^{**}$ are calculated by econometrically estimating parametric specifications of the Lorenz curves and deriving the poverty measures as functions of those parameters and of the mean income and the poverty line. The non-zero residual in Equation (3) exists whenever the poverty measure is not additively separable between u and L, i.e., whenever the marginal effects on the poverty index of changes in the mean (Lorenz curve) depend on the precise Lorenz curve(mean). Hence, the residual is the difference between the distributionally neutral growth effect given the Lorenz curve at date $t+n$ and that evaluated at the Lorenz curve at date t.

In general, the residual does not vanish. It will vanish if either (i) the distributionally neutral growth effect on poverty is independent of the Lorenz curve (or equivalently, if the distributional effect is independent of the mean) i.e. the poverty measure is additively separable between u and L or (ii) the changes in one or both the mean u and Lorenz curve are infinitesimally small. This does not hold for the poverty measures and Lorenz curve parameter estimates considered in this study, nor does it appear likely to ever hold for any plausible Lorenz curve. Infact, most poverty measures used in practice are not separable into the mean and the Lorenz curve. A residual will thus arise, given that one has fixed the Lorenz curve (in measuring the growth component) and the level of the mean (when measuring the distribution component). Moreover, the residual cannot be apportioned between the growth and redistribution components. Such an exercise will be arbitrary and convey a false impression that the decomposition is exact. Infact, the residual can be of considerable interest in its own right. In particular, it can be interpreted as the contribution to aggregate poverty of the interaction effects between growth and distributional changes.[2]

[2]For further discussion on the interpretation of the residual, see Datt and Ravallion (1992).

Table 3 gives the estimates of the decomposition of changes in total poverty in Pakistan between 1979 and 1993-94 using the methodology in Equation 3. The table gives the increments in percentage points, both in the aggregate and by components and sub-periods. It is observed that the shifts in the Lorenz curve contributed to poverty alleviation for the period 1979—1987-88. However, the majority of the reduction in poverty can be attributed to higher mean consumption for a given distribution of consumption. Between 1987-88 and 1993-94, we find that both the growth and redistribution components contributed to the increase in poverty, though the former factor was quantitatively more important. The residuals in the decomposition vary in size.

Table 3

Decomposition of Changes in Poverty into Growth and Redistribution
Components, Pakistan, 1979 − 1993-94
(Percentage Points)

Period	Growth Component	Redistribution Component	Residual	Change in Poverty
Householdcount Index				
1979 to 87-88	− 7.59	− 1.10	− 0.25	− 8.94
1987-88 to 93-94	4.40	1.83	0.97	7.20

Source: Authors' calculations based on *HIES, 1979, 1987-88* and *1993-94* and Ali and Tahir (1999).

Our results suggest that it would be hazardous to assume the residual is zero, or simply lump it into the components.

To facilitate comparisons, Table 4 and Table 5 provide the estimates of the relative contributions to poverty changes in Pakistan of changes in mean consumption and distributional shifts. The distributional effects (12.3 percent) contributed to the alleviation of poverty in Pakistan between 1979 and 1987-88. However, growth in mean consumption accounted for the bulk of the improvement

Table 4

Decomposition of Changes in Poverty into Consumption Growth and
Redistribution Effects, Pakistan, 1979—1987-88
(Percentage of Total Poverty Reduction)

Poverty Measure	Higher Mean Consumption[a]	Change in Distribution[b]	Residual
Householdcount Index	84.9	12.3	2.8

Source: Authors' calculations based on *HIES, 1979* and *1987-88* and Ali and Tahir (1999).
Note: a. $(P_{87}^{*} - P_{79}) / (P_{87} - P_{79})$.
    b. $(P_{87}^{**} - P_{79}) / (P_{87} - P_{79})$.

Table 5

Decomposition of Changes in Poverty into Consumption Growth and
Redistribution Effects, Pakistan, 1987-88—1993-94
(Percentage of Total Poverty Increase)

Poverty Measure	Lower Mean Consumption[a]	Change in Distribution[b]	Residual
Householdcount Index	61.11	25.42	13.47

Source: Authors' calculations based on *HIES, 1987-88* and *1993-94* and Ali and Tahir (1999).
Note: a. $(P_{93}^{*} - P_{87}) / (P_{93} - P_{87})$.
　　b. $(P_{93}^{**} - P_{87}) / (P_{93} - P_{87})$.

(84.9 percent). The growth component again dominated the redistribution component in Pakistan for the period 1987-88 to 1993-94. Changes in distribution (25.42 percent) reinforced the adverse effect of the decrease in mean consumption (61.11 percent). The above results complement the evidence obtained from the "sectoral decomposition" of poverty in Pakistan and may indeed have a strong bearing on the sectoral shares of poverty.

IV. IMPLICATIONS OF EMPIRICAL RESULTS FOR THE PRSP

This paper aims at providing insight to policy-makers into a framework for action, which is needed to effectively reduce poverty in all its dimensions in Pakistan. In this regard, it will be befitting to take as starting reference the Pakistan government's own Draft Poverty Reduction Strategy Paper, PRSP (2003a) so as to base the recommendations on the experience of existing programmes and initiatives in Pakistan. The PRSP specifies five main goals of policy in the years ahead: accelerating economic growth and maintaining macroeconomic stability, investing in human capital, augmenting targeted interventions, expanding social safety nets and improving governance. While the approach of the PRSP is well focused, there is a need to deepen the understanding that underpins some areas of reform identified by it.

A vitally critical area of intervention for which the PRSP has not laid out a comprehensive approach is rural poverty. Our study reinforces other findings that poverty in Pakistan is overwhelmingly rural. An effective strategy for rural development will have immense bearings on the incidence of poverty in Pakistan. The strategy for addressing rural poverty in Pakistan will require the implementation of mutually consistent, mutually reinforcing, multi-faceted packages of programmes and strategies. The most effective approach will entail a combination of certain critical elements. Lipton and Ravallion (1995) point out that the policies pursued by most LDCs have been biased against the rural sector in various ways. Three sources of bias can be identified.

(1) The direct effect of sector-specific pricing policies, appearing as a wedge between domestic producer prices and border prices for agricultural outputs.

(2) The direct effect of non-price, sector-specific, policies, such as public spending on roads, schools, services and research.

(3) The indirect effect on the farm sector of economy-wide distortions operating through exchange rate and external trade policies.

In most LDCs, there are prospects for reducing poverty by removing these biases. In addition, cross-sectoral spillover effects also strengthen the case for a pro-rural bias, with or without other distortions. Such spillover effects can arise in a number of ways, including migration across regions and trade.[3] Ravallion and Datt (1994) found strong evidence of a significant response of urban poverty measures to rural consumption growth in India. The reverse was not true; that is urban growth did not reduce rural poverty controlling for the rural mean. Their investigation clearly established the quantitative importance of fostering rural economic growth for poverty reduction in both rural and urban /India.

The World Bank (2002) proposes a coordinated strategy for addressing rural poverty in Pakistan. In regards to constraints on productivity in the farm sector, there is first a need to improve household access to assets, in particular land. Historically poor outcomes of land and tenancy reforms, examined in light of some new initiatives, hint at the importance of improving not only the distribution of land but also the complementary access to agrarian inputs and credits. Improving credit allocation generally requires moving away from supply driven mechanisms, and improving and broadening micro-credit practices. Programmes that promote investments in the non-farm sector should be further encouraged since diversification out of agriculture has been shown to mitigate rural vulnerability and poverty. Particularly in view of Pakistan's growing drought problem, we need programmes that improve access to rural infrastructure, focusing on improved efficiency of the irrigation system. Increased public investment is warranted here, but some successes to date stress the importance of local governance reforms, particularly in the form of more community participation in local land and resource management. All these measures have to be designed and implemented in a coordinated fashion, due to considerable interrelationships among the various constraints addressed.

The PRSP has very appropriately emphasised the importance of good governance in the context of fighting poverty in Pakistan. The lack of institutional capacity and strength in Pakistan to withstand the rigors of an effective poverty eradication programme has often been highlighted. World Bank (2000) stressed the imperative of "facilitating empowerment" and "enhancing security" to generate the

---

[3]Cross-sectoral linkages through migration and trade can readily create multiplier effects, which enhance sector-specific policy impacts on the poor.

dynamics for sustainable poverty reduction. "Empowerment" implies the enhancement of the poor's capacity to influence the state institutions that affect their lives. This can be made possible by strengthening the participation of the poor people in political processes and local decision-making. Hence, "empowerment" of the poor people is part of the broader agenda of sound governance and accountability of state institutions to their citizens. In "enhancing security" the issue once again is whether public interventions and institutions work well—and in the interests of poor people. So, access to information and participation are again vital to address the menace of vulnerability to risks (e.g., ill health and economic shocks) faced by the poor people. Infact, sound and inclusive governance is central to creating an enabling environment for eradicating poverty. Good governance demands well-functioning and accountable public and private institutions. It is a prerequisite to mobilise social capital for sustained action against poverty.

The PRSP recognises that poverty in Pakistan is highly conditioned by governance factors. Addressing the governance component of the poverty reduction strategy requires major transformation of governance structures and systems, as well as of political and organisational culture, especially at the local level. It is in this spirit, that Pakistan's new "Devolution Plan", finalised in August 2000, seeks to restructure the administrative setups at the district, tehsil and union levels. The plan envisages the creation of full-fledged district governments with legislative and financial powers, serving below federal and provincial levels.

To date major steps have been taken towards the implementation of the "Devolution Plan". The "Local Government Ordinance 2001" paved the way for nation-wide elections to local governments. Administrative structures at the district level now function under the Zila Nazim.[4] The District Coordination Officer (DCO) is responsible for coordinating the activities of eleven groups of offices each headed by an Executive District Officer (EDO). Municipal services have been reorganised under the Tehsil/Town Nazim. The Tehsil/Town Municipal Officer (TMO) and Tehsil/Town Officers function under the Tehsil/Town Nazims. At the union level, the union administration operates under the Union Nazim. The Tehsil/Town Municipal Administrations have been assigned the responsibility for planning and developing municipal services (local roads, water supply, street lighting, markets, urban amenities, etc.). The union administrations plan and execute small community development projects in addition to their major role of monitoring the services and facilities. Deconcentration of functions in the revenue and police hierarchies has taken place. Now coordination, revenue and magisterial functions are not concentrated in one post. Likewise police investigation has been separated from watch and ward.

---

[4]The divisional level where there were administrative structures and no corresponding political dispensation has been abolished.

Unfortunately, there have been myriad problems in the series of fundamental transformations to overcome the governance crisis and lay the foundation of a successful poverty reduction strategy in Pakistan. The main issue has been to overcome the opposition of vested interests determined to hold on to the old system characterised by institutional decay and breakdown. Apart from that, three key problem areas that have emerged in the implementation of decentralisation reform are related to the lack of funds, capacity and systems.

First and foremost, devolution is a costly business. It requires new offices, equipment and manpower. Fiscal decentralisation entails providing local governments with significant locally generated resources. The question of how to mobilise these resources remains unresolved. There has hardly been any devolution of taxes to the local levels or improvement in the collection/recovery mechanism of the local taxes. It must be realised that local resource mobilisation is an important activity for the sustainability of local governments. Without fiscal decentralisation, political decentralisation is meaningless. Adequate service delivery and poverty reduction can only be achieved through a combination of grassroots participation and grassroots spending.

Second, the full implementation of the district government system requires the political leadership, administrative personnel and other stakeholders to comprehend in entirety what their particular roles/responsibilities are and how best they can be performed. To date, they lack that understanding in wake of the massive scale of reforms introduced. There is a pressing need for capacity building across all three newly created tiers of government and across the political leadership and civil service divide. The PRSP has appreciated the requirement of civil service reform to adapt the public administration to the new reality of devolution to render them more responsive to citizen demands.

Third, in certain cases there is acute need for new systems to reflect and accommodate the altered political, fiscal and administrative realities. For instance, Provincial Finance Commissions (PFCs) have been constituted in each province to ensure equitable and transparent distribution of resources. The local governments are primarily dependent upon these fiscal transfers from provincial governments for meeting their expenditure requirements. These fiscal transfers have been far from reliable and predictable. The systems for direct fund transfers to local governments are not fully in place. Similarly, the "Local Government Ordinance 2001" separated the functions of accounting and audit. But special structures have not yet been created to implement these measures.

Overall, this paper has described some tools for statistical analysis to decompose observed changes in aggregate poverty in Pakistan, so as to assess their sectoral and distributional composition. The recommendations that derive from the empirical analysis in this paper are broadly consistent with the poverty reduction strategy outlined in the PRSP, though they also suggest a need for a strengthening of this strategy.

The Government of Pakistan has formulated a new Poverty Reduction Strategy Paper (2003b) which includes a concrete and well-classified "Rural Development Strategy". Keeping in view the policy message of this study, it is sincerely hoped that the Rural Development Strategy incorporated in the new PRSP, will be adequately pursued and implemented in letter and spirit.

REFERENCES

Ali, Salman Syed, and Sayyid Tahir (1999) Dynamics of Growth, Poverty and Inequality in Pakistan. *The Pakistan Development Review* 38:4, 837–858.

Amjad, Rashid, and A. R. Kemal (1997) Macroeconomic Policies and their Impact on Poverty Alleviation in Pakistan. *The Pakistan Development Review* 36:1, 39–68.

Contreas, D. (2003) Poverty and Inequality in a Rapid Growth Economy: Chile 1990-96. *The Journal of Development Studies* 39:3, 181–200.

Datt, G. and M. Ravallion (1992) Growth and Redistribution Components of Changes in Poverty Measures: A Decomposition with Applications to Brazil and India in the 1980s. *Journal of Development Economics* 38, 275–295.

Kakwani, N. (1993) Poverty and Economic Growth with Application to Cote D'Ivoire. *Review of Income and Wealth* 39:2, 121–139.

Kakwani, N. (2000) On Measuring Growth and Inequality Components of Poverty with Application to Thailand. *Journal of Quantitative Economics* 16:1, 67–79.

Lipton, M., and M. Ravallion (1995) Poverty and Policy. In J. Behrman and T. N. Srinivasan (eds.). *Handbook of Development Economics, Vol. III*. Amsterdam: North-Holland.

Pakistan, Government of (1979) *HIES: Household Income and Expenditure Survey, 1979*. Islamabad: Federal Bureau of Statistics.

Pakistan, Government of (1987-88) *HIES: Household Income and Expenditure Survey*, *1987-88*. Islamabad: Federal Bureau of Statistics.

Pakistan, Government of (1993-94) *HIES: Household Income and Expenditure Survey*, *1993-94*. Islamabad: Federal Bureau of Statistics.

Pakistan, Government of (2003) *Economic Survey 2002-03*. Islamabad: Economic Advisor's Wing, Ministry of Finance.

Pakistan, Government of (2003a) *Draft PRSP*. Islamabad: PRSP Secretariat, Ministry of Finance.

Pakistan, Government of (2003b) *Accelerating Economic Growth and Reducing Poverty: The Road Ahead.* PRSP, Government of Pakistan. Islamabad: PRSP Secretariat, Ministry of Finance.

Population Census Organisation (1984) *1981 Census Report of Pakistan*. Islamabad: Statistics Division. (Report No. 69.)

Population Census Organisation (2001) *1998 Census Report of Pakistan*. Islamabad: Statistics Division. (Census Publication No. 160.)

Ravallion, M., and G. Datt (1994) How Important to India's Poor is the Urban-Rural Composition of Growth? Washington, D.C.: World Bank. (World Bank Policy Research Working Paper No. 1399.)

Ravallion, M., and M. Huppi (1991) Measuring Changes in Poverty: A Methodological Case Study of Indonesia during an Adjustment Period. *The World Bank Economic Review* 5:1, 57–82.

World Bank (2000) *World Development Report: Attacking Poverty*. New York: Oxford University Press.

World Bank (2002) Pakistan Poverty Assessment: Poverty in Pakistan—Vulnerabilities, Social Gaps and Rural Dynamics. Islamabad: The World Bank in Pakistan. (Report No. 24296-PAK.)