Poverty and growth: Lessons from 40 years of data on India’s poor

Despite years of debate, the relationship between economic growth and poverty reduction is still far from clear. Data are part of the problem—comparable and consistent information is hard to come by for many developing countries. Data from India, however, reveal patterns from the past—and lessons for the future.

There has been much debate about how much poor people share in economic growth. Some analysts argue that in developing countries distribution must get worse before it gets better. Some even argue that “pro-poor” economic growth is nearly impossible during the early stages of an economic take-off.

These debates have taken on new urgency as a result of macroeconomic difficulties and adjustment efforts in many developing countries. They are hard to resolve empirically, partly because of the paucity of sound data on the living standards of poor people in developing countries. India is an exception in this regard: between 1951 and 1992 the government undertook 34 national surveys yielding data that are reasonably comparable over time. Other data (on price indices and explanatory variables) are also available on a reasonably consistent basis. Although there are data problems—some of which can be corrected for—they are modest by the standards of international cross-sectional studies. Thus the data from India offer a unique opportunity to study the determinants of India’s progress in reducing poverty. The results contain important lessons for India and for other countries that have followed similar development strategies. This note describes the main results of this research.

Measuring poverty in India

To investigate the relationship between growth and poverty, the project constructed a set of consistent estimates of various poverty measures for India for 1951–92 from the national survey data. The project was mainly concerned with absolute poverty, meaning that the extent of any person’s poverty depends solely on the consumption expenditure per capita in that person’s household. The measure of consumption used is reasonably comprehensive—it includes both food and nonfood goods and the imputed values for consumption from own production. Cost of living differences between urban and rural areas and across states were also built into the analysis.

Various poverty measures were analyzed. This note focuses on the simplest: the headcount index, that is, the percentage of the population living in households where per capita consumption is below the poverty line.
Other poverty measures generally showed a similar pattern of change.

How much progress has India made?

The study’s estimates of the headcount index at the urban, rural, and national levels are shown in figure 1. Until the mid-1970s poverty fluctuated without a clear trend in either direction. After that poverty fell significantly, though this trend did not continue into the 1990s. It took more than 20 years for poverty measures to fall below—and stay below—their values in the early 1950s. Changes in rural and urban poverty closely correspond to those at the national level.

India’s progress on poverty has been modest compared with the standards set by some countries in East Asia. For example, in 1970 Indonesia’s headcount index was 58 percent, about the same as India’s. By 1993, however, Indonesia’s headcount index (using the same real poverty line) had fallen to 8 percent—about one-fifth of India’s.

How much did growth help India’s poor?

Looking first at the effect of aggregate economic growth on poverty, the project estimated that a 10 percent increase in mean consumption resulted in a 12–13 percent drop in the headcount index. The consumption response tends to be even greater for poverty measures that better reflect the depth and severity of poverty. This is because the effects of growth on India’s poor are not confined to those near the poverty line, but reach deeper.

Redistribution played a secondary role in the long-run changes in poverty. Any change in a poverty measure can be decomposed into a growth component and a redistribution component. Roughly speaking, the growth component is the change in the poverty measure that would have occurred if inequalities had not changed; the redistribution component is the change in the poverty measure that would have occurred if mean consumption had not changed. By adding each component over time we can assess the cumulative impact (figure 2).

The overall contribution of redistribution to change in the headcount index has not been large. Since 1951 growth in mean consumption has accounted for about 80 percent of the decline in the headcount index. Poverty measures that are more sensitive to changes in the living standards of the poorest show redistribution playing a more significant role.

Most of the pro-poor effects of redistribution were realized during the early to mid-1960s, before the onset of the sustained decline in India’s national poverty measures. Since the mid-1960s the redistribution component has fluctuated without a trend and has had little further effect on national poverty. Thus the gains to the poor since about 1970 have come mainly from growth.

Did the pattern of growth matter?

The research found that rural areas accounted for more than three-quarters of the decline in national poverty measures over the whole period. Despite the substantial sectoral shifts in

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**Figure 1. Poverty in India, 1951–92**

[Graph showing headcount index (percentage of people below the poverty line) from 1950 to 1990 for Urban, Rural, and National levels.]

Source: Author’s calculations.

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**Figure 2. Cumulative change in India’s headcount index since 1951–52**

[Graph showing growth component, redistribution component, and total change from 1950 to 1990.]

Source: Author’s calculations.
national output that have occurred over the past 40 years, poverty in India is still overwhelmingly rural—in 1992 three-quarters of India’s poor lived in rural areas.

In analyzing the links between the urban-rural composition of growth and the urban-rural composition of poverty, the research found that rural growth had beneficial spillover effects that increased its importance to national poverty reduction. Both the urban poor and rural poor gained from growth in rural areas. By contrast, urban growth had adverse distributional effects within urban areas that limited gains to the urban poor, and urban growth had no discernible effect on rural poverty. Growth resulting from rural-urban migration also contributed very little to poverty reduction.

There were marked differences in the effect on poverty when growth in national income was broken down by output-based sector. Both primary (mainly agriculture) and tertiary (services) sector growth reduced poverty nationally and in urban and rural areas. By contrast, secondary (industry) sector growth brought no discernible gains to the urban or rural poor. In the historical shift from primary to secondary and tertiary sectors, the tertiary sector delivered the bulk of the gains to India’s poor.

The research thus indicates the quantitative importance to poverty reduction of the sectoral composition of economic growth. Fostering the conditions for rural growth must be central to any effective strategy for reducing poverty in India. An additional lesson, however, concerns the nature of industrial growth. The project studied a period in which India’s development strategy emphasized capital-intensive industrialization concentrated in the urban areas of a largely closed economy. It is hardly surprising that the urban economic growth fueled by such industrialization brought negligible gains to the nation’s poor.

Did the poor benefit from agricultural growth?

Since rural poverty has been so important, the project turned its attention to this sector. The project combined the household survey data with data on agricultural wages, prices, and output and estimated a model determining rural poverty measures and real wages. All three poverty measures responded significantly in the short run to changes in agricultural wages and average farm yields. Wages also responded to farm yields, presumably through effects on labor demand. Higher yields thus helped reduce absolute poverty through induced wage effects as well as through more direct channels, including effects on employment and farm productivity.

Neither the poverty measures nor real wages adjusted instantaneously to changes in farm yields. The combined effect of this stickiness in both variables was that the short-run gains to the poor of agricultural productivity growth were far lower than the long-run effects. Also, the short-run effects operating through the wage rate were minor compared with those operating through other channels. But in the long run the wage effects did matter, accounting for about one-third of the long-run response of absolute poverty to a yield increase. About half of the long-run effect of increased agricultural output on the welfare of the poor occurred within three years of an initial gain in farm yield.

How did macroeconomic instability affect the poor?

In the short run, inflation had a strongly adverse effect on real agricultural wages and hence absolute poverty. Inflation lowered real wages in the short term because nominal agricultural wages were slow to adjust to inflation. Nominal wages catch up eventually. But the adverse short-term effect on the rural poor can be sizable. For example, rising poverty in the early 1990s was caused partly by inflation, though other factors were at work (including output contraction in both farm and nonfarm sectors). The combined effects of macroeconomic crisis and stabilization accounted for about one-third of the increase in rural poverty in 1992.

Why were some states better at reducing poverty?

Disparities in living standards across states have been large. In 1990–91 about 58 percent of the rural population in Bihar was poor—three times
the average proportion in Punjab and Haryana. The differences in the rate of poverty reduction across states are also striking. Between 1960 and 1990 some states reduced poverty much faster than others (figure 3).

What accounts for these differences? Higher growth rates in agricultural output per acre, lower inflation, and higher growth in state development expenditures all led to more rapid reductions in absolute poverty in rural areas. Differences in initial human and physical resource development also mattered: higher irrigation intensity, higher literacy, and lower infant mortality all contributed to long-term poverty reduction. Initial inequalities in access to physical and human infrastructure appear to have been an important factor in the differences in long-term rates of poverty reduction.

Two main approaches to reducing poverty can be identified from India’s experience. One is through rural economic growth. Such growth, fueled in part by state development spending and combined with good initial conditions in physical infrastructure, produced significant reductions in poverty in states like Punjab and Haryana. The second approach relies on human resource development, supported by appropriate public spending. This can reduce poverty even when there is little output growth in the domestic economy, partly through increased exports of relatively skilled labor and the resulting inflow of remittances; Kerala is an example. Some states, such as Bihar, failed on both counts; there was too little growth and human resources were underdeveloped. These states made the least progress in the fight against poverty.

No Indian state effectively combined both approaches. This research suggests that if any state had done so it would have achieved rapid reductions in poverty, comparable to the progress made in a number of East Asian countries. The lesson for the future is clear.

—Martin Ravallion

Further reading


