Understanding the recent rise in poverty incidence: a look at growth and income distribution effects

Celia M. Reyes, Christian D. Mina, Aubrey D. Tabuga, Ronina D. Asis, and Maria Blesila G. Datu

With the 2015 deadline set for the Millennium Development Goals (MDGs) looming ahead, the Philippines continues with its difficult battle against poverty. Under the MDGs, the country targeted to halve its 1990 poverty incidence by 2015. In 2006, however, poverty incidence in the Philippines worsened despite the relatively fast economic growth with about 3.7 million individuals added to the count of 23.8 million people living below the poverty line in 2003. This marks a reversal from the downward trend in the past. With only five years left before the deadline and with the recent economic shocks and natural disasters that the Philippines has experienced, the country has to work faster and more seriously than ever to achieve its goals.

This Policy Notes, which is based on a study by Reyes et al. (2010), briefly discusses the factors behind the worsening of the poverty situation from 2003 to 2006, with the objective of drawing critical policy insights for effective poverty reduction strategies. In sum, it states that the rise in the poverty rate was due to lack of growth of real income and worsening income distribution. It also points out that although overall output growth has been significant, said growth was more in the nonagricultural sectors and not in agriculture where most of the poor can be found. Therefore, the benefits of economic growth may not have reached the poor.

PIDS Policy Notes are observations/analyses written by PIDS researchers on certain policy issues. The treatise is holistic in approach and aims to provide useful inputs for decisionmaking.

This Notes is based on PIDS Discussion Paper No. 2010-26 titled "Are we winning the fight against poverty? An assessment of the poverty situation in the Philippines" by the same authors. The authors are Research Fellow, Research Associates, and Senior Research Specialists, respectively, at the Institute. The views expressed are those of the authors and do not necessarily reflect those of PIDS or any of the study’s sponsors.
What explains the rise in poverty rate in 2003–2006?

In their study, Reyes et al. (2010) decomposed the rise in poverty rate from 2003 to 2006 into growth and redistribution components. For purposes of comparison, the changes in the poverty rate in 2000–2003 and 2000–2006 were also decomposed. The study looked into what amount of change in the poverty rate can be credited to economic growth and what part can be attributed to changes in income distribution. The growth component refers to the change in poverty due to a change in the mean income, while holding the income distribution constant at the reference level. The redistribution component, on the other hand, pertains to the change in the poverty rate due to a change in the distribution, or the Lorenz curve, while keeping the mean income constant.

The results of the decomposition analysis are shown in Table 1. These are estimates of the effects of the components where a negative (positive) value indicates poverty reducing (worsening) effect. In 2003–2006, the results indicate that growth and redistribution factors both affected poverty adversely. As shown in Table 1, the poverty increase of 2.849 during this period was due to a sum of a growth effect of 2.388, redistribution effect of 0.343, and interaction component of 0.118 percentage point. The interaction component measures the part that is not exclusively attributed to growth or redistribution. This shows that real income did not grow but instead shrank while income distribution changed in a way that left the poor even worse off. Indeed, the real income of all income deciles declined from 2003 to 2006 as can be seen in Table 2. At the same time, income distribution particularly in the rural areas where 71 percent of the poor live became unequal. The effect of the growth component was larger than that of the redistribution component.

**Table 1. Decomposition of poverty by component, 2000–2006**

<table>
<thead>
<tr>
<th>Area/Period</th>
<th>Change in Poverty Incidence</th>
<th>Growth Component</th>
<th>Redistribution Component</th>
<th>Interaction Component</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000–2003</td>
<td>-3.052</td>
<td>-0.573</td>
<td>-2.575</td>
<td>0.096</td>
</tr>
<tr>
<td>2003–2006</td>
<td>2.849</td>
<td>2.388</td>
<td>0.343</td>
<td>0.118</td>
</tr>
<tr>
<td>2000–2006</td>
<td>-0.203</td>
<td>1.719</td>
<td>-2.057</td>
<td>0.135</td>
</tr>
</tbody>
</table>

*a Real income data are based on 2000 prices. Source of basic data: Family Income and Expenditure Survey (FIES), National Statistics Office (NSO)

**Table 2. Growth rate of mean per capita income by decile (base year=2000)**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1.76</td>
<td>-0.50</td>
</tr>
<tr>
<td>2</td>
<td>5.84</td>
<td>-3.68</td>
</tr>
<tr>
<td>3</td>
<td>6.94</td>
<td>-4.77</td>
</tr>
<tr>
<td>4</td>
<td>6.24</td>
<td>-5.16</td>
</tr>
<tr>
<td>5</td>
<td>6.23</td>
<td>-5.99</td>
</tr>
<tr>
<td>6</td>
<td>5.94</td>
<td>-5.68</td>
</tr>
<tr>
<td>7</td>
<td>5.32</td>
<td>-5.55</td>
</tr>
<tr>
<td>8</td>
<td>3.49</td>
<td>-4.19</td>
</tr>
<tr>
<td>9</td>
<td>2.10</td>
<td>-2.64</td>
</tr>
<tr>
<td>10</td>
<td>-3.93</td>
<td>-4.93</td>
</tr>
<tr>
<td>Total</td>
<td>1.07</td>
<td>-4.53</td>
</tr>
</tbody>
</table>

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In contrast, the decline in the poverty rate of 3.052 points in 2000–2003 was due to poverty reducing effects of both growth and redistribution (-0.573 and -2.575 percentage points, respectively). This was a period where both real income and income distribution improved. When we look into the computations for 2000–2006, the effects vary such that growth worsened poverty rate while redistribution reduced it. The net effect was reduction in the poverty rate because the magnitude of the impact of a change in income distribution was larger than that of growth.

The results reiterate the importance of having a sustainable level of economic growth to reduce poverty. At the same time, effective redistributive efforts are critical because the lack of it tends to further worsen poverty in the extreme case where there is no increase in real income as what happened in 2003–2006. Therefore, policies that aim to effectively reduce poverty must complement economic growth with effective and targeted redistributive efforts.

**Rising income inequality in the rural areas**

The bulk (71%) of the poor is located in the rural areas. For several years now, inequality in the rural areas has been increasing based on the Gini coefficient estimates. Figure 1 shows the slight yet continuous upward trend of the Gini coefficient for the rural areas. Another measure of inequality, the Theil index, indicates that inequality in the rural parts has worsened during 2003–2006.

The rising income inequality proves the need to implement effective redistributive policies. Improving income distribution is important not only in terms of poverty reduction, as seen in the previous sections, but also in terms of being one essential welfare measure.

**Lack of growth in the agricultural sector**

The rise in inequality in the rural areas can be attributed to the agriculture sector’s inability...
From 2000 to 2003, the agriculture sector was growing by an average of roughly 3.8 percent per year while industry and services grew at an average rate of 1.8 percent and 5.2 percent, respectively. However, by 2003–2006, the growth rates of industry and services have surged to 4.5 percent and 7.1 percent per year, respectively, while that of agriculture went down to an average of 3.7 percent per year. Notably, the slowest growth rate of the agriculture sector within 2000 to 2006 was in 2005, at only 2 percent.

The difference can be more clearly seen when one looks at labor productivity by sector (Figure 3). The agriculture sector had a labor productivity that almost stagnated at below P20,000. Those of the two other sectors, on the other hand, have been consistently way higher than that of the agriculture sector and are growing at a much faster rate. For instance, agriculture labor productivity grew only by 6.9 percent from 2003 to 2006, while industry and services grew at 15 percent and 14 percent, respectively. The slower growth rate in the agriculture sector is where most poor people are engaged in. In fact, in 2006, 45 percent of the poor are in households headed by farmers, forestry workers, and fisherfolk. As seen in Figure 2, the agriculture sector grew at a much slower pace than the industry and service sectors during the years 2003–2006.

![Figure 2. Output growth by sector, Philippines](image)

![Figure 3. Labor productivity (in pesos, constant) by sector](image)

Source: National Income Accounts, National Statistical Coordination Board (NSCB)
agriculture sector resulted in lower per capita income among crop growers, animal farmers, foresters and loggers, and fishermen.

High population growth rate
The more fundamental issue of high population growth rate has always been another dimension left unsolved in the fight against poverty. At a rate of 2.04 percent, an estimated 1.7 million mouths to feed are added to the population every year. As long as population continues to grow at this high rate, efforts in reducing poverty will be overshadowed and improving the well-being of the poor will continue to be just another goal in the government’s development plans.

More effective interventions are urgently needed
The rise in the poverty rate despite the fast economic growth indicates that indeed poverty reduction programs have a long way to go. As population continues to grow and more challenging events (economic crisis, natural disasters) unfold, poverty reduction strategies have to work double time in bringing the poor out of poverty and at the same time in preventing people from falling into poverty in times of economic shocks, life-cycle shocks, and natural disasters.

Unfortunately, no such program or strategy has been implemented yet, at least not in a considerable scale and in a sustained manner that can bring significant results.

There has not been a large-scale poverty reduction program implemented during the period 2003–2006, so to speak. The KALAHI Prototype Projects, which focused on asset reform, improvement of basic amenities, resettlement, and helping conflict areas are mostly relevant only to the chronic poor. The

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poor at any point in time are not a homogenous group; they consist of the chronic poor (those who are consistently poor) and the transient poor (those who were previously nonpoor). There are significant movements in and out of poverty, suggesting the vulnerability of certain segments of the population to shocks. In fact, 14.5 percent of those who were classified as nonpoor in 2003 became poor in 2006. This means that one third of those who were classified as poor in 2006 were previously nonpoor, but fell into poverty. This highlights the importance of safety nets to help vulnerable populations from falling into poverty. This suggests that different strategies should be implemented toward helping the chronic poor and the transient poor.

Summary and concluding remarks
A sustained growth of real income coupled with effective redistributive efforts is necessary to reduce poverty. In 2006, poverty incidence rose because real incomes declined and income distribution in the rural areas where majority of the poor are located worsened.

In summary, what matters in poverty reduction is not just economic growth per se but the nature of expansion that takes place. The analysis points out that to reduce poverty, an inclusive growth coupled with effective redistributive efforts is necessary. Ensuring income security of families for them to weather effects of economic shocks is one important policy option. Increasing rural incomes by improving nonfarm income opportunities is a key to reducing poverty in the rural areas. And provision of safety nets like health and crop insurance will help the poor from falling deeper into the poverty trap and the nonpoor into becoming poor in times of crises.

The more fundamental issue of high population growth rate has always been another dimension left unsolved in the fight against poverty. (Photo: Valerie Belizario)