



## Commentary

# A Model for Poverty Reduction in the Developing World

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## INTRODUCTION

In 2007, 230 scientific journals collaborated in calling attention to the critical problem of poverty. In 2002, the United Nations' Secretary General underscored the connection between poverty and human development by commissioning the Millennium Project to reverse poverty and eradicate the hunger and disease that afflict billions of people throughout the world. These parallel occurrences in different sectors of society argue for the same action: the plight of the poor must be addressed and innovative models for poverty reduction must be considered for implementation. The urgency for developing new programs is that the gap between the rich and the poor continues to expand. In this commentary, we will discuss the situation in rural south India and propose a novel method for poverty reduction.

According to several forecasts, India is expected to become the next trillion dollar economy by 2050<sup>1</sup>. Using the Government of India's official poverty lines, in 2004-2005, 28% of people in rural areas and 26% of people in urban areas lived below the poverty line down from 47% and 42% respectively in 1983<sup>2</sup>.

However, it appears that inequality is on the rise<sup>2</sup>. India's record on improving basic health and education indicators is mixed. The improvements in child malnutrition, for example, are only half of what would be predicted based on the rate of growth of the gross domestic product (GDP)<sup>2</sup>. Although the internet technology (IT) revolution was expected to improve the lives of the poor by creating employment and increasing people's purchasing power, the opposite may have occurred. Two classes appear to have emerged: one that reaped the benefits of this revolution and one that was relegated to unrelenting adversity. The IT revolution may have intensified pre-existing financial and health disparities throughout the country. In rural south India, the local elite (landowners, moneylenders, and local officials) have consolidated their wealth and power by accumulating land while simultaneously employing the poor at low wages<sup>3</sup>. Because of the excess of unskilled labor in these impoverished areas, the limited access to information and to education, and the

precariousness of the farmers' financial situations, they can become indebted to the local elite<sup>4</sup>. This situation may not be rectified in their lifetimes. In 2005, the ratio between rich and poor nations was estimated at 1 to 67<sup>5</sup>. Disincentives to confronting poverty include the geographic, social, and economic segregation of the rural poor from those in power.

In 2003, 360 million people (34.7% of the population) in India lived on less than \$1 per day<sup>6</sup>. This number is compared to almost 0% in the United States. At least 500 million people lived on less than \$2 per day<sup>7</sup>. The rural poor are deprived of both economic and social opportunities, and must contend with illiteracy, the oppression of women, and malnutrition.

Former U.N. Secretary General Kofi Annan stated that \$50 billion in additional annual aid might solve the problem of poverty in India but only if the funds were put to productive use. The former Prime Minister of India, Rajiv Gandhi, noted that only 15% of the funding allocated for rural development reached its target. The Planning Commission of India subsequently lowered that figure to 10-15%. In 2003, Indian government expenditures were budgeted at 50% on debt service, 20% on defense, 7.5% for payment of government employees, and 22% for all other items including programs for poverty eradication<sup>8</sup>.

The primary intervention summoned to narrow the ever-expanding abyss between the rich and the poor is education but according to India's Ministry of Education, the country has only spent 1.7% of its gross domestic product on primary education and 3.7% for education overall. To compound the issue, as many as 40 million children may be out of school. Traditional development economists have argued that educational programs should be geared towards basic primary school education for the poor but not necessarily comprehensive education in the arts, humanities, and sciences.

## Hypothesis

We present an innovative method of combating rural poverty that is both sustainable and replicable in the developing world. It can be used in conjunction with other poverty reduction strategies. Shanti Bhavan (Haven of Peace), which has been hailed as one of the best private schools in the world,<sup>9</sup> invests in poor children. If these children can become leaders in law, medicine, and business amongst other fields, they can bring about societal transformation in their communities.

## METHODS

Shanti Bhavan houses 240 children and 90 teachers and administrators. Once admitted into the school, children have access to a battery of learning tools including personalized computers and an excellent library. These resources are dedicated to improving the knowledge and skills of these children.

Although there are other private schools in the developing world that educate the poor, Shanti Bhavan has unique criteria for admission. One requirement is that the children must be from the poorest families and the lowest castes in rural south India. These economically and socially disadvantaged children are not expected to benefit from education and are often deprived of it. Instead, they often withdraw from public school in order to work in the fields to bring home meager incomes to their families. One challenge that the George Foundation faces is convincing these children's parents that the benefit of attending Shanti Bhavan is worth foregoing the income these children could have earned in the fields. The goal of the foundation is to invest in children who have the skills to succeed but lack the opportunities.

The second admission criteria are the children's scores on neuropsychological testing. Over a 10-year period, the George Foundation tested the intelligence quotients (IQs) of 3000 children and accepted 240. If the child had an IQ above average and his or her family's

income was less than \$1 per day, he or she would qualify for admission. These admission criteria assume that those with high IQs are those who are most likely to effect change if given the opportunity. It must be noted, however, that IQ itself can be influenced by poverty. Malnutrition, stress, illiteracy, and toxic exposures can decrease IQ in the developing brain. Some of these effects may be reversible<sup>10</sup> but for Shanti Bhavan, the opportunity cost of determining whether the low IQ is reversible, and of investing resources in these children, is too high.

The vehicle by which Shanti Bhavan is funded is Baldev Farms, a separate arm of the George Foundation employs 250 women, from predominantly low castes, for fieldwork. Two major obstacles to the empowerment of poor women appear to be the economic dependence of women on men and the caste system<sup>6</sup>. Farming offers women who may be illiterate, untrained, and socioeconomically disadvantaged an opportunity to improve their circumstances. In India, there are at least 150 million unemployed women<sup>6</sup>. The women at Baldev Farms are given year-round employment rather than seasonal jobs. The farm utilizes new agricultural technology from countries such as the United States, is profitable and can partially support Shanti Bhavan. The surplus of the farm is used to combat local malnutrition. In addition, Baldev Farms has a "learn while you earn" program to educate its employees about banana and vegetable cultivation. The female labor force is trained in those areas that are integral to the profitability of the farm so that the continuing technological progress of the farm is not limited by a lack of skilled labor. As the female laborers become more skilled, barriers to their upward mobility within the farm decrease as do barriers to their horizontal mobility or employment at other farms. This partially alleviates the economic dependence of these socially and economically disadvantaged women on men.

## DISCUSSION

It is still too early to evaluate the long-term effects of the Shanti Bhavan program but we are presenting this framework now because of the urgency to address poverty. This type of program can be used in conjunction with existing poverty reduction strategies. Shanti Bhavan is a long-term investment in people with the skills to succeed. Nobel Laureate Amartya Sen argues that mankind's goal should be the expansion of human freedoms, and not simply a rise in the gross national product<sup>11</sup>. Shanti Bhavan and Baldev Farms together are a self-sustaining system that is expanding the human freedoms of the poor in India. Baldev Farms is a financially profitable project that mitigates the oppression of women. With the resultant increased purchasing power of the women employed at Baldev Farms, urban industries may slowly be attracted to sell their products to this market, thus establishing a self-reinforcing cycle of improvements in the quality of life of the rural poor. Although Baldev Farms is run privately, similar agricultural projects could be initiated through partnership between the private and public sectors of society. Private companies could be rewarded by the government on the basis of productivity from the farms they oversee. These funds could be reinvested in schools such as Shanti Bhavan to precipitate changes in adjacent communities. The beauty and innovation of this strategy is its sustainability and reproducibility. This system could be transported to any rural society in the developing world. If executed, it could precipitate changes throughout the developing world and perhaps free the poor from their reliance on the generosity of the rich and the benevolence of their governments. As McCannon et al. argue, "Failure to deploy improved technologies and practices widely and quickly is a form of waste that donors, researchers, clinicians, and most of all, communities in developing nations cannot afford."<sup>12</sup>

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