Macroeconomic impact of the MGNREGA work scheme in India
By Akhilesh K. Sharma, Atul Sarma, Charanjit Kaur and Deeksha Tayal

Key messages
- The Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) has increased GDP and household income, particularly amongst poor households.
- Reallocation of MGNREGA funds to education, health, or public administration would result in decreased GDP and income of poor households.
- The Indian government should continue to invest in the MGNREGA programme.

Guaranteed work scheme in rural India

India is one of the fastest-growing economies in the world, but this high growth in recent years has widened the gap between the rich and poor members of the population. The rural population, dependent mainly on agriculture and related activities, is trapped in poverty and deprivation. As agricultural work is seasonal, rural labourers, especially those who are unskilled, find themselves frequently unemployed or underemployed.

Rural development is key to stimulating inclusive and sustainable growth in India, and the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) aims to address this issue. The national government provides at least 100 days of guaranteed wage employment per financial year to every household whose adult members volunteer to do unskilled manual work under the MGNREGA programme.

Much of the work is in constructing rural assets such as roads, water reservoirs, housing for the poor, and land levelling for poor farmers. The programme legitimises the “right to work” for all rural Indian households while also encouraging sustainable development through national resource management projects that address the causes of chronic poverty such as drought, deforestation and soil erosion.

As well as rural employment, the Indian government has highlighted health and education as key priorities for sustainable growth and poverty reduction.

A team of local researchers evaluates the macroeconomic impact of the MGNREGA, and potential adjustments to the programme, on the Indian economy in terms of GDP, unskilled labour supply, household income, and household consumption.

Data, methodology and simulated reforms

The research team created a computable general equilibrium model of the Indian economy, calibrated to the 2007-2008 social accounting matrix for India, to simulate four different funding situations for the MGNREGA programme. Simulation 1 – reduce government expenditure on the construction sector by 20% (to model the withdrawal of the MGNREGA programme); Simulation 2 – Reallocate 20% of government construction sector spending to educational services; Simulation 3 – Reallocate 20% of government construction sector spending to medical services; Simulation 4 – Reallocate 20% of government construction sector spending to public administration.
In 2012, with support of the UK Department for International Development (DfID) and the International Development Research Centre (IDRC) of Canada, PEP launched a new program to support and build capacities in “Policy Analyses on Growth and Employment” in developing countries.

This brief summarizes the outcomes of MPIA-12823 supported under the 3rd round of the PAGE initiative (2015-2016). This study was conducted at Institute for Human Development, New Delhi, India. To find out more about the research methods and findings, read the full paper, published as part of the working paper series.

The views and opinions expressed in this publication are those of the authors and do not necessarily reflect those of PEP.

### Table 1: Change in macroeconomic variables

<table>
<thead>
<tr>
<th>Macroeconomic Variables</th>
<th>Simulation 1</th>
<th>Simulation 2</th>
<th>Simulation 3</th>
<th>Simulation 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real GDP at Basic Prices</td>
<td>-0.01</td>
<td>-0.01</td>
<td>-0.01</td>
<td>-0.01</td>
</tr>
<tr>
<td>GDP at Basic Prices</td>
<td>-0.01</td>
<td>0.02</td>
<td>0.01</td>
<td>-0.01</td>
</tr>
<tr>
<td>Consumer Price Index</td>
<td>0.01</td>
<td>0.03</td>
<td>0.03</td>
<td>0.004</td>
</tr>
<tr>
<td>Wage Rate of Unskilled Labour*</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Wage Rate of the Semi-skilled Labour</td>
<td>-0.02</td>
<td>-0.03</td>
<td>-0.02</td>
<td>-0.02</td>
</tr>
<tr>
<td>Wage Rate of the Skilled Labour</td>
<td>0.03</td>
<td>0.14</td>
<td>0.12</td>
<td>0.02</td>
</tr>
<tr>
<td>Supply of Unskilled Labour</td>
<td>-0.06</td>
<td>-0.05</td>
<td>-0.06</td>
<td>-0.06</td>
</tr>
</tbody>
</table>

* The wage rate of unskilled labour has been fixed to reflect the fixed daily wage paid to MGNREGA beneficiaries.

### Key findings & policy implications

The results show that withdrawing the MGNREGA programme would decrease GDP, wages for semi-skilled labourers and the supply of unskilled labour (Table 1), as well as household income (particularly amongst poor households), household consumption, and imports. As such these findings indicate that the MGNREGA programme has a positive impact on these aspects of the Indian economy.

Simulations 2 and 3 show that GDP, wages for semi-skilled workers, the supply of unskilled labour, the demand for composite labour, exports, the income of poor households, and household consumption (for all but the richest urban households) would decrease. Simulation 4 shows similar effects but wages for skilled workers increase in this situation and there is no impact on exports.

In comparing the four situations modeled, it is clear that the current use of funds for the MGNREGA programme is the most beneficial option for both the country’s economy and household income. Furthermore, the alternative policy scenarios are not only less beneficial, but in fact detrimental particularly to the household income of the poor.

As such, it is clear that the MGNREGA programme should continue.