The Inter-Regional Inequality Facility was initiated in 2004 to promote inter-regional dialogue and knowledge sharing on MDGs and inequality.

Institutions participating in the Inter-Regional Inequality Facility include:

- African Development Bank
- African Union Commission
- Asian Development Bank
- Inter-American Development Bank
- New Partnership for Africa’s Development
- United Nations Economic Commission for Africa

This series of Policy Briefs summarises the experiences of recent government initiatives aimed at addressing inequality in Africa, Asia and Latin America.

Current Policy Briefs in the series:

- Social grants, South Africa
- Familias en Acción, Colombia
- Red de Protección Social, Nicaragua
- Programme for Advancement through Health and Education, Jamaica
- Social safety nets, Indonesia
- Maharastra Employment Guarantee Scheme, India
- National Employment Fund, Tanzania
- Youth Training, Argentina and Chile
- National Functional Literacy Program, Ghana
- Universal Primary Education, Uganda
- Upgrading educational opportunities for the poor, Sri Lanka
- Health insurance for the poor, India
- Affirmative action, Malaysia
- Affirmative action, India
- Affirmative action, Nigeria

The Maharastra Employment Guarantee Scheme

In the semi-arid region to which the state of Maharastra in India belongs, agriculture is a high-ly seasonal activity. During the lean periods, large numbers of rural households eke out a bare subsistence through short spells of mostly unreumerative employment. The aim of the Maharastra Employment Guarantee Scheme (EGS) is to address this problem by providing guaranteed employment at a wage level sufficient to ensure a minimum level of subsistence. By reducing risks faced by poor households, and by constructing productive assets and infrastructure, the scheme also aims to have a longer-term developmental role.

The EGS is designed so as to minimise the administrative costs and disincentive effects associated with targeted transfers. It does this in two main ways. First, the work requirement reduces the incentive for the non-poor to masquerade as the poor in order to qualify for benefits. Second, the work requirement also implies that benefits do not deter poverty-reducing investments in job search and/or building of human capital. As the work requirement necessarily excludes some people (e.g., the elderly), it is complemented by other schemes, such as state pensions and subsidised food.

The EGS guarantees that every adult who wants a job in rural areas will be given one, provided that the person is willing to do unskilled manual work on a piece-rate basis. The piece-rates are fixed so that an average person working diligently for seven hours a day would earn an amount equal to the minimum wage. The projects to which EGS employment contributes include moisture conservation and water conservation works (e.g., percolation and storage tanks), soil conservation and land development works, afforestation, roads, and flood protection schemes.

The EGS is financed through a combination of taxes which are levied specifically for the scheme, and a matching contribution from the state government. It is implemented via a three-tier set up, comprising committees for planning, direction and co-ordination at the State, District and Panchayat Samiti levels.

Although overall participation in the EGS fell sharply over the period 1980-1997, it continues to confer significant transfer and stabilisation benefits during slack periods of the year. Nevertheless, concerns about design and implementation remain. Elaborate registration procedures and long distances to work-sites prevent wider take-up among poor households. A larger funding allocation to the poorest regions would help improve targeting, as well as confer substantially larger income stabilisation benefits. Finally, more careful attention must be given to the quality, maintenance and location of assets created by the EGS, so that their benefits accrue to poor households and contribute to the long-term developmental objective of the scheme.
Background
In the semi-arid region to which Maharashtra belongs, agriculture is a highly seasonal activity. During the lean periods, large sections of rural households eke out a bare subsistence through short spells of mostly unremunerative employment. Motivated by this concern, Mr V. C. Page – the Chair of the Maharashtra State Legislative Council, and a social activist – launched the Employment Guarantee Scheme (EGS) experimentally in 1965. It was subsequently expanded, in part precipitated by an extended drought in 1971 and the need for widespread employment relief. This culminated in the EGS Act and its implementation in Maharashtra in 1979. From a modest beginning, the EGS expanded rapidly into the most important poverty alleviation programme in Maharashtra.

The EGS is a special case of a Rural Public Works (RPW) programme. RPWs have a potentially significant role in poverty alleviation. Even if land reforms – especially land redistribution – are carried out successfully, and the beneficiaries are provided with access to credit and modern agricultural inputs, a large fraction of the rural poor in a densely populated agrarian economy such as India is likely to remain unaffected, simply because there is not enough surplus land to distribute among them. Furthermore, income from cultivation of small plots often falls short of subsistence requirements, and those without access to land are forced to rely primarily on agricultural employment with long seasonal spells of inactivity.

The case for RPWs rests on two main arguments. The first is the screening argument. Given the often high administrative costs of identifying the poor, a work requirement is advantageous since it provides a cost-effective way of excluding the non-poor from the receipt of benefits. The other is the deterrent argument: the work requirement implies that RPWs do not deter poverty-reducing investments in job search and/or building of human capital. This discoursages people from becoming dependent on public support.

RPWs confer both transfer and stabilisation benefits to participants. The transfer benefits consist of the gross wages received by participants less any cost they incur in participating (direct benefits), plus any second-round effects on income from other sources generated by the RPW’s output (indirect benefits). The stabilisation benefits arise mainly from the scheme’s effect on the risk faced by the poor of a decrease in consumption. Since many of the poor only just manage to survive, a reduction in the risk of a decrease in consumption matters a great deal.

Details
The EGS guarantees that every adult who wants a job in rural areas will be given one, provided that the person is willing to do unskilled manual work on a piece-rate basis. The piece-rates are fixed so that an average person working diligently for 7 hours a day would earn a wage equal to the minimum wage prescribed for agricultural labour for the concerned zone, under the Minimum Wages Act.

To obtain employment under the scheme, individuals must register with the local village authority, and provide a ‘demand for work’. The local EGS representative (called the Tahsildar) is then obliged to provide work within 15 days of receiving the demand for work. Failure to provide employment within this period entitles the person to an unemployment allowance. Once employed, participants are provided with certain on-site amenities, including potable water, creches, a resting place and first aid. An ex-gratia payment up to Rs.10,000 is also admissible in case of death or disablement of a worker on the site.

The projects on which participants of the EGS work must satisfy two criteria. First, they must be labour-intensive, and second they must create productive assets. The labour-intensity criterion is defined rather strictly: the ratio of cost of unskilled labour to equipment, materials, supervision charges and so on must be 51.49 or higher. Productive assets are somewhat loosely defined as those which lead to an increase in production, directly or indirectly. With a view to minimising the recurrence of droughts, priority is given to water conservation works (e.g. percolation and storage tanks). Other priorities are soil conservation and land development works, afforestation, roads, and flood protection schemes.

New EGS projects can be undertaken when at least 50 labourers are available who cannot be absorbed in on-going projects (although exceptions can be made for works in hilly areas). However, it is required that the EGS should not interfere with normal agricultural activities, and should not be activated when work is available on other plan or non-plan public works projects.

The EGS is financed through a combination of taxes which are levied specifically for the scheme, and a matching contribution from the state government. The former include (i) a tax on professionals (e.g. lawyers, doctors, accountants) and formal sector employees in the urban sector, (ii) an additional tax on motor vehicles, (iii) a surcharge on sales tax, (iv) a surcharge on land revenue, and (v) a tax on non-residential urban land and buildings. The most important of these is the first.

Implementation
The EGS is implemented via a three-tier set up, comprising committees for planning, direction and co-ordination at the State, District and Panchayat Samiti (block council) levels. (The Panchayat Samiti is an elected body with two main sets of functions: to implement and co-ordinate the policy directives of the state government with regard to development and extension programmes, and to plan and implement production and social welfare programmes, especially with regard to agriculture, irrigation, small industries, education, and health.) At the state level, overall responsibility for the EGS is vested in the Planning Department. At the district level it is vested in the Collector, and at the Panchayat Samiti level it is vested in the Tahsildar. The Planning Department makes the budgetary provision for the EGS, and then releases quarterly credit limits to the Collectors. Expenditure accounts are required to be maintained at the District and Panchayat Samiti levels in accordance with normal government procedures.

Impacts
Aggregate employment and expenditure
In 1997, the EGS generated a total of 90 million person-days of employment, while expenditure amounted to Rs. 247 million (approximately US$7 million). As of 2003/04, expenditure on the EGS as a share of total development expenditure was a little over 4 per cent (GOM, 2005).

Recent trends in EGS employment and expenditure are shown in Figure 1. Over the period 1980–1997, there was a sharp decline in
households are defined as those with expenditure levels of less than
third measure is the percentage of participants from non-poor
of adults in poor households not participating in the scheme. The
The second measure is ‘failure to include’, defined as the percentage
1979 and 1989. The first is ‘excessive coverage’, defined as percent-
Other estimates provided a different picture however. Table 1 shows
participation was higher in the more backward of the two villages
of participation in the EGS decreased rapidly with wealth, and that
between 30 and 39 per cent. Although these are high shares, it is
arguable that they are lower than expected. In Pune district, for
example, the number of females registered for the EGS was
considerably higher than the number of males registered, yet the
share of females in EGS employment was much lower than that of
men. Reasons for lower participation among women include the
long distances to work sites, lack of child-care facilities, and that
women are typically paid lower wages than men.
The composition of EGS expenditure has changed. Between 1991
and 1996, the share of expenditure on the Shram Shaktidware
Gram Vikas – including all development activities in a village
carried out in an integrated manner – halved, from about 12 per
cent to about 6 per cent, while that of jawahar Wells – projects
targeted to marginal and small farmers – rose sharply, from over
13 per cent to about 23 per cent. These compositional changes
weakened the poverty reducing effect of the EGS. In particular,
replacement of community assets with individual assets diverted
the benefits of the EGS away from the poorest landless
households to the moderately poor or to relatively affluent land-
owning households (Gaiha, 2005).

Targeting to poor households
Early studies pointed to the accurate targeting of the EGS. A study
based on ICRISAT data over the period 1977–83 showed that days
of participation in the EGS decreased rapidly with wealth, and that
participation was higher in the more backward of the two villages
surveyed.
Other estimates provided a different picture however. Table 1 shows
information on three measures of targeting errors under the EGS, in
1979 and 1989. The first is ‘excessive coverage’, defined as percent-
age of adults in non-poor households participating in the scheme.
The second measure is ‘failure to include’, defined as the percentage
of adults in poor households not participating in the scheme. The
third measure is the percentage of participants from non-poor
households in the total number of participants in the scheme. (Poor
households are defined as those with expenditure levels of less than
Rs.180 per capita per annum, at 1960/61 prices, which is the
standard poverty cut-off point used in the Indian poverty literature.)
Three conclusions emerge from Table 1. First, ‘failure to include’
errors were substantially larger than ‘excessive coverage’ errors in
both years. Second, while ‘excessive coverage’ errors fell between
1979 and 1989, ‘failure to include’ errors rose moderately. Third, the
share of the non-poor in total EGS participants rose sharply, from
30% in 1979 to 55% in 1989. In sum, there was over the period 1979–
1989 a combination of greater exclusion of the poor and the non-
poor from the EGS, and a higher share of the non-poor among the
participants.
More recent surveys in Ahmadnagar district suggest higher levels
of targeting accuracy however. In the two surveyed villages, nearly
60 per cent of the participants were poor, and most of them were
exremely poor (Gaiha, 2005). Among poor-households, EGS
earnings ranged from 18 to 40 per cent of total household income.
Assuming that the opportunity cost of participating in this scheme
is Rs. 20 per day, the direct transfer benefit to one of the poorest
households worked out to be Rs. 2,400.

Effects on agricultural wages
If the EGS provides an effective employment guarantee, it will
tend to increase the prevailing level of agricultural wages. This
might be due to (i) gains in agricultural productivity through the
assets created and, associated with such gains, a shift in the demand
for agricultural labour; and (ii) a higher reservation wage
as a consequence of a “guaranteed” employment option in slack
periods. Analysis of ICRISAT data has confirmed the existence of
such an effect (Gaiha, 1997). Specifically, if EGS wages rise by a
rupee, agricultural wages are estimated to rise by about 17 paise
in the short-run, and by about 28 paise in the long-run. The
higher long-run effect could plausibly be explained by the
contribution of the EGS to a sense of collective identity among
rural workers (for which there is some evidence, e.g. Joshi and
Moore 2000), in turn strengthening their bargaining position vis-
à-vis that of large landholders.

Benefits from EGS assets
The most detailed survey of the benefits derived from EGS assets
was carried out jointly by the Government of Maharashtra and the
Indian Planning Commission in the late 1970s. Even though it is an
old survey, it suggested that a disproportionately large share of the
benefits from EGS assets accrued to large landholders. More
recently, Imai (2004) finds that the potential indirect effects through
the EGS assets are substantial, based on a village-level Social
Accounting Matrix built with the ICRISAT data. However, the results
show that the scheme has to be carefully designed so that assets,
such as irrigation facilities, are made accessible to the poor without
undermining their positive effects on agricultural productivity.
That the location of assets created by EGS employment matters a
great deal was reflected in recent surveys in Ahmadnagar district. A
percolation tank in one village was located in the foothills, but poor
households’ farms were at the top, and were therefore deprived of

Figure 1 EGS Employment and Expenditure during 1980–1997

<table>
<thead>
<tr>
<th>Year</th>
<th>Excessive coverage</th>
<th>Failure to include</th>
<th>Share of non-poor in total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1979</td>
<td>15.7</td>
<td>80.7</td>
<td>38.0</td>
</tr>
<tr>
<td>1989</td>
<td>7.2</td>
<td>85.7</td>
<td>54.8</td>
</tr>
</tbody>
</table>

Source: Gaiha (2000)
its benefits. Even among those with farms around the tank, the benefits accrued to those with wells. Nevertheless, the drinking water facility during the summer months benefited a much larger number.

Income stabilisation

There is also evidence to suggest that the EGS provides an income stabilising role. Detailed econometric analysis of the ICRISAT panel survey for 1979–1984 found that, despite some unevenness in the results, EGS participation generally decreases the variability of labour earnings (Scandizzo et al. 2004). (The measure of variability of labour earnings was constructed from monthly data, and the contribution of the EGS was separated out from that of various household and village characteristics, e.g. caste, occupation, rainfall).

Recent surveys carried out in Ahmadnagar district also confirmed that the EGS facilitated income-smoothing among poor households, and prevented them from making costly adjustments (e.g. cuts in food expenditure, sale of livestock and/or loans at exorbitant rates of interest) during slack months.

Incentives

Recent surveys carried out in Ahmadnagar district suggested that any disincentive effects arising from the EGS were small. Respondents typically expressed a keen desire for economic betterment through self-employment in a non-farm activity (e.g. brick making). What prevented them from engaging in such activities was not the availability of employment under the EGS, but rather their lack of access to credit facilities. Econometric analysis of the ICRISAT panel data also indicates that the poor switch out of the EGS when better economic opportunities arise (Scandizzo et al. 2005).

The proposed National Rural Employment Guarantee Scheme

In December 2004, a bill was tabled in the Indian Parliament, the National Rural Employment Guarantee Bill, which proposed to extend the EGS to the poorest 510 districts of the country. Some of the features of this Bill reflect lessons learnt from distortions that have crept into the EGS (e.g. manipulation of muster rolls, delays in offer of work and payment of wages, unsatisfactory design and execution of projects) while some others are contentious (e.g. fiscal burden of the nation-wide scheme). There is however a sharp division of opinion on its desirability (e.g. Dreze, 2004, Gaiha, 2004, Gaiha, R. and K. Imai 2002) “Rural Public Works and Poverty Alleviation—The Case of the Employment Guarantee Scheme in Maharashtra”, The International Review of Applied Economics, Vol. 16, No. 2, April 2002, pp. 331–353.


Lessons learned

Although overall participation in the EGS fell sharply over the period 1990–1997, it continues to confer significant transfer and stabilisation benefits during slack periods of the year. As alternative employment options are few and far between, dependence on the EGS is unavoidable high for those who participate in it. Even if overall participation rates are low, this is more a consequence of the nature of projects undertaken, elaborate registration procedures, long distances to work-sites and low financial outlays, rather than a lack of demand for the programme itself.

Nevertheless, concerns about the design and implementation of RPWs in general, and the EGS in particular, remain. First, if the public assets created by the programme merely substitute for private investment, as with the Jawahar Wells component of the EGS, the (net) benefit of the programme may well be small. Second, as no separate provision for the maintenance of assets is made, their potential benefits are not fully realised. Third, enhanced outlays under the EGS are feasible, but only if other similar interventions (e.g. Jawahar Rozgar Yojana) are merged under it. Given a fixed fiscal outlay, the only way to ensure a wider coverage of the poor is through a lower wage. Fourth, a larger funding allocation to the poorest regions would help improve targeting, as well as confer substantially larger income stabilization benefits. Fifth, more careful attention must be given to location of assets created by the programme, so that their benefits accrue to poor households. Finally, given the long-term developmental role of the EGS, the quality and maintenance of assets created should not be overlooked.

References and further information


This paper was written by Raghav Gaiha, Faculty of Management Studies, University of Delhi, and Katsushi Imai, School of Economic Studies, University of Manchester. Contact: Dr Katsushi Imai, School of Economic Studies, Faculty of Social Sciences, Oxford Road, Manchester M13 9 PL, UK, Phone: + 44 –(0) 161-275-4827, Fax +44 –(0) 161-275-4928, e-mail: Katsushi.imai@manchester.ac.uk. Research assistance was provided by Parasang Kaur. The paper was edited by Edward Anderson of the Overseas Development Institute.

©Overseas Development Institute 2005

This Policy Brief has been produced by the Secretariat of the Inter-Regional Inequality Facility and the Overseas Development Institute, London. Initial sponsorship for the Facility has been provided by the UK Department for International Development.

The views in the paper are those of the author(s) and do not represent the official position of the institutions participating in the Inter-Regional Inequality Facility.