International
Labour
Office

Geneva

Employment Sector
Employment Working Paper No. 105

2011

Addressing the employment challenge: India's MGNREGA

Ajit K. Ghose

Employment
Analysis and
Research Unit

Economic and
Labour Market
Analysis
Department

ILO Cataloguing in Publication Data

Ghose, Ajit K.

Addressing the employment challenge: India's MGNREGA / Ajit K. Ghose ; International Labour Office, Employment Analysis and Research Unit, Economic and Labour Market Analysis Department. - Geneva: ILO, 2011
25 p. (Employment working paper ; No.105)

ISBN: 9789221256878 (print); 9789221256885 (web pdf)

International Labour Office; Economic and Labour Market Analysis Dept

rural employment / rural worker / income distribution / poverty alleviation / rural area / India

13.01.3

Printed in Switzerland

document1

Preface

The primary goal of the ILO is to contribute, with member States, to achieve full and productive employment and decent work for all, including women and young people, a goal embedded in the ILO Declaration 2008 on *Social Justice for a Fair Globalization, and*[1] which has now been widely adopted by the international community.

In order to support member States and the social partners to reach the goal, the ILO pursues a Decent Work Agenda which comprises four interrelated areas: Respect for fundamental worker's rights and international labour standards, employment promotion, social protection and social dialogue. Explanations of this integrated approach and related challenges are contained in a number of key documents: in those explaining and elaborating the concept of decent work[2], in the Employment Policy Convention, 1964 (No. 122), and in the Global Employment Agenda.

The Global Employment Agenda was developed by the ILO through tripartite consensus of its Governing Body's Employment and Social Policy Committee. Since its adoption in 2003 it has been further articulated and made more operational and today it constitutes the basic framework through which the ILO pursues the objective of placing employment at the centre of economic and social policies.[3]

The Employment Sector is fully engaged in the implementation of the Global Employment Agenda, and is doing so through a large range of technical support and capacity building activities, advisory services and policy research. As part of its research and publications programme, the Employment Sector promotes knowledge-generation around key policy issues and topics conforming to the core elements of the Global Employment Agenda and the Decent Work Agenda. The Sector's publications consist of books, monographs, working papers, employment reports and policy briefs.[4]

The *Employment Working Papers* series is designed to disseminate the main findings of research initiatives undertaken by the various departments and programmes of the Sector. The working papers are intended to encourage exchange of ideas and to stimulate debate. The views expressed are the responsibility of the author(s) and do not necessarily represent those of the ILO.

José Manuel Salazar-Xirinachs
Executive Director
Employment Sector

[1] See http://www.ilo.org/public/english/bureau/dgo/download/dg_announce_en.pdf

[2] See the successive Reports of the Director-General to the International Labour Conference: *Decent work* (1999); *Reducing the decent work deficit: A global challenge* (2001); *Working out of poverty* (2003).

[3] See http://www.ilo.org/gea. And in particular: *Implementing the Global Employment Agenda: Employment strategies in support of decent work, "Vision" document*, ILO, 2006.

[4] See http://www.ilo.org/employment.

Foreword

This important study provides and early assessment of India's much acclaimed job creation programme – the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS). It examines, in particular, the effects of the programme on employment, wages and incomes of the rural poor. It also considers its effect on overall growth of the economy.

The study finds that the MGNREGS, despite problems in implementation, has succeeded in providing substantial additional wage employment to the rural poor at a wage no lower than what prevails. It has thereby increased money incomes for this group of workers quite significantly. Yet, the programme has not made a significant contribution to reduction of rural poverty. The reason is food price inflation to which the programme has ended up contributing. While the MGNREGS increased the demand for food, this was not met by an increase in the supply of food in the short run.

Ajit Ghose is a Visiting Professor in the Institute for Human Development, New Delhi, India.

Sandrine Cazes
Chief, Employment Analysis and
Research Unit

Moazam Mahmood
Director, Economic and Labour
Market Analysis Department

Contents

Page

Appendices

List of tables

Introduction

In September 2005, India's parliament enacted a remarkable piece of legislation – the National Rural Employment Guarantee Act (NREGA), later renamed Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA). The Act recognizes employment as an entitlement and defines an obligation for the government – the obligation to provide, in each year, 100 days of wage employment at a stipulated minimum wage[5] to all rural households whose members are seeking or willing to do unskilled manual work.[6] Employment scheme under MGNREGA – we shall henceforth refer to it as MGNREGS – was launched in 200 poorest districts during 2006-07 and extended to another 130 districts during 2007-08. Since 2008-09, MGNREGS has been implemented in all the 600-odd non-urban districts in the country.

Special wage employment schemes for rural areas, of course, are not new in India; a variety of such schemes has been implemented since 1960.[7] What is new in MGNREGS is that implementation of a special wage employment scheme on a certain specified scale is now a binding obligation for the government. Thus MGNREGS represents, simultaneously, an explicit recognition by the government of its responsibility for ensuring availability of adequate employment for all workers and an explicit acknowledgement of the fact that the growth process in the country has been failing to generate adequate employment opportunities and will continue to do so in the foreseeable future.

The stated objectives of MGNREGS include not just creation of a social safety net for the vulnerable groups by creating a fall-back employment option but also stimulation of growth of the rural economy through a strengthening of the resource base in agriculture. So that the second of these objectives can be achieved, the Act specifies a list of permissible works that can be undertaken for the purpose of providing wage employment under MGNREGS. These include water conservation and harvesting, building of irrigation works and canals, renovation of traditional water bodies (e.g., de-silting of tanks), land development, flood control and protection works, and improvement of "rural connectivity" (i.e., building of all-weather roads within rural areas).

Whether and to what extent MGNREGS succeeds in stimulating growth of the rural economy remains to be seen. What is certain is that MGNREGS will have the effect of substantially increasing the money incomes of the rural poor. Thus one effect of MGNREGS, it might be thought, will be a decline in rural poverty. Another less obvious effect will be macroeconomic; the MGNREGS-induced growth of money incomes of the poor should alter the pattern of effective demand in the economy and could conceivably affect the pace of economic growth.

[5] See Appendix 1 for the details.

[6] The entitlement of 100 days of wage employment is for a rural household and can be shared by its adult working members. See Appendix 1.

[7] There were, successively, Rural Manpower Programme, Crash Scheme for Rural Employment, Drought Prone Areas Programme, Food for Work Programme, National Rural Employment Programme, Rural Landless Employment Guarantee Programme, Jawahar Rozgar Yojana, Employment Assurance Scheme, Food for Work Programme II, Jawahar Gram Samridhi Yojana, and Sampoorna Grameen Rozgar Yojana.

There are two ways in which MGNREGS would increase money incomes of the rural poor. First, it would directly increase money incomes of workers from poor households in rural areas by generating additional wage incomes for them. Second, by substantially increasing the demand for casual labour as also by paying a stipulated minimum wage, MGNREGS could conceivably have the effect of increasing the wage for casual labour in rural areas in general and thus increase the incomes of the poor indirectly.

Certain caveats and qualifications to this story must be added, however. We know from past experience that, because of "leakage" (usurpation of funds by corrupt agents of implementation), actual transfers to the intended beneficiaries generally fall short of the expenditure incurred by the government. Also, an increase in the money wage rate for casual labour does not necessarily imply growth of non-MGNREGS wage incomes of casual labourers.[8] And the workers employed under MGNREGS may have withdrawn from other jobs that they had previously been engaged in so that their income gains will be accompanied by income losses. Thus while it is safe to assume that money incomes of the poor will increase, it is more difficult to judge the extent of the increase.

It is also difficult to predict with any degree of confidence the extent to which increased money incomes of the rural poor will reduce poverty and influence growth. Growth of money incomes of the rural poor can be expected to increase mainly the demand for food – the wage good *par excellence*. To the extent that MGNREGS involves redistribution of incomes from the non-poor to the poor, therefore, the growth of effective demand for food can be expected to accelerate while the growth of effective demand for manufactures and services decelerates. So unless MGNREGS itself and/or other programmes and policies of the government can ensure adequate growth of food availability in the country, food prices will inevitably rise. This will prevent translation of increased money incomes of the rural poor into increased real incomes and could even slow down the pace of economic growth.[9] In other words, there are circumstances under which the transfers to the rural poor delivered through MGNREGS would simply generate inflation without either reducing poverty or stimulating growth.

These theoretical possibilities underline the need for empirical investigations into the effects of MGNREGS on incomes and expenditure of the rural poor. This is the broad context within which this study seeks to find empirical answers to the following two questions: To what extent might MGNREGS increase money incomes of the rural poor? And how would increased money incomes in the hands of the rural poor affect the composition of demand in the economy? The answers to these two questions will allow us to ask and answer a big question: Is it reasonable and realistic to expect MGNREGS to reduce poverty and stimulate growth?

[8] For, increased wage could either reduce the demand for casual labour or increase the number of workers seeking casual employment. The effect of a rise in the wage rate is then offset by a decline in the level of employment. For a discussion of why wage growth does not necessarily result in income growth for casual labourers, see Ghose (2010).

[9] If there is no acceleration in agricultural growth while there is deceleration in the growth of manufactures and services because of demand squeeze, overall growth will decelerate.

The paper proceeds as follows. The brief section that follows considers the database available for empirical explorations. The second section empirically examines the possibility of growth of money incomes of the rural poor because of MGNREGS. The third section considers the way in which the increased money incomes of the rural poor might affect rural poverty as also the pattern of aggregate demand in the economy. The final section brings together the arguments and findings to answer the big question.

The database

It has to be acknowledged that empirical investigation into the effects of MGNREGS on money incomes of the rural poor is presently made difficult by paucity of data. The scheme has been implemented on a nationwide scale only since 2008-09. As it happens, large-scale surveys of employment/unemployment and of consumption expenditure were conducted in 2009-10.[10] Data from these surveys, when they become available, will make thorough explorations of the issues involved possible. Unfortunately, however, it will be quite some time before these data become available and this study must do without them.

Data on employment and wage incomes thus far generated by MGNREGS are available from the Ministry of Rural Development (MORD) – the Ministry responsible for implementation of the scheme. These data give us a good starting point for an analysis of the income effects of MGNREGS. However, they do suffer from a number of limitations. In the first place, they tell us what the government has tried to do rather than what it has succeeded in doing, for they do not give us any idea of the extent of "leakage". Moreover, they also give us no information on changes in non-MGNREGS wages and wage incomes, and the magnitude and nature of employment foregone by the MGNREGS workers.

The inadequacy of information available from official sources has prompted us to conduct a small-scale sample survey (henceforth referred to as the IHD survey).[11] Data from this survey help fill in some of the gaps in information and also help confirm or question the findings from MORD data. Admittedly, however, such a survey has its own limitations. Findings based on data generated by it do not really permit generalisations. Besides, these data only allow us to draw some qualitative conclusions about changes in non-MGNREGS wages and wage incomes and the nature of foregone employment. And it has proved difficult to generate any useful information on the extent of "leakage". Thus precise estimates of income gains of the rural poor remain beyond our reach in this study.

For studying the effects of income gains of the rural poor on the pattern of consumption expenditure in the economy (and thus on the composition of demand), we have been obliged to rely on data from an older National Sample Survey of Consumer Expenditure that covers the period 2004-05 (since data from the more recent survey covering 2009-10 remain unavailable). It is perhaps safe to assume that, for a given level of expenditure, the pattern of expenditure in 2009-10 will not be radically different from that in 2004-05 so that use of data for 2004-05 does not introduce serious distortions on this account. But our reliance on data on consumption expenditure for just one period

[10] These are the latest rounds of the quinquennial National Sample Surveys of "Employment and Unemployment" and of "Consumer Expenditure".

[11] The survey was conducted by the Institute for Human Development (IHD), New Delhi in 2010. See Appendix 2 for a brief description.

imposes two limitations on the analysis. First, it means that we are using cross-section data to draw conclusions about change over time. Second, because the data relate to expenditure and not to income, we can only trace the demand effects of changes in expenditure and not of changes in incomes. For the rural poor, we can expect expenditures to equal incomes. For the non-poor, however, savings will be positive so that incomes will exceed expenditures.

While we recognize these limitations, we have no way of overcoming them. Comparable data on incomes are simply not available. And while it is possible to make inter-temporal comparisons (there exist comparable surveys covering past periods) of consumption, it is not easy to derive useful results from such comparisons. For, inter-temporal change in consumption incorporates both price and income effects (and possibly also changes in tastes and aspirations), and separating them requires econometric exercises that cannot be attempted here.

MGNREGS and incomes of the rural poor

The MGNREGS, modest in scale at the beginning in 2006-07, expanded quite rapidly and, by 2009-10, had become the largest ever special wage employment programme not just in India but in the world. In that later year, nearly 53 million rural households were reportedly provided with 2862 million days of wage employment under MGNREGS (table 1). And there is still a long way to go. For, an average rural household got only 54 days, in stead of the promised 100 days, of employment in 2009-10, and just 13 percent of the rural households (who found employment under MGNREGS) actually got wage employment for 100 days.[12] The wage paid per day of employment also remained below the stipulated minimum wage of Rupees 100.[13] If the obligation of the government defined by MGNREGA is to be fully met, therefore, considerable further expansion of MGNREGA will have to occur.

Despite the incomplete and deficient implementation, however, MGNREGS appears to have already brought very substantial gains in wage incomes for the poor households in rural areas. In 2009-10, for example, MGNREGS increased the combined wage income of poor households in rural India by as much as 22 per cent beyond what they would have otherwise earned.

[12] These aggregate figures, it should be noted, hide large variations in performance across states. In 2009-10, the average number of person days of MGNREGS employment per household varied from a minimum of 25 (Arunachal Pradesh) to a maximum of 95 (Mizoram).

[13] There also was a great deal of variation in wage per day across the states; in 2009-10, it varied from minimum of Rs. 72 (Tamil Nadu) to a maximum of Rs. 151 (Haryana).

Table 1: MGNREGS and employment and wage incomes of rural households

	2006-07	2007-08	2008-09	2009-10
Government expenditure on MGNREGS as % of GDP (in current prices)	0.22	0.35	0.53	0.65
Number (million) of households provided with employment under MGNREGS	21.0	33.9	45.1	52.6
Persondays of employment provided per household under MGNREGS	43.0	42.0	48.0	53.9
Number (million) of households provided with 100 days of employment under MGNREGS			6.5	7.1
Wage (Rs.) paid per day of employment	65.0	75.0	84.1	90.2
Total wage income generated by MGNREGS (million Rs.)	58825	107692	182004	255793
Total wage income earned from employment in agriculture (million Rs.)	793600	908600	1030884	1152759
Increase (per cent) in wage income of rural households attributable to MGNREGS	7.4	11.8	17.7	22.2

Source: Author's estimates based on data available from MORD; Ministry of Statistics and Programme Implementation; and Planning Commission.

There is, of course, a question mark on the reliability of these estimates. In particular, we know that there is substantial "leakage" due to corruption but do not know the extent of it.[14] Thus we do not know what percentage of the total amount reported to have been paid out as wages under MGNREGS has actually been received by the workers employed under it.

Besides, in estimating the "increase in wage income of rural households attributable to MGNREGS", presented in table 1, a number of assumptions have been used: (i) that it is mainly the poor rural households that sought and got wage employment under MGNREGS, (ii) that the main non-MGNREGS wage employment of workers from these households is casual wage employment in agriculture, (iii) that the volume of non-MGNREGS wage employment in agriculture has not been affected by MGNREGS, and (iv) that the data on "compensation to employees in unorganised agriculture", available from National Accounts Statistics, accurately measure the total wage income from casual wage employment in agriculture. Fortunately, these assumptions are perfectly reasonable and we shall see below some evidence that attest to their reasonableness.

[14] ARC (2006), having analysed the implementation record of the special employment schemes of the past, concludes that substantial "leakage" was a common feature in all cases. It would be too much to expect that things will be radically different in the case of MGNREGS. Indeed, some small-scale surveys have already shown "leakage" to be quite significant in the case of MGNREGS. See, for example, Dreze and Khera (2009), which reports the results of a survey carried out in six states in 2008.

There is a fair amount of evidence to suggest that it is mainly the workers from poor rural households who seek wage employment under MGNREGS. Data from MORD show that workers from Scheduled Caste and Scheduled Tribe (henceforth SC/ST) households – known to be the poorest households in rural areas – form a majority of the workers employed under MGNREGS (even though they constitute a minority of the rural workers).[15] The data from the IHD survey, presented in table 2, strongly corroborate this and also provide some additional evidence to show that it is indeed the poor who seek and get employment under MGNREGS. Thus the survey finds a large majority of the workers employed under MGNREGS to be from landless and marginal farmer households – the poorest households in rural areas. The proviso that MGNREGS would only provide unskilled manual work seems to have served its purpose of reaching the poor (through a process of self-selection) admirably well.[16]

Table 2: Share (%) of poor rural workers in person days of wage employment generated by MGNREGS in six survey districts, 2010

% share of	Koornool	Medak	Gaya	Purnia	Tonk	Udaipur
SC/ST workers	45.8	53.7	92.6	60.4	56.0	54.6
Workers from landless and marginal farmer households	67.9	72.9	99.6	99.6	80.1	93.7

Note: Marginal farmers are those who cannot derive even basic subsistence from cultivation because their landholdings are far too small. They therefore have to work as casual wage labourers for a part of the time. The actual size of landholding that can be considered as adequate for basic subsistence for a farm family naturally varies from region to region

Source: Author's estimates based on data from IHD Survey.

The assumption that the main non-MGNREGS wage employment of the workers employed under MGNREGS is casual wage employment in agriculture also seems to be well founded. Data from the IHD survey (table 3) show quite clearly that a large majority of the workers employed under MGNREGS usually work in agriculture, either as self-employed or as casual wage labourers. It is well known that many of the self-employed also work as casual wage labourers for some of the time just as many of the casual wage labourers work as self-employed for some of the time. Thus the principal source of wage income for both the self-employed and the casual wage labourers is casual wage employment in agriculture.

[15] These data show that workers from SC/ST households constituted 55 per cent of all workers employed under MGNREGS in 2008-09 and 51 per cent in 2009-10.

[16] Dreze and Khera (2009) also find that “most of the NREGA workers belong to the most disadvantaged sections of society”.

Table 3: Percentage distribution of MGNREGS workers by type of their non-MGNREGS employment

	Kurnool	Medak	Gaya	Purnea	Tonk	Udaipur
Casual labour in agriculture	74.0	98.3	60.3	77.8	29.2	30.8
Self-employment in agriculture	20.6	0.0	4.3	4.9	42.9	61.3
Casual labour in non-agriculture	2.2	1.3	20.3	6.2	10.4	4.6
Self-employment in non-agriculture	1.3	0.0	2.2	1.3	7.9	1.3
Wage work away from home	0.0	0.0	12.5	9.3	2.1	0.8
Others	1.9	0.4	0.4	0.5	7.5	1.2

Source: Author's estimates based on data from IHD Survey

The data in table 3, it should be noted, cast some doubt on the validity of our third assumption. For, they hint at the possibility that availability of wage employment under MGNREGS may have been associated with reduced employment in agriculture and/or reduced migration for work. These effects of MGNREGS, if they are there, are not undesirable as such; reduction of engagement in work that brings poor remuneration and involves distress migration is a perfectly desirable outcome. Their significance in the present context lies in the fact that, against the gain in wage income from MGNREGS, there may also be some loss in wage income because of reduced wage employment in non-MGNREGS activities.

That MGNREGS has induced reduction of wage employment in non-MGNREGS activities seems to be confirmed by the data presented in table 4. Most of the workers employed under MGNREGS in four of the six districts surveyed report that availability of employment under MGNREGS has reduced both the non-MGNREGS employment locally as well as the extent of temporary out-migration of workers in search of employment.[17] The exceptions are the survey districts located in Bihar, which happens to have a very poor record of implementation of MGNREGS (table 5). The number of person days of employment generated under MGNREGS has been very low in Bihar generally and in the survey districts in particular. It is not particularly surprising, therefore, that MGNREGS has not had much of an impact on either the labour supply in non-MGNREGS activities or on the extent of temporary migration for work.

Table 4: MGNREGS and labour supply in non-MGNREGS activities

	Kurnool	Medak	Gaya	Purnea	Tonk	Udaipur
Percentage of MGNREGS workers who say:						
Labour supply in non-MGNREGS activities has declined	100.0	100.0	12.5	50.0	100.0	100.0
Migration in search of work has declined	100.0	100.0	18.7	31.2	75.0	80.0

Source: Author's estimates based on data from IHD Survey

[17] Other surveys, e.g., Dreze and Khera (2009) have also found MGNREGS to have reduced temporary migration for work.

Table 5: Average number of days of employment per household generated under MGNREGS

	Number of days
MORD data	
Andhra Pradesh, 2009-10	65.7
Bihar, 2009-10	27.5
Rajasthan, 2009-10	69.0
Survey data	
Koornool, Andhra Pradesh, 2010	72.0
Medak, Andhra Pradesh, 2010	47.0
Gaya, Bihar, 2010	18.5
Purnea, Bihar, 2010	12.0
Tonk, Rajasthan, 2010	48.3
Udaipur, Rajasthan, 2010	41.0

Source: Author's estimates based on data from MORD and from IHD Survey

The evidence examined thus far seems to suggest that the observed gain in wage income of the poor rural households is not a net gain. The net gain, of course, must be positive since otherwise the workers would have preferred to stay in their earlier jobs. But the net gain may be a fraction of the observed gain and we are not in a position to know the value of this fraction.

Happily, however, there are some good reasons to believe that the value of the fraction may well be unity. There is some evidence to suggest that MGNREGS has induced an increase in wages for casual labour in non-MGNREGS activities. In the IHD survey, most of the workers employed under MGNREGS, when asked if wages have increased as a result of implementation of MGNREGS, answer in the affirmative.[18] Yet, the same workers also say that it is not the level of wage paid for work under MGNREGS that induces them to seek employment under MGNREGS (table 6). Most workers choose to take employment under MGNREGS basically because it brings substantial wage earning opportunities to their own localities where such opportunities are otherwise inadequate. It seems, therefore, that to the extent that MGNREGS induces wage increases in rural areas, it does so not because it pays a higher than prevailing wage but because it reduces labour availability in non-MGNREGS activities. To the extent that this is true, the reduction in non-MGNREGS employment need not imply a reduction in wage income. Reduced employment, together with increased wage rates, may well mean a negligible change in wage income from non-MGNREGS employment. Thus even our third assumption – the one most open to doubt – turns out to be perfectly reasonable.

[18] Dreze and Khera (2009) also found evidence of MGNREGS-induced rise in wages of casual labour in non-MGNREGS activities.

Table 6: Percentage distribution of MGNREGS workers by reason for preferring employment under MGNREGS

	Kurnool	Medak	Gaya	Purnea	Tonk	Udaipur
MGNREGS provides primary wage earning opportunity	100.0	70.5	36.9	43.1	88.2	79.4
Employment under MGNREGS available at doorstep	0.0	0.0	42.4	41.1	0.8	0.0
MGNREGS pay higher wage	0.0	7.4	3.5	2.1	0.4	0.4
Other reasons	0.0	22.1	17.2	13.7	10.6	20.2

Source: Author's estimates based on data from IHD Survey

Our fourth assumption also seems perfectly reasonable in light of what we know about employment in rural areas. In 2004-05, 76 per cent of all rural workers worked in unorganised agriculture either as self-employed or as casual labourers and they were poorer than those working in non-agriculture.[19] Thus "compensation to employees in unorganised agriculture" can reasonably be seen as the wage income accruing to the poorest sections of the rural workers. We also know that regular wage employment is virtually non-existent in unorganised agriculture (which accounts for more than 99 per cent of total employment in agriculture) so that it is broadly correct to suppose the "compensation to employees in unorganised agriculture" to be equivalent to income from casual wage employment outside MGNREGS.

What remains wholly unknown, of course, is the extent of "leakage". In so far as the "leakage" is significant, the estimates of "increase in wage income of rural households attributable to MGNREGS" are overestimates. Nevertheless, our judgement is that the income gain for poor rural households would remain quite substantial in many parts of the country even if we were able to make appropriate deductions.

Some basis for this judgement is provided by the evidence produced by the IHD Survey (table 7). In four of the six survey districts, wage incomes from employment under MGNREGS are found to have constituted, in 2010, a large proportion of total incomes of poor rural households. This by itself suggests the income gains of these households to have been substantial. For, arguably, had the possibility of income gain been only marginal, wage incomes from employment under MGNREGS would not have become so large a proportion of total incomes for these households. In the Survey districts of Bihar, where the record of implementation of MGNREGS has been very poor, the possibility of income gain was clearly marginal and this shows up in the very low share of wage incomes from employment under MGNREGS in total incomes of poor rural households. On the other hand, "income from wage employment away from home" constitutes a large proportion of the total income of MGNREGS workers in Bihar districts; temporary migration for work remains important. Thus there clearly are cases where MGNREGS is yet to have an impact

[19] This is author's estimate based on data available from the 61st Round of the National Sample Survey of Employment and Unemployment.

on the incomes of the rural poor, but such cases are less numerous than cases where it has brought favourable changes for them.

Table 7: Percentage distribution of incomes of MGNREGS households by source

	Kurnool	Medak	Gaya	Purnea	Tonk	Udaipur
Income from employment under MGNREGS	47.7	47.3	4.0	1.7	16.5	15.0
Income from employment under other public works programmes	0.0	0.0	0.8	2.0	9.3	6.6
Income from employment in agriculture (local)	31.3	45.9	38.8	38.1	36.0	34.4
Income from employment in non-agriculture (local)	18.1	6.0	33.9	29.4	29.4	36.9
Income from wage employment away from home	2.9	0.8	22.5	28.8	8.8	7.1

Source: Autthor's estimates based on data from IHD Survey

We conclude that MGNREGS, even though it still remains to be undertaken on the stipulated scale and despite the considerable deficiencies of implementation, has already generated substantial gains in money incomes for poor rural households in many parts of India. And as the scale of MGNREGS is increased toward the stipulated level, the gains in money incomes will correspondingly increase, though the uneven spread across regions can be expected to persist for a while.

MGNREGS, poverty and economic growth

If we assume that growth of money incomes of the poor, attributable to MGNREGS, occurs in a context of stable prices and unaltered distribution of income among the poor, then, from a scrutiny of the available data on consumption expenditure, it is possible to get a first view of how MGNREGS might reduce rural poverty. The results of some thought experiments, based on the data on consumption expenditure of the rural population for the year 2004-05, are shown in table 8. These illustrate the manner in which the growth of average per capita expenditure of the rural poor would lower the incidence of rural poverty under our assumptions. The method used to derive these estimates is as follows. We first use the unit-level data on consumer expenditure of the rural population (from the 61st Round of the National Sample Survey of consumer expenditure) to arrange individuals in ascending order of expenditure per capita per month. We then organise them into percentile groups and estimate the average expenditure per capita per month for each of the percentile groups. From this, it is easy to identify the percentile group the average per capita expenditure of which matches the poverty line. Thus the bottom 42 per cent of the rural population is identified as the group of rural poor and the average per capita expenditure for this group is estimated. We then consider increases of the average per capita expenditure of each percentile group at uniform rates (this ensures stable distribution) – by 5 per cent, 10 per cent, 15 per cent, 20 per cent and 25 per cent – thus deriving new percentile distributions. For each of the new percentile distributions, we can redefine the group of rural poor by identifying the percentile group the average per capita expenditure of which matches the poverty line.

The estimates in table 8 suggest that, if our assumptions of stable prices and unaltered distribution among the poor were valid, MGNREGS should already have reduced poverty very substantially. Let us recall our earlier observation that MGNREGS may have increased the combined wage income of the rural poor by around 20 per cent in 2009-10 and hence should have reduced the incidence of rural poverty by anywhere between 12 and 16 percentage points in that year alone.

Table 8: How the growth of average per capita expenditure of the rural poor might reduce the incidence of rural poverty if the distributional inequality among the poor as well as prices remain unchanged

	Incidence of poverty (%)	Decline in poverty (percentage points)
Level of average per capita expenditure		
Actual level in 2004-05	42	
5% higher than the 2004-05 level	38	4
10% higher than the 2004-05 level	34	8
15% higher than the 2004-05 level	30	12
20% higher than the 2004-05 level	26	16
25% higher than the 2004-05 level	23	19

Note: The poverty line used is a level of expenditure of Rs. 446.7 per capita per month. This is the poverty line most recently defined by a special Committee .set up by the Planning Commission. See Planning Commission (2009).

Source: Author's estimates based on data from the 61st Round of the National Sample Survey of Consumer Expenditure.

Whether and how MGNREGS might have altered the distribution of income among the poor is impossible to know at this stage. But prices, we know, did not remain stable. In fact, food prices rose very sharply in 2009-10; the wholesale price index for "food articles" rose by more than 15 per cent.[20] So the actual reduction of poverty must obviously have been very much lower than what is indicated by the growth of money incomes of the poor brought about by MGNREGS.

Is it possible that the rise in food prices was caused, at least in part, by the growth of money incomes of the rural poor brought about by MGNREGS? We can be fairly certain (thanks to the well established Engel's Law) that, compared to the non-poor, the poor would spend a larger proportion of their incremental income on food. Thus a given amount of incremental income would generate a higher growth of demand for food if it goes to the poor than if it goes to the non-poor. Correspondingly, a given amount of incremental

[20] The source of data on wholesale prices is the Central Statistical Office, Ministry of Statistics and Programme Implementation, Government of India. "Food articles" include "cereals and pulses", "fruits and vegetables", "eggs, fish and meat", and "condiments and spices". The rate of price rise in 2009-10 was 14.5 per cent for "cereals and pulses", 9.6 per cent for "fruits and vegetables", and 20.8 per cent for "eggs, fish and meat" as well as for "condiments and spices". All of these items, it might be noted, are products of agriculture.

income would generate a lower growth of demand for manufactures and services if it goes to the poor than if it goes to the non-poor. On the supply side, it can be said that the supply of manufactures and services can in general be increased much more easily than the supply of food.[21] Thus, on the whole, a given amount of incremental income is likely to increase food prices more if it goes to the poor than if it goes to the well-off. To the extent that MGNREGS involves redistribution of incomes from the non-poor to the poor, therefore, it is reasonable to think that MGNREGS contributed to the rise in food prices.

Table 9 presents some estimates of consumption expenditure and its distribution across consumption items. Three expenditure groups are considered – bottom 42 per cent, middle 42 per cent and top 16 per cent; we can think of these groups as the poor, the well-off and the rich. Consumption items are also classified into three broad groups – food, manufactures and services. The details of classification are given in Appendix 3. Here we note that the group "food", as defined here, consists entirely of agricultural products; manufactured food items are included in manufactures.

Table 9: Consumption expenditure and its distribution, rural population, 2004-05

	Average per capita expenditure per month (Rs.)			
Expenditure group	Food	Manufactures	Services	Total
Bottom 42 per cent	158.89	167.84	17.69	344.22
Middle 42 per cent	247.77	288.62	41.81	578.20
Top 16 per cent	380.88	669.14	148.68	1198.69
	Percentage distribution			
Bottom 42 per cent	46.16	48.76	5.08	100.00
Middle 42 per cent	42.85	49.92	7.23	100.00
Top 16 per cent	31.77	55.82	12.41	100.00

Note: For details of the items included under "food", "manufactures" and "services", see Appendix 3.

Source: Author's estimates based on data available from the 61st Round of National Sample Survey of Consumer Expenditure.

The method used to derive the estimates (presented in table 9) involves, once again, derivation (by using the unit-level data from the 61st Round of the National Sample Survey of Consumer Expenditure) of average per capita expenditures on each of the three categories of consumption items – food, manufactures and services – for each of the

[21] In manufacturing and services, excess capacity typically exists. Also capacity in these sectors can be stretched up to a point fairly easily. In agriculture (which produces food), on the other hand, output cannot be increased speedily because neither land under cultivation nor land productivity can be speedily adjusted.

percentile groups of rural population (arranged in ascending order of per capita expenditure). From these, we derive the averages for the three expenditure groups – bottom 42 per cent (the poor), middle 42 per cent (the well-off) and top 16 per cent (the rich).

The figures in table 9 clearly show the Engel's Law at work. The share of food in total expenditure declines as the level of total expenditure rises. Correspondingly, the shares of manufactures and services in total expenditure rise as the level of total expenditure rises. Somewhat surprisingly, the share of food in total expenditure is high (32 per cent) even for the rich and the share of manufactures in total expenditure is high even for the poor, but this is no place to dwell on the factors that underlie these features.

The estimates presented in table 10 illustrate the differential effects of a given increase in expenditure of the poor vis-à-vis that in expenditure of the well-off. The method used to derive these estimates is as follows. We have, to begin with, the total per capita expenditure as well as the per capita expenditures on the three categories of consumption items (food, manufactures and services) for each of the percentile groups of rural population arranged in ascending order of per capita consumption. Using these, average per capita expenditures of the rural poor (the bottom 42 per cent) and of the rural well-off (the middle 42 per cent) are estimated.[22] We make life simple by assuming stable distribution of income within each expenditure group. We then estimate – for the rural poor, i.e., the bottom 42 per cent – the levels of average per capita expenditure resulting from growth of per capita expenditure at different rates – at 5 per cent, 10 per cent, 15 per cent, 20 per cent and 25 per cent. For each of these higher levels of per capita expenditure, we find the matching percentile group and thus get the per capita expenditures on food, manufactures and services. We can also estimate from the above the absolute increase in per capita expenditure of the poor for each rate of increase. These values are used to augment the average per capita expenditure of the well-off – the comparator group - and the corresponding expenditures on food, manufactures and services are then found.

[22] The size of the group of the well-off is deliberately made equal to the size of the group of poor as this facilitates comparison.

Table 10: Effects of increased expenditure by groups of rural population on demand for consumption items

	Increment in per capita expenditure				
	Total (Rupees)	% increase over base	Food (Rupees)	Manufactures (Rupees)	Services (Rupees)
The poor	17.21	5	4.89	9.95	2.37
The well-off	17.21	3	4.19	11.50	1.52
The poor	34.42	10	10.11	20.41	3.90
The well-off	34.42	5.9	11.07	20.56	2.79
The poor	51.63	15	18.87	28.88	3.88
The well-off	51.63	8.9	15.69	30.00	5.96
The poor	68.84	20	25.68	35.42	7.74
The well-off	68.84	11.9	21.61	37.58	9.66
The poor	86.05	25	33.17	44.16	8.72
The well-off	86.05	14.9	23.65	50.68	11.72

Note: The poor refer to bottom 42 % while the well-off refer to middle 42 %.

Source: Author's estimates based on data from the 61st Round (2004-05) of the National Sample Survey of Consumer Expenditure.

A striking fact that emerges is that, for moderate increases in money income, the changes in demand for different groups of consumption items are roughly the same irrespective of whether the incremental income goes to the poor or to the well-off. Thus, for example, the increased demand for food resulting from an incremental income of Rs. 34 would be the same irrespective of whether the incremental income has accrued to the poor or to the well-off. It seems, therefore, that if MGNREGS involves only moderate redistribution of income from the well-off to the poor and (correspondingly) increases the money income of the poor only moderately, MGNREGS would not contribute to food price inflation.[23] It is only when the increase in money income is large that the pattern of change in demand depends, in the theoretically expected manner, on whether the incremental income has accrued to the poor or to the well-off. Thus the increased demand for food resulting from an incremental income of Rs. 86 would be substantially higher if the incremental income accrues to the poor than if it accrues to the well-off.

From this evidence, it would appear that MGNREGS, in so far as it has involved redistribution of income from the well-off to the poor and has delivered a fairly large increase in money income to the rural poor, has indeed contributed to food price

[23] This is only an observation, not a recommendation. But it suggests the intriguing possibility that a moderate increase in money incomes of the rural poor may actually reduce poverty more than a large increase.

inflation.[24] And the food price inflation, in turn, has robbed MGNREGS of much of its potential for poverty reduction.

At first sight, MGNREGS also appears to have restrained the growth of demand for manufactures and services. In so far as MGNREGS involved redistribution of income from the well-off to the poor, it directly restrained the growth of demand for manufactures and services. And in so far as it contributed to food price inflation, it further restrained growth of demand for manufactures and services by forcing a reallocation of expenditure in favour of food (required to protect the level of food consumption). It would seem, then, that if MGNREGS contributed to food price inflation, it must also have contributed to a slowdown in the pace of economic growth. For while the accelerated growth of demand for food did not lead to accelerated growth of agricultural output, the decelerated growth of demand for manufactures and services can be expected to have caused a slowdown in the growth of output of these sectors.

But such an outcome is not in fact inevitable. To the extent that MGNREGS involved redistribution, it involved redistribution mainly from the well-off in non-agriculture to the poor in agriculture (the well-off in agriculture do not pay much taxes). And food price inflation squeezed the consumption of only the net purchasers of food – the rural poor and the non-agricultural population – while it actually delivered income gains to the surplus farmers, i.e., the rural well-off. So the growth of the surplus farmers' demand for manufactures and services should have accelerated.

Thus MGNREGS can be said to have generated two contradictory effects on the growth of demand for manufactures and services – acceleration in the case of the well-off in agriculture and deceleration in the case of the well-off in non-agriculture. The overall effect is ambiguous but is unlikely to have been very significant. We may thus conclude that MGNREGS contributed to food price inflation but had no significant effect on the pace of economic growth.

What seems puzzling in all this is that the government has not used the large stock of foodgrains it holds to check food price inflation.[25] That a scheme such as MGNREGS would put pressure on food prices was not difficult to anticipate. And that this pressure would not be countered in the short run by increased food production was not difficult to realise.[26] Yet the government was actually building up stock in 2009-10 rather than using the accumulated stock to put downward pressure on food prices. The clue to this puzzle seems to lie in the deeply flawed system of procurement / public distribution that is

[24] To avoid misunderstanding, it should be said that what is being argued is not that food price inflation would not have happened had there been no MGNREGS but that it would have been somewhat lower.

[25] In April 2009, the government held 13 million tonnes of wheat and 22 million tonnes of rice in stock. In April 2010, it held 16 million tonnes of wheat and 27 million tonnes of rice. See Ministry of Finance (2011).

[26] Bhaduri (2005) saw a scheme offering "wage employment opportunities to all at a legally stipulated minimum wage" as only a first step toward full employment in India, as he fully recognized that sustaining full employment in the longer run required expansion of productive capacity of the economy. In the short run, he argued, the stock of food grains held by the government could be used to meet the increased demand for food resulting from increased wage employment of the poor.

currently in operation.[27] Having failed to do much about the food price inflation, the government has just announced full indexation of the minimum wage paid under MGNREGS. This, however, offers no solution to the problem. In the absence of increased availability of food, such a measure is far more likely to generate spiralling food price inflation than to protect the income gains of the poor.

So far we have been discussing the short-run effects of MGNREGS. In the longer run, the effect of MGNREGS on food production will be of critical importance. This is where the list of works, permitted to be carried out under MGNREGS, assumes significance. As noted earlier, this list does reflect recognition of the need to ensure that MGNREGS contributes to growth of agricultural production through enhancement of land productivity. If the works actually carried out have followed the specified norms, food production should increase in the longer run. Increased food production will then lower food price inflation so that MGNREGS will be effective not just in reducing poverty but also in stimulating economic growth. Growth of food production will mean accelerated agricultural growth and lower food price inflation will mean accelerated growth of overall demand for manufactures and services and hence accelerated growth of manufactures and services. Accelerated growth of this kind will also generate productive employment and MGNREGS will have set the economy on a path toward sustainable full employment.

There is evidence to suggest that most of the works carried out under MGNREGS are indeed those that ought to enhance land productivity. According to information available from the MORD, more than 82 per cent of the expenditure on the works completed under MGNREGS in 2009-10 was on projects designed to increase land productivity (table 11). The IHD Survey also produces evidence to show that bulk of the expenditure was indeed incurred on works that should increase land productivity (table 12). However, there is much doubt about the quality and durability of the assets created under MGNREGS. The Planning Commission, on a review of the implementation of the programme, has expressed serious concern about the poor quality of the works undertaken thus far.[28] Some small-scale field surveys have also found the quality of the assets created through MGNREGS to be generally poor.[29] And there really are no surprises here. For, the past experience with rural works programmes has shown that creation and renovation of productive assets through schemes whose primary objective is to generate wage employment for unskilled labour is extremely difficult, particularly so in a situation where productive assets are privately and unequally held.[30]

[27] See Basu (2011) for a discussion.

[28] See Planning Commission (2010).

[29] See, for example, Dreze and Khera (2009).

[30] ARC (2006), having reviewed the past experience of implementation of special employment schemes, draws the following conclusion: “These programmes created income for the rural poor but left very few durable assets.” (p. 7)

Table 11: Asset creation under MGNREGS – 1

Works completed under MGNREGS	Percentage of expenditure 2008-09	2009-10
For enhancement of land productivity	80.1	82.3
For construction/renovation of rural roads	18.5	15.7
Others	1.4	2.0

Note: Works meant to increase land productivity include "flood control and protection, "water conservation and harvesting", "drought proofing", "irrigation works", "renovation of traditional water bodies" and "land development". Others include afforestation.

Source: Author's estimates based on data available from MORD.

Table 12: Asset creation under MGNREGS – 2

Works completed under MGNREGS in 2009-10	Percentage of expenditure on MGNREGS Koornool	Medak	Gaya	Purnea	Tonk	Udaipur
For enhancement of land productivity	85.4	98.8	85.1	73.6	62.6	30.4
For construction/improvement of village riads	14.6	1.2	3.8	26.4	36.1	63.6
Others	0.0	0.0	11.1	0.0	1.3	6.0

Notes: As in table 4.

Source: Author's estimates based on data from the IHD Survey.

It does not appear very likely, therefore, that MGNREGS will contribute significantly to the growth of land productivity even in the longer run. Indeed, we should recognize that there is inherent tension between the objective of delivering income gains to the poor and that of creating / renovating productive assets for promoting agricultural growth. Given that land is privately owned, it is not easy to create many publicly owned assets that can enhance land productivity. If agricultural growth is to be stimulated, public works have to create assets that become privately owned and even the publicly owned assets cannot but benefit private landowners. And these benefits can only vary directly with the size of landholding. All this seems highly inequitable and this makes creation of useful assets through special employment schemes a politically difficult undertaking. Besides, given the objective of employment generation, much of the spending on MGNREGS has to be set aside for payment of wages to unskilled workers, but this is not always the best arrangement for asset creation.

So MGNREGS is and will remain, principally, a programme through which transfers are delivered to the rural poor. As the scale of the programme is gradually expanded to its promised level, then, the problem of food price inflation could well become increasingly serious and persistent. And persistently high food price inflation will not only render the programme ineffective in reducing rural poverty but will also undermine the overall growth process. For, food price inflation reduces the real wage of non-agricultural workers who can be compensated only by increasing the product wage in manufacturing and services sectors. The consequence is likely to be a fall in the level of investment in the economy.

Concluding observations

MGNREGS is an impressively ambitious programme for providing wage employment to the rural poor. Even though it still has a long way to go to reach its stipulated scale and its implementation has been far from perfect, it has already succeeded in providing very substantial additional wage employment at a wage no lower than the prevailing wage to the rural poor. The result has been impressive growth of money incomes for this group.

Nevertheless, MGNREGS has not had the expected effect of significantly reducing rural poverty basically because it contributed to food price inflation. To the extent that it involved redistribution of income from the non-poor to the poor and to the extent that it delivered a large increase in money income to the poor, it led to accelerated growth of demand for food. As the government failed to introduce measures to commensurably augment the supply of food in the short run, food price inflation was unavoidable. And food price inflation ensured that the increase in real income of the poor was much less than the increase in money income.

Though a final judgement must await availability of more information, it is hard to avoid the conclusion that MGNREGS by itself cannot really be expected to stimulate agricultural growth even in the longer run. Creation of productive assets under a programme of this kind in a situation where land is privately and unequally held is inherently difficult. And deficiencies in implementation ensures that whatever assets are created are of poor quality and durability. All this means that as the scale of MGNREGS is expanded, it will deliver increasingly larger increases in money income to the poor without correspondingly contributing to agricultural growth. Food price inflation may then become a persistent problem, which will undermine both poverty alleviation and economic growth.

If MGNREGS is to alleviate poverty, stimulate growth and promote full employment, two things have to happen. In the short run, the government must find a way of using the accumulated stock of foodgrains it holds to curb food price inflation. Alongside, the government must also undertake to increase public investment in agriculture so that food production can grow in the longer run to match the growth in demand.

References

(Second) Administrative Reforms Commission, (2006), *Unlocking Human Capital: Entitlements and Governance – A Case Study (Implementation of NAREGA)*, New Delhi: Government of India.

Basu, K. (2011), "India's foodgrain policy: an economic theory perspective", *Economic and Political Weekly*, January 29.

Bhaduri, A. (2005), *Development With Dignity: A Case for Full Employment*, New Delhi: National Book Trust, India.

Dreze, J. and R. Khera (2009), "The battle for employment: the NREGA is making a difference to the lives of the rural poor, slowly but surely", *Frontline*, January 16.

Ghose, Ajit K. (2010), "Reinventing development economics", *Economic and Political Weekly*, October 16.

Ministry of Finance (2011), *Economic Survey 2010-11*, New Delhi: Government of India.

Planning Commission (2009), *Report of the Expert Group to Review the Methodology for Estimation of Poverty*, New Delhi: Government of India.

Planning Commission (2010), *Mid-Term Appraisal of the Eleventh Five-Year Plan*, New Delhi: Government of India.

Appendix 1

MGNREGS: Salient features

- The scheme is designed to guarantee 100 days of wage employment per year for all rural households who are seeking or willing to do manual work. The guarantee is for a household and not for a worker; the 100 days of wage employment can be shared by the adult working members of a household.
- There already exists an Act – the Minimum Wages Act of 1948 – under which minimum daily wages for unskilled agricultural labourers are fixed by the state governments. These are the wages to be paid for work under MGNREGS unless the central government stipulates a minimum wage specifically for the scheme. As a matter of fact, by 2009-10, the Central Government had stipulated a minimum wage of Rupees 100 per day for employment under MGNREGS. The Central Government has now also announced that this minimum wage will henceforth be fully indexed.
- Wages must be paid within 15 days of the date on which the work was done.
- Men and women must be paid equal wages.
- Employment is to be provided to a claimant within 15 days of his/her asking for it. If, for some reason, the relevant authorities fail to provide employment within this period, the claimant will be entitled to an unemployment allowance amounting to 25 per cent of the minimum wage for the first thirty days and 50 per cent thereafter.
- Work is normally to be provided to a claimant within a 5 km radius of his/her village. If work can only be provided beyond a 5 km radius, the wage paid should be higher than the stipulated minimum wage by 10 per cent.
- At least one-third of those provided with employment should be women.
- Facilities such as crèche, first aid, drinking water and shade are to be provided at each worksite.
- Only certain kinds of work can be organized for the purpose of providing employment under MGNREGS. These include: water conservation and harvesting, drought proofing, afforestation, minor irrigation, flood control and protection, renovation of traditional water bodies including de-silting of tanks, land development and construction/renovation of village roads. Maintenance of assets created under MGNREGS is also to be considered permissible work.
- In works taken up under MGNREGS, spending on wages for unskilled manual labour should constitute at least 60 per cent of total spending. The other 40 per cent can be spent on materials and wages of skilled and semi-skilled labour. No machinery is to be used.
- Transparency is to be ensured by establishing social audit and grievance redressal mechanism as also by making all accounts and records available for public scrutiny on demand.
- The Central Government is to bear the full cost of wages for unskilled labour and 75 per cent of the cost of materials and wages of skilled and semi-skilled labour. The State Governments are to bear 25 per cent of the cost of materials and wages of skilled and semi-skilled labour and the full cost of unemployment allowance.
- An annual report on the outcomes of MGNREGS is to be presented to the Parliament by the Central Government. Similar reports are to be presented in State Legislatures by the State Governments.

Appendix 2

The IHD Survey

The Institute for Human Development (IHD) conducted a small-scale field survey of the working of MGNREGS in 2010. The survey covered three states: Andhra Pradesh, Bihar and Rajasthan. From each of the three states, two districts – one relatively developed and the other relatively backward – were purposively selected. The districts are: Koornool and Medak in Andhra Pradesh; Purnea and Gaya in Bihar; and Tonk and Udaipur in Rajasthan. From each of the six selected districts, two Blocks (a Block is composed of a cluster of villages that represents the lowest tier of government administration and the second tier of Panchayati Raj institutions) – one relatively developed and one relatively backward – were purposively selected. From each of the Blocks, two villages – in which MGNREGS was under implementation – were purposively selected. From each of the villages, 20 households were randomly selected from a list of households working under MGNREGS. Thus 80 households from each of the six districts were selected for the survey.

Apart from the households, the selected villages and the worksites in them were also surveyed both to gather additional information and to check the reliability of the information gathered through the survey of households.

Appendix 3

Grouping of consumption items

Food: cereals; cereal substitutes; pulses and pulse products; vegetables; milk and milk products; egg, fish and meat; fruits; spices and condiments

Manufactures: edible oil; sugar; salt; beverages; tobacco; intoxicants; fuel and light; clothing; bedding, etc.; footwear; crockery and utensils; cooking and household appliances; books, journals, newspapers and periodicals; stationary; medicines; sports goods, toys, etc.; goods for recreation and hobbies; goods for personal care and effects; toilet articles; sundry articles; petrol, diesel and lubricating oil; furniture and fixtures; jewellery and ornaments; personal transport equipment; therapeutic appliances; other personal goods; residential building, land and other durables

Services: education services (institutional and non-institutional), medical care (institutional and non-institutional); rent; entertainment; conveyance; consumer services excluding conveyance; consumer taxes and cesses.

Employment Working Papers

2008

1 Challenging the myths about learning and training in small and medium-sized enterprises: Implications for public policy;
ISBN 978-92-2-120555-5 (print); 978-92-2-120556-2 (web pdf)
David Ashton, Johnny Sung, Arwen Raddon, Trevor Riordan

2 Integrating mass media in small enterprise development: Current knowledge and good practices;
ISBN 978-92-2-121142-6 (print); 978-92-2-121143-3 (web pdf)
Gavin Anderson. Edited by Karl-Oskar Olming, Nicolas MacFarquhar

3 Recognizing ability: The skills and productivity of persons with disabilities.
A literature review;
ISBN 978-92-2-121271-3 (print); 978-92-2-121272-0 (web pdf)
Tony Powers

4 Offshoring and employment in the developing world: The case of Costa Rica;
ISBN 978-92-2-121259-1 (print); 978-92-2-121260-7 (web pdf)
Christoph Ernst, Diego Sanchez-Ancochea

5 Skills and productivity in the informal economy;
ISBN 978-92-2-121273-7 (print); 978-92-2-121274-4 (web pdf)
Robert Palmer

6 Challenges and approaches to connect skills development to productivity and employment growth: India;
unpublished
C. S. Venkata Ratnam, Arvind Chaturvedi

7 Improving skills and productivity of disadvantaged youth;
ISBN 978-92-2-121277-5 (print); 978-92-2-121278-2 (web pdf)
David H. Freedman

8 Skills development for industrial clusters: A preliminary review;
ISBN 978-92-2-121279-9 (print); 978-92-2-121280-5 (web pdf)
Marco Marchese, Akiko Sakamoto

9 The impact of globalization and macroeconomic change on employment in Mauritius: What next in the post-MFA era?;
ISBN 978-92-2-120235-6 (print); 978-92-2-120236-3 (web pdf)
Naoko Otobe

10 School-to-work transition: Evidence from Nepal;
ISBN 978-92-2-121354-3 (print); 978-92-2-121355-0 (web pdf)
New Era

11 A perspective from the MNE Declaration to the present: Mistakes, surprises and newly important policy implications;
ISBN 978-92-2-120606-4 (print); 978-92-2-120607-1 (web pdf)
Theodore H. Moran

12 Gobiernos locales, turismo comunitario y sus redes:
Memoria: V Encuentro consultivo regional (REDTURS);
ISBN 978-92-2-321430-2 (print); 978-92-2-321431-9 (web pdf)

13 Assessing vulnerable employment: The role of status and sector indicators in Pakistan, Namibia and Brazil;
ISBN 978-92-2-121283-6 (print); 978-92-2-121284-3 (web pdf)
Theo Sparreboom, Michael P.F. de Gier

14 School-to-work transitions in Mongolia;
ISBN 978-92-2-121524-0 (print); 978-92-2-121525-7 (web pdf)
Francesco Pastore

15 Are there optimal global configurations of labour market flexibility and security? Tackling the "flexicurity" oxymoron;
ISBN 978-92-2-121536-3 (print); 978-92-2-121537-0 (web pdf)
Miriam Abu Sharkh

16 The impact of macroeconomic change on employment in the retail sector in India: Policy implications for growth, sectoral change and employment;
ISBN 978-92-2-120736-8 (print); 978-92-2-120727-6 (web pdf)
Jayati Ghosh, Amitayu Sengupta, Anamitra Roychoudhury

17 From corporate-centred security to flexicurity in Japan;
ISBN 978-92-2-121776-3 (print); 978-92-2-121777-0 (web pdf)
Kazutoshi Chatani

18 A view on international labour standards, labour law and MSEs;
ISBN 978-92-2-121753-4 (print);978-92-2-121754-1(web pdf)
Julio Faundez

19 Economic growth, employment and poverty in the Middle East and North Africa;
ISBN 978-92-2-121782-4 (print); 978-92-2-121783-1 (web pdf)
Mahmood Messkoub

20 Global agri-food chains: Employment and social issues in fresh fruit and vegetables;
ISBN 978-92-2-121941-5(print); 978-92-2-121942-2 (web pdf)
Sarah Best, Ivanka Mamic

21 Trade agreements and employment: Chile 1996-2003;
ISBN 978-92-121962-0 (print); 978-92-121963-7 (web pdf)

22 The employment effects of North-South trade and technological change;
ISBN 978-92-2-121964-4 (print); 978-92-2-121965-1 (web pdf)
Nomaan Majid

23 Voluntary social initiatives in fresh fruit and vegetable value chains;
ISBN 978-92-2-122007-7 (print); 978-92-2-122008-4 (web pdf)
Sarah Best, Ivanka Mamic

24 Crecimiento económico y empleo de jóvenes en Chile: Análisis sectorial y proyecciones;
ISBN 978-92-2-321599-6 (print); 978-92-2-321600-9 (web pdf)
Mario D. Velásquez Pinto

25 The impact of codes and standards on investment flows to developing countries;
ISBN 978-92-2-122114-2 (print); 978-92-2-122115-9 (web pdf)
Dirk Willem te Velde

26 The promotion of respect for workers' rights in the banking sector:
Current practice and future prospects;
ISBN 978-92-2-122116-6 (print); 978-2-122117-3 (web pdf)
Emily Sims

2009

27 Labour market information and analysis for skills development;
ISBN 978-92-2-122151-7 (print); 978-92-2-122152-4 (web pdf)
Theo Sparreboom, Marcus Powell

28 Global reach - Local relationships: Corporate social responsibility, worker's rights and local development;
ISBN 978-92-2-122222-4 (print); 978-92-2-122212-5 (web pdf)
Anne Posthuma, Emily Sims

29 Investing in the workforce: Social investors and international labour standards;
ISBN 978-92-2-122288-0 (print); 978-92-2-122289-7 (web pdf)
Elizabeth Umlas

30 Rising food prices and their implications for employment, decent work and poverty reduction;
ISBN 978-92-2-122331-3 (print); 978-92-2-122332-0 (web pdf)
Rizwanul Islam, Graeme Buckley

31 Economic implications of labour and labour-related laws on MSEs: A quick review of the Latin American experience;
ISBN 978-92-2-122368-9 (print); 978-92-2-122369-6 (web pdf)
Juan Chacaltana

32 Understanding informal apprenticeship – Findings from empirical research in Tanzania;

ISBN 978-92-2-122351-1 (print); 978-92-2-122352-8 (web pdf)
Irmgard Nübler, Christine Hofmann, Clemens Greiner

33 Partnerships for youth employment. A review of selected community-based initiatives;
ISBN 978-92-2-122468-6 (print); 978-92-2-122469-3 (web pdf)
Peter Kenyon

34 The effects of fiscal stimulus packages on employment;
ISBN 978-92-2-122489-1 (print); 978-92-2-122490-7 (web pdf)
Veena Jha

35 Labour market policies in times of crisis;
ISBN 978-92-2-122510-2 (print); 978-92-2-122511-9 (web pdf)
Sandrine Cazes, Sher Verick, Caroline Heuer

36 The global economic crisis and developing countries: Transmission channels, fiscal and policy space and the design of national responses;
ISBN 978-92-2-122544-7 (print); 978-92-2-122545-4 (web pdf)
Iyanatul Islam

37 Rethinking monetary and financial policy:
Practical suggestions for monitoring financial stability while generating employment and poverty reduction;
ISBN 978-92-2-122514-0 (print); 978-92-2-122515-7 (web pdf)
Gerald Epstein

38 Promoting employment-intensive growth in Bangladesh: Policy analysis of the manufacturing and service sectors;
ISBN 978-92-2-122540-9 (print); 978-92-2-122541-6 (web pdf)
Nazneen Ahmed, Mohammad Yunus, Harunur Rashid Bhuyan

39 The well-being of labour in contemporary Indian economy: What's active labour market policy got to do with it?;
ISBN 978-92-2-122622-2 (print); 978-92-2-122623-9 (web pdf)
Praveen Jha

40 The global recession and developing countries;
ISBN 978-92-2-122847-9 (print); 978-92-2-122848-6 (web pdf)
Nomaan Majid

41 Offshoring and employment in the developing world: Business process outsourcing in the Philippines;
ISBN 978-92-2-122845-5 (print); 978-92-2-122846-2 (web pdf)
Miriam Bird, Christoph Ernst

42 A survey of the Great Depression as recorded in the International Labour Review, 1931-1939;
ISBN 978-92-2-122843-1 (print); 978-92-2-122844-8 (web pdf)

Rod Mamudi

43 The price of exclusion: The economic consequences of excluding people with disabilities from the world or work;
ISBN 978-92-2-122921-6 (print); 978-92-2-122922-3 (web pdf)
Sebastian Buckup

44 Researching NQFs: Some conceptual issues;
ISBN 978-92-2-123066-3 (print), 978-92-2-123067-0 (web pdf)
Stephanie Allais, David Raffe, Michael Young

45 Learning from the first qualifications frameworks;
ISBN 978-92-2-123068-7 (print), 978-92-2-123069-4 (web pdf)
Stephanie Allais, David Raffe, Rob Strathdee, Leesa Wheelahan, Michael Young

46 International framework agreements and global social dialogue:
Lessons from the Daimler case;
ISBN 978-92-2-122353-5 (print); 978-92-2-122354-2 (web pdf)
Dimitris Stevis

2010

47 International framework agreements and global social dialogue:
Parameters and prospects;
ISBN 978-92-2-123298-8 (print); 978-92-2-122299-5 (web pdf)
Dimitris Stevis

48 Unravelling the impact of the global financial crisis on the South African labour market;
ISBN 978-92-2-123296-4 (print); 978-92-2-123297-1 (web pdf)
Sher Verick

49 Guiding structural change: The role of government in development;
ISBN 978-92-2-123340-4 (print); 978-92-2-123341-1 (web pdf)
Matthew Carson

50 Les politiques du marché du travail et de l'emploi au Burkina Faso;
ISBN 978-92-2-223394-6 (print); 978-92-2-223395-3 (web pdf)
Lassané Ouedraogo, Adama Zerbo

51 Characterizing the school-to-work transitions of young men and women:
Evidence from the ILO school-to-work transition surveys;
ISBN 978-92-2-122990-2 (print); 978-92-2-122991-9 (web pdf)
Makiko Matsumoto, Sara Elder

52 Exploring the linkages between investment and employment in Moldova:
A time-series analysis
ISBN 978-92-2-122990-2 (print); 978-92-2-122991-9 (web pdf)

Stefania Villa

53 The crisis of orthodox macroeconomic policy: The case for a renewed commitment to full employment;
ISBN 978-92-2-123512-5 (print); 978-92-2-123513-2 (web pdf)
Muhammed Muqtada

54 Trade contraction in the global crisis: Employment and inequality effects in India and South Africa;
ISBN 978-92-2124037-2 (print); 978-92-2124038-9 (web pdf)
David Kucera, Leanne Roncolato, Erik von Uexkull

55 The impact of crisis-related changes in trade flows on employment: Incomes, regional and sectoral development in Brazil;
Forthcoming
Scott McDonald, Marion Janse, Erik von Uexkull

56 Envejecimiento y Empleo en América Latina y el Caribe;
ISBN 978-92-2-323631-1 (print); 978-92-2-323632-8 (web pdf)
Jorge A. Paz

57 Demographic ageing and employment in China;
ISBN 978-92-2-123580-4 (print); 978-92-2-123581-1 (web pdf)
Du Yang, Wrang Meiyan

58 Employment, poverty and economic development in Madagascar: A macroeconomic framework;
ISBN 978-92-2-123398-5 (print); 978-92-2-123399-2 (web pdf)
Gerald Epstein, James Heintz, Léonce Ndikumana, Grace Chang

59 The Korean labour market: Some historical macroeconomic perspectives;
ISBN 978-92-2-123675-7 (print); 978-92-2-123676-4 (web pdf)
Anne Zooyob

60 Les Accords de Partenariat Economique et le travail décent:
Quels enjeux pour l'Afrique de l'ouest et l'Afrique centrale?;
ISBN 978-92-2-223727-2 (print); 978-92-2-223728-9 (web pdf)
Eléonore d'Achon; Nicolas Gérard

61 The great recession of 2008-2009: Causes, consequences and policy responses;
ISBN 978-92-2-123729-7 (print); 978-92-2-123730-3 (web pdf)
Iyanatul Islam, Sher Verick

62 Rwanda forging ahead: The challenge of getting everybody on board;
ISBN 978-92-2-123771-6 (print); 978-92-2-123772-3 (web pdf)
Per Ronnås (ILO), Karl Backéus (Sida); Elina Scheja (Sida)

63 Growth, economic policies and employment linkages in Mediterranean countries: The cases of Egypt, Israel, Morocco and Turkey;
ISBN 978-92-2-123779-2 (print); 978-92-2-123780-8 (web pdf)
Gouda Abdel-Khalek

64 Labour market policies and institutions with a focus on inclusion, equal opportunities and the informal economy;
ISBN 978-92-2-123787-7 (print); 978-92-2-123788-4 (web pdf)
Mariangels Fortuny, Jalal Al Husseini

65 Les institutions du marché du travail face aux défis du développement: Le cas du Mali;
ISBN 978-92-2- 223833-0 (print); 978-92-2-223834-7 (web pdf)
Modibo Traore, Youssouf Sissoko

66 Les institutions du marché du travail face aux défis du développement: Le cas du Bénin;
ISBN 978-92-2-223913-9 (print); 978-92-2-223914-6 (web pdf)
Albert Honlonkou, Dominique Odjo Ogoudele

67 What role for labour market policies and institutions in development?Enhancing security in developing countries and emerging economies;
ISBN 978-92-2-124033-4 (print); 978-92-2-124034-1 (web pdf)
Sandrine Cazes, Sher Verick

68 The role of openness and labour market institutions for employment dynamics during economic crises;
Forthcoming
Elisa Gameroni, Erik von Uexkull, Sebastian Weber

69 Towards the right to work: Innovations in Public Employment programmes (IPEP);
ISBN 978-92-2-124236-9 (print); 978-92-2-1244237-6 (web pdf)
Maikel Lieuw-Kie-Song, Kate Philip, Mito Tsukamoto, Marc van Imschoot

70 The impact of the economic and financial crisis on youth employment: Measures for labour market recovery in the European Union, Canada and the United States;
ISBN 978-92-2-124378-6 (print); 978-92-2-124379-3 (web pdf)
Niall O'Higgins

71 El impacto de la crisis económica y financiera sobre el empleo juvenil en América Latina: Medidas des mercado laboral para promover la recuperación del empleo juvenil;
ISBN 978-92-2-324384-5 (print); 978-92-2-324385-2 (web pdf)
Federio Tong

72 On the income dimension of employment in developing countries;
ISBN: 978-92-2-124429-5 (print);978-92-2-124430-1 (web pdf)
Nomaan Majid

73 Employment diagnostic analysis: Malawi;
ISBN 978-92-2-123101-0 (print); 978-92-2-124102-7 (web pdf)
Per Ronnas

74 Global economic crisis, gender and employment:
The impact and policy response;
ISBN 978-92-2-14169-0 (print); 978-92-2-124170-6 (web pdf)
Naoko Otobe

2011

75 Mainstreaming environmental issues in sustainable enterprises: An exploration of issues, experiences and options;
ISBN 978-92-2-124557-5 (print); 978-92-2-124558-2 (web pdf)
Maria Sabrina De Gobbi

76 The dynamics of employment, the labour market and the economy in Nepal
ISBN 978-92-2-123605-3 (print); 978-92-2-124606-0 (web pdf)
Shagun Khare , Anja Slany

77 Industrial policies and capabilities for catching-up:
Frameworks and paradigms
Irmgard Nübler

78 Economic growth, employment and poverty reduction:
A comparative analysis of Chile and Mexico
ISBN 978-92-2-124783-8 (print); 978-92-2-124784-5 (web pdf)
Alicia Puyana

79 Macroeconomy for decent work in Latin America and the Caribbean
ISBN 978-92-2-024821-8 (print); 978-92-2-024822-5 (web pdf)
Ricardo French-Davis

80 Evaluation des emplois générés dans le cadre du DSCRP au Gabon
ISBN 978-92-2-223789-0 (print) ; 978-92-2-223790-6 (web pdf)
Mohammed Bensid, Aomar Ibourk and Ayache Khallaf

81 The Great Recession of 2008-2009: Causes, consequences and policy responses
ISBN 978-92-2-123729-7 (print); 978-92-2-123730-3 (web pdf)
Iyanatul Islam and Sher Verick

82 Le modèle de croissance katangais face à la crise financière mondiale : Enjeux en termes d’emplois
ISBN 978-92-2-225236-7 (print) ; 978-92-2- 225237-4 (web pdf)
Frédéric Lapeyre, Philippe Lebailly, Laki Musewa M’Bayo, Modeste Mutombo Kyamakosa

83 Growth, economic policies and employment linkages: Israel

ISBN 978-92-2-123775-4 (print); 978-92-2-123778-5 (web pdf)
Roby Nathanson

84 Growth, economic policies and employment linkages: Turkey
ISBN 978-92-2-123781-5 (print); 978-92-2-123782-2 (web pdf)
Erinc Yeldan and Hakan Ercan

85 Growth, economic policies and employment linkages: Egypt
ISBN 978-92-2-123773-0 (print); 978-92-2-123774-7 (web pdf)
Heba Nassar

86 Employment diagnostic analysis: Bosnia and Herzegovina
ISBN 978-92-2-125043-2 (print); 978-92-2-2125044-9 (web pdf)
Shagun Khare, Per Ronnas and Leyla Shamchiyeva

87 Should developing countries target low, single digit inflation to promote growth and employment
ISBN 978-92-2-125050-0 (print); 978-92-2-125051-7 (web pdf)
Sarah Anwar, Iyanatul Islam

88 Dynamic Social Accounting matrix (DySAM): concept, methodology and simulation outcomes: The case of Indonesia and Mozambique
ISBN 978-92-2-1250418 (print); 978-92-2-1250425 (web pdf)
Jorge Alarcon, Christoph Ernst, Bazlul Khondker, P.D. Sharma

89 Microfinance and child labour
ISBN 978-92-2-125106-4 (print)
Jonal Blume and Julika Breyer

90 Walking on a tightrope: Balancing MF financial sustainability and poverty orientation in Mali
ISBN 978-92-2-124906-1 (print); 978-92-2-124907-8 (web pdf)
Renata Serra and Fabrizio Botti

91 Macroeconomic policy “Full and productive employment and decent work for all”: Uganda country study
ISBN 978-92-2-125400-3 (print); 978-92-2-125401-0 (web pdf)
Elisa van Waeyenberge and Hannah Bargawi

92 Fiscal and political space for crisis response with a focus on employment and labour market: Study of Bangladesh
ISBN 978-92-2-125402-7 (print); 978-92-2-125403-4 (web pdf)
Rizwanul Islam, Mustafa K. Mukeri and Zlfiqar Ali

93 Macroeconomic policy for employment creation: The case of Malawi
ISBN 978-92-2-125404-1 (print); 978-92-2-125405-8 (web pdf)
Sonali Deraniyagala and Ben Kaluwa

94 Challenges for achieving job-rich and inclusive growth in Mongolia
ISBN 978-92-2-125399-0 (print); 978-92-2-125398-3 (web pdf)
Per Ronnas

95 Employment diagnostic analysis: Nusa Tenggara Timur
ISBN 978-92-2-125412-6 (print); 978-92-2-125413-3 (web pdf)
Miranda Kwong and Per Ronnas

96 What has really happened to poverty and inequality during the growth process in developing countries?
ISBN 978-92-2-125432-4 (print); 978-92-2- 125433-1 (web pdf)
Nomaan Majid

97 ROKIN Bank: The story of workers' organizations that successfully promote financial inclusion
ISBN 978-92-2-125408-9 (print): 978-92-2-125409-6 (web pdf)
Shoko Ikezaki

98 Employment diagnostic analysis: Maluku, Indonesia
ISBN 978-92-2-12554690 (print); 978-92-2-1254706 (web pdf)
Per Ronnas and Leyla Shamchiyeva

99 Employment trends in Indonesia over 1996-2009: Casualization of the labour market during an ear of crises, reforms and recovery
ISBN 978-92-2-125467-6 (print): 978-92-2-125468-3 (web pdf)
Makiko Matsumoto and Sher Verick

100 The impact of the financial and economic crisis on ten African economies and labour markets in 2008-2010: Findings from the ILO/WB policy inventory
ISBN 978-92-2-125595-6 (print); 978-92-2-125596-3 (web pdf)
Catherine Saget and Jean-Francois Yao

101 Rights at work in times of crisis: Trends at the country-level in terms of compliance with International Labour Standards
ISBN 978-92-2-125560-4 (print); 978-92-2-125561-1 (web pdf)
David Tajgman, Catherine Saget, Natan Elkin and Eric Gravel

102 Social dialogue during the financial and economic crisis: Results from the ILO/World Bank Inventory using a Boolean analysis on 44 countries
ISBN 978-92-2- 125617-5 (print); 978-92-2-125618-2 (web pdf)
Lucio Baccaro and Stefan Heeb

103 Promoting training and employment opportunities for people with intellectual disabilities: International experience
ISBN 978-92-2-1254973 (print); 978-92-2-125498-0 (web pdf)
Trevor R. Parmenter

104 Towards an ILO approach to climate change adaptation

ISBN 978-92-2-125625-0 (print); 978-92-2-125626-7 (web pdf)
Marek Harsdorff, Maikel Lieuw-Kie-Song, Mito Tsukamoto

105 Addressing the employment challenge:
India's MGNREGA
ISBN 978-92-2-125687-8 (print);978-92-2-125688-5 (web pdf)
Ajit Ghose

106 Diverging trends in unemployment in the United States and Europe: Evidence from Okun's law and the global financial crisis
ISBN 978-92-2-125711-0 (print); 978-92-2-125712-7 (web pdf)
Sandrine Cazes, Sher Verick and Fares Al Hussami

107 Macroeconomic policy fur full and productive and decent employment for all:
The case of Nigeria
ISBN 978-92-2-125693-5 (print); 978-92-2-125696-0 (web pdf)
Ugochukwu Agu, Chijioke J. Evoh

108 Macroeconomics of growth and employment:
The case of Turkey
ISBN 978-92-1-125732-5 (print); 978-92-2-125733-2 (web pdf)
Erinc Yeldan

109 Macroeconomic policy for full and productive employment and decent work for all:
An analysis of the Argentine experience
ISBN 978-92-2-125827-8 (print); 978-92-2-125828-5 (web pdf)
Mario Damill, Roberto Frenkel and Roxana Maurizio

110 Macroeconomic policy for full and productive employment and decent work for all:
Sri Lanka country study
ISBN 978-92-2-125845-2 (print); 978-92-2-12584-6 (web pdf)
Dushni Weerakoon and Nisha Arunatilake

**A complete list of previous working papers can be found on:
http://www.ilo.org/employment**

Employment Sector

For more information visit our site:
http://www.ilo.org/employment

International Labour Office
Employment Sector
4, route des Morillons
CH-1211 Geneva 22

Email: edempdoc@ilo.org