



**“Impact of Employment Guarantee Programmes on
Gender Equality and Pro-Poor Economic Development”**

POLICY BRIEF
Case-Study on South Africa

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POLICY BRIEF ON SOUTH AFRICA ⁱ

INTRODUCTION AND POLICY CONTEXT FOR THIS STUDY

The recent global crisis, originating in financial liberalization, longstanding ‘free’ trade policies and laissez faire promotion in general, has resulted in uneven and rather discouraging socioeconomic outcomes around the world. For the most part, the expectation market efficiency would accompany deregulation, reduction of budget deficits, and price stability, i.e., channel investment where most needed, did not come to pass. The much anticipated poverty reduction and more equitable income distribution impacts proved elusive as well. Furthermore, higher growth rates did not generate sufficient demand to absorb surplus labour. These issues are connected but an in depth discussion is beyond the scope of this short note. Instead we will concentrate on the challenge of joblessness.

Perplexed governments, international development agencies, and the Bretton Woods institutions have concluded that “trickle down” effects do not always take place, and in any event, not in a timely fashion. Particularly troubling and beyond loss of income, joblessness and poverty are associated with marginalization and social exclusion, susceptibility to extremist ideologies, subjection of people to high levels of violence and criminality and overall loss of hope. There is therefore a particular urgency to engage in policy dialogue and pursue new directions and by now, it is acknowledged that fresh ideas are needed.

In the search for new directions, we keep in mind that since poverty and inequality are the result of different processes, one size will not fit all. To give some examples, meagre wages and unregulated work conditions, being on the brink of becoming landless or lacking the skills to be eligible for better paying *existing* vacancies, each clearly requires a different type of intervention and hence points to distinct policy recommendations.

There also exists another group of people whose economic suffering is largely based on chronic and severe lack of employment opportunities. In such instances, “public work programmes” and “employment guarantee schemes,” whereby the government becomes the employer of last resort (ELR), can go a long way. These are sometimes referred to as ‘active labour market policies’, and there have been many such country experiences; ⁱⁱ at its core, such a policy makes it the obligation of the state to provide a paid work entitlement to those ready and willing but unable to find a job. Historically, such job opportunities have been created primarily in construction and maintenance of physical infrastructural assets. Often bypassed are equally meaningful jobs that enhance social service delivery, a subject matter this note is dedicated to.

Specifically, this policy brief presents the findings of a research project undertaken to examine the macroeconomic consequences of scaling-up the Expanded Public Works Programme (EPWP), a public job creation initiative introduced by the South African government in 2004. The job creation we propose pertains to social service delivery in health and education, especially important areas when current backlogs are taken into account. For households that cannot purchase such services due to lack of income, public provisioning gaps are devastating and are mostly filled by long hours of invisible,

unpaid work performed by women and children. Time use data reveals this to be the case in many countries, resulting in yet another form of gender inequality, and South Africa is not an exception. The employment creation we propose therefore addresses several policy objectives: income and job generation, provisioning of unmet needs of communities, skill enhancement for a new cadre of workers, and promotion of gender equality by addressing the overtaxed time of women.

Domestic labour resource mobilisation through well-designed public employment programmes presents an opportunity to achieve multiple developmental policy objectives. For the case of South Africa, we find that public job creation synergistically creates jobs and income, expands fiscal space, promotes pro-poor growth and contributes to gender equality by substituting paid for unpaid work. These results stem from an ex-ante evaluation of a policy scenario for South Africa's EPWP. The orders of magnitude involved are indeed compelling and we hope they are useful in motivating discussion for other countries.

BACKGROUND ON SOUTH AFRICA

While many positive developments have taken place in post-apartheid South Africa, unemployment and poverty remain serious challenges. In the last decade the official unemployment rate in South Africa has been very high and is currently at 25.5 percent. The expanded unemployment rate (a measure that includes discouraged workers) is about 37.1 percent, affecting predominantly unskilled and low-skilled workers.ⁱⁱⁱ These rates correspond to 4.4 and 7.1 million persons out of work, respectively. What makes joblessness even more intractable is the fact that as compared to countries of similar socioeconomic level of development, self-employment and the size of the informal sector are surprisingly small in South Africa.

Unemployment and poverty in South Africa continue to have racial, gender and spatial characteristics. Joblessness among African women and youth in ex-homelands, urban slums and rural areas is as high as 70 to 80 percent in some parts of the country. In March 2007 the official unemployment rate (a measure that excludes discouraged workers) among the African population was 36.4 percent for women and 25 percent for men, while for white women it was 4.6 percent and 4.1 percent for white men. Poverty estimates place 50–60 percent of the population below the poverty line.^{iv} Overall, a larger number of women are in poverty; in a population of about 44 million, among the poor, 11.9 million (54.4 percent) are female as compared to 10 million poor males.^v

Despite South Africa's economic growth, which in the past five years has ranged between 3–4.5 percent, high unemployment rates persist. Starting back in 1994, the government introduced policies and programmes geared toward improving growth, as well as reducing poverty and inequality. Examples include the *Reconstruction and Development Programme* (1994), a Keynesian aggregate-demand strategy; *Growth, Employment and Redistribution Strategy* (1996), which included a strong commitment to price stability and inflation-targeting; *Child Support Grant* (1998), as a part of social cash transfers programmatic commitment; and more recently, the *Accelerated and Shared Growth Initiative for South Africa* (2006). Despite these policies, moderate but steady growth has not translated to substantial employment creation, partly due to overall declining labour-intensity and weakening of the

manufacturing sector. Simply put, private sector demand has not been able to absorb surplus labour. Current projections indicate that even if the government of South Africa were to adopt aggressive expansionary fiscal and monetary policies, cutting unemployment by more than half its present rate would be an impossible task in the next decade.^{vi} Prospects look especially grim for unskilled workers.

To redress the serious problem of chronic unemployment, among other measures, the government of South Africa introduced the Expanded Public Works Programme (EPWP) in 2004. This active labour market policy is a public job creation programme that provides the unemployed with a paid work entitlement and has set a target to create one million job opportunities within five years. The idea of government acting as the *employer of last resort* has a very long history and over the years, many countries have undertaken what has variably been known as “employment guarantee schemes,” “public employment programmes,” “food for work,” and “public works programmes.” Such government-led projects have been implemented as temporary emergency relief programmes during crises and phased out as conditions improve.^{vii} However, the case has also been made for using such measures on a permanent basis^{viii} to guard against the many undesirable socioeconomic effects of underemployment and to promote the right to a job as a guaranteed entitlement. In 2005, India became the first country to introduce such a permanent entitlement by introducing the *National Rural Employment Guarantee Act* in the Constitution.^{ix}

The main goal of EPWP is to address economic empowerment through job creation. This is a policy that has the potential to mitigate social exclusion and contribute to poverty alleviation by mobilising an underutilised domestic resource, namely labour. By creating short- to medium-term jobs for unskilled workers who have been unemployed (in most cases for prolonged periods of time), this policy aims to achieve another goal as well—to build skills and provide on-the-job training and formal accreditation so as to prepare EPWP participants for longer-term jobs.^x EPWP projects and job creation are primarily focused on labour-intensive infrastructure, such as construction and maintenance of roads and bridges, with a mandate to substitute labour for machines to the largest degree possible. In addition, smaller budgetary allocations were designated in environmental projects and for social sector job creation.

In many respects, EPWP has set deeply transformative objectives, which are difficult to achieve within a short-term period and with small budgetary allocations. In the 2004–2005 period, EPWP to GDP ratio was .3 percent and in terms of EPWP to government expenditures, a mere .8 percent.^{xi} To give an indication of relative magnitudes involved, out of the annual 2004/5 Rand20 billion budgetary allocation, R15 billion was dedicated to job creation within infrastructure projects, R4 billion for employment in environmental projects, and R600 million to social sector job opportunities. Recent mid-term reviews and independent research have revealed that budgetary allocations are incommensurable to the problem at hand and that job opportunities are too few and too short in duration to have a substantial impact. Hence, fresh thinking and discussions are currently underway to scale-up EPWP.

This study joins in the efforts aiming to contribute to the current policy dialogue on scaling-up EPWP. We propose an expansion of job creation within the social sector and we subsequently explore the economy-wide implications of such job creation on unemployment, growth of output, fiscal space and poverty reduction. In distinction from

other countries' public job creation initiatives that have an exclusive focus on infrastructure, South Africa is the first country to programmatically include public job creation that aims to extend social service delivery. Specifically, two focus areas have been identified: Early Childhood Development (ECD) and Home and Community Based Care (HCBC). We consider this particularly important from a gender equality perspective. Across the world, especially among poor households who cannot purchase such services from the market, it is the unpaid work of women that fills public sector care gaps.

Invisibility of unpaid work has resulted in omitting unpaid work inequalities from proper consideration in economic analysis and policy recommendations. To provide a clearer picture of the nexus between poverty, paid/unpaid work and unemployment, this research project uses a methodology that includes the construction of time use satellite accounts that reveal the hidden economy of unpaid work, as well as a variety of useful jobs that present themselves as potential but “hidden vacancies”, waiting to become part of the monetised economy. Overall we find that in South Africa, time spent on unpaid care work is higher for women, increasingly so with poverty and unemployment. In contrast to adult men, women perform 75 percent of the total unpaid work. The time burdens of unpaid work, including unpaid care work, are particularly acute among African poor women in ex-homelands and urban slum areas. As a result, they end up having less time available for skill upgrading, political participation and self-care with negative implications for human development, full citizenship and capabilities.

The EPWP provides policy space to create job opportunities that upgrade skills for men and women, extend service delivery to underserved communities and substitute paid for unpaid work. This we consider a very important feature, at least from a gender perspective. EPWP programmatically recognises that unpaid HCBC and ECD work performed primarily by women, children and mostly unemployed and poor “volunteers” should become paid work. Unpaid work performed by poor women includes care for the sick and permanently ill, such as malaria and TB patients and people living with the HIV/AIDS virus. It also consists of care provisioning with meagre means and under impoverished conditions for children during their early childhood development stages. This work extends beyond child minding—it includes securing adequate nutrition and clean water, collecting fire wood to prepare meals, accessing health services, providing mental stimulation and creating a secure, clean, warm and nurturing environment, which is critically important for the physical and psychological development of children. In South Africa, the two care areas of ECD and HCBC are critically interconnected. As a result of the high HIV/AIDS prevalence rates among the mid-aged part of the population, older children and older women become the primary caretakers of orphans and children living in households with HIV patients.

CASE STUDY ON SCALING-UP THE SOCIAL SECTOR, EPWP

The EPWP jobs we propose below build upon and extend the present scope of the Social Sector EPWP.^{xii} Evaluation documents have noted that the social sector has been primarily focused on facilitating skill upgrading through learnerships.^{xiii} Given its small budgetary allocations, it only provides for a very short duration of employment and has not expanded service delivery adequately. In contrast, the jobs we propose are full-time, year-round jobs based on service delivery targets. They are meant to create jobs while providing

services that reach infants, young children and the sick of vulnerable households. These services will also be available to households from within which newly hired EPWP workers will come from, enabling women's participation in EPWP without adding to their already heavy burdens of unpaid work. Delivery of services will entail the hiring and development of an ECD and HCBC cadre that ranges from child care workers, school nutrition workers, teacher aids, school caretakers and school clerical workers, to cooks, vegetable gardeners and administrators for local ECD sites, as well as community health workers, nutrition and food security workers, directly observed therapy, voluntary counselling and testing, and TB and malaria health officers. These services, among other benefits yielded, will alleviate unpaid care burdens by providing support for the raising of children and the care of the ill.

While the present study addresses the particular context of South Africa, this research project develops a methodology applicable to a variety of other policy experiments and, with appropriate modifications, can be adopted for use in other countries. The two pillars of our analysis are a gender-disaggregated social accounting matrix and time use satellite accounts that we developed for the South African economy. Our methodology visualises the macroeconomy through a lens that makes evident its gender, race, income and poverty structure. It sheds light on how unpaid work is distributed by gender, employment status, and poverty status of households, and offers simulations and impact analysis that is disaggregated by gender and a variety of household types, revealing some salient features of the macro-micro implications of policy experiments.

To assess the impacts of scaling-up the EPWP social sector job creation, we developed a gender disaggregated Social Accounting Matrix (SAM-SA). The model shows the use of male and female labour (skilled and unskilled) in paid work from within several stratified household types. Parallel satellite time use accounts were constructed to shed light on the distribution of unpaid work for the same stratified household types. We also made use of models that allowed us to determine the types and numbers of new jobs needed to expand service delivery. From these estimates we calculated the corresponding budgetary allocations that will allow for such scaling-up to take place. Lastly, it should be mentioned that during the month of October 2007, a total of seventeen interviews with government officials and EPWP beneficiaries were conducted and five project sites were visited in the provinces of KwaZulu Natal and Limpopo. These provided valuable insights and enhanced our understanding of both the importance of scaling-up and the challenges EPWP faces.

The results of the policy experiment we report stem from a suggested budgetary allocation of approximately R9.2 billion. The proposed full-time, year-round jobs primarily reach unskilled workers that are members of ultra-poor and poor households. Wages are stipulated at R500 per month with some jobs requiring higher skill levels and paying up to double that amount. The labour supply response is presumed to be the same for all households below the poverty line. The key simulation findings are:

- **The injection of R9.2 billion corresponds to creation of 571,505 new full-time EPWP Social Sector jobs.** Approximately 540,000 are allocated to unskilled members of poor and ultra-poor households and the remaining to skilled supervisory workers.

- **Almost 60 percent of these jobs are estimated to be filled by women.** The jobs created include 317,007 (55.5 percent) unskilled female positions. Monthly wages received by both women and men are identical, at Rand500 for most workers and of Rand1,000 for those with some level of skill. There are also 16,386 skilled EPWP jobs that are filled by women (2.9 percent of total direct job creation).
- **In addition to the direct EPWP job creation, approximately 200,000 jobs are created indirectly elsewhere in the economy.** The injection of roughly R9.2 billion results in extra demand generated throughout the economy from two sources: (a) new demand for intermediate inputs used by the EPWP sector in order to hire, train and deliver the new ECD and HCBC services; and (b) new demand for consumption goods that is generated when the newly hired skilled and unskilled EPWP workers, as well as workers from other sectors, spend the income received.
- **Combining direct and indirect jobs, a total of 772,000 new work opportunities are created.** Put differently, for every three job opportunities EPWP creates, another job becomes necessary, and is therefore created, elsewhere in the economy.
- **In 2000 prices, the R9.2 billion corresponds to 3.5 percent of government expenditures or 1.1 percent of GDP.** The annual cost of this policy covers all labour payments and all other costs associated with service delivery and human capital development, such as food, other agricultural inputs for meal preparation, supervisory costs, as well as training and certification expenses.
- **The total impact on GDP growth is in the order of 1.8 percent or R15 billion.** For 2000, growth rate increases from 4.2 to 6 percent from an implied multiplier of 1.6 ($15B \div 9.2B$).
- **New direct and indirect taxes are generated equal to about R3 billion,** which will reduce the overall cost of the intervention by one-third, assuming there will not be any unanticipated leakages.
- **The resultant growth is pro-poor.** The overall *incremental* change in income is 9.2 percent for ultra-poor households, 5.6 percent for poor households and 1.3 for non-poor households. These overall changes are instructive, but do not shed light on those households from whose ranks participants of the scaled-up social sector EPWP come from. We discuss this issue below.
- **All EPWP participating ultra-poor households cross the ultra-poor poverty line datum** and depth of poverty is reduced by 60–80 percent. **Among them, poor households previously located above or around the ultra-poverty line are lifted above the poverty line datum.** Our results indicate the need for careful consideration of possible targeting. It may be the case that job rationing may be required, in favour of selected ultra poor households.
- **Overall, social sector job creation is more labour intensive than the infrastructure sectors of EPWP.** Budgetary allocations in the social sector result in higher levels of job creation and larger depth of poverty reduction.

FISCAL SPACE

Financing for the above proposed EPWP social sector expansion of R9.2 billion (R13.3 billion in 2007 prices) can take place through one or a combination of three venues: expansionary fiscal stance, raising tax rates, and increase in tax revenues due to the resultant economic growth^{xiv}.

- **Deficit Financing**

The government budget surplus of R26.6 billion in 2007/08 fiscal year could fully finance the proposed expansion. South Africa has been running for several years primary surpluses. Future EPWP financing would not be a heavy burden to expected budget deficit: it may increase budget deficit/GDP ratio from -1.6 to -2.2 percent in 2009/10 fiscal year. Positive multiplier effects of the program would increase tax revenue, and thus reduce the ratio to -2.0 percent. Given the fiscal discipline in the past, structural deficit financing for EPWP would not exert a heavy fiscal burden in the near future.

- **Tax Financing**

Financing solely through tax revenue would be achieved by increasing the tax revenue to GDP from 27.8 to 28.4 percent. One percentage increase of value-added tax rate (from 14 to 15 percent and on non basic consumption goods and services) would raise the revenue by R12 billion. Reinstating corporate income tax rate to 29 percent from 28 percent would collect another R5.7 billion. These two adjustments alone may be enough to finance expansion of EPWP social sector.

- **Growth Dividend**

Economic growth translates into higher tax revenue: estimated 3.7 percent growth in real GDP during 2008 fiscal year alone could bring additional R20 billion. In addition it must also be kept in mind that the projected Keynesian multiplier effects of this specific intervention program could finance up to one third of the proposed government spending on this initiative

BEYOND THE MULTIPLIER ANALYSIS

We must emphasize that this exercise serves as a hypothetical policy experiment and its aim is to identify *orders of magnitude* of economy-wide impacts should scaling-up be implemented. Many of the specific assumptions can be easily changed to reflect different initial conditions, as well as diverse objectives set by beneficiary communities, policy makers and other stakeholders at the national, provincial and municipal levels.

Going beyond the multiplier analysis, a variety of implications (which clearly cannot be 'measured' due to the experimental nature of this study) for all participants, and especially for women, must be mentioned:

Service delivery. Children of all households across the country will be able to enrol in early childhood development programmes that should lead to better nutrition, health, education and overall well-being, especially those in vulnerable households. About twenty percent of (the most vulnerable) households with people living with HIV/AIDS will be receiving home-based care, counselling and better nutrition. Such extended services will reduce demands placed on women's time for unpaid care work.

Accreditation. The range of possible work opportunities we have proposed entail on-the-job training, including attending seminars and workshops that lead to formal accreditation. Increased levels of human capital and certification of skills will potentially lead to better job prospects in formal markets, including the government sector at the provincial or municipal level. Both ECD and HCBC are female intensive sectors, increasing the likelihood of translating EPWP training in these sectors to formal employment opportunities for women.

Participants will experience increasingly a renewed sense of dignity, fulfilment and self-worth. Our hypothetical policy scenario limits our capacity to directly conduct such an impact assessment study emanating from the proposed intervention. Nonetheless, existing literature on this subject, as well as visits to various EPWP sites and other public works project evaluations confirm this is indeed the case. Even the most critical research has shown an increase in self-esteem and fulfilment stemming from being able to work, save, afford better clothing, participate in community events and help family members financially.

Generating self-employment. Potential savings and other asset accumulation, together with government interventions that nurture community-based development, can lead to the springing-up of new small businesses. Newly earned income spent locally on purchases from local shops and neighbours is extremely important in this context. As households move out of poverty, the government is expected to generate savings due to reduced budgetary pressures for poverty alleviation. An excellent use of such savings would be to support interventions that contribute to community based development and community revitalization.

Before we conclude, it is also worth considering the strong linkages between EPWP and the Millennium Development Goals (MDGs). Many costing studies have been conducted with the objective of determining the total resource requirement of achieving the MDGs. For the most part, discussion on the feasibility of the MDGs has focused on the lack of financial resources and on ways of bridging the funding gap. Yet, policy selection is equally important in this context. **Domestic labour resource mobilisation** through a public works strategy ought to be given due consideration. There are multiple channels through which employment can speed up the achievement of MDG targets and this issue has received some attention recently.^{xv} A good place to start would be to include a public employment, and a labour-intensive mandate for all MDG related projects (for physical and social infrastructural asset creation). Although not a panacea, a well-designed public employment guarantee strategy can go a long way toward the achievement of MDGs. The table below lists benefits that gender-informed EPWP projects deliver:

Expanded Public Works Programme and the Millennium Development Goals

MDGs	Public employment projects can deliver:
MDG 1: Eradicate Extreme Hunger and Poverty	<ul style="list-style-type: none"> ▪ Wage income benefit to EPWP workers (beneficiaries) ▪ Project design in development of community gardens and common lands and other community based agricultural production
MDG 2: Universal Primary Education	<ul style="list-style-type: none"> ▪ Reduction in need for unpaid work will result in higher enrolment of girls ▪ Training work/education options for adults ▪ Beneficiaries can be also engaged in school construction/maintenance
MDG 3: Promote Gender Equality and Empower Women	<ul style="list-style-type: none"> ▪ Women beneficiaries participate in the design of EGS projects ▪ Benefit of wage income combined with gender targeting design ▪ Training/accreditation courses draw women into the labour force ▪ Reduction of unpaid work via better service delivery and infrastructure ▪ Water and crèche provisioning for beneficiaries and by beneficiaries ▪ Early childhood development (ECD) workers & centres for ages 0-4 ▪ Home based care workers alleviate unpaid care burdens
MDG 4: Reduce Child Mortality	<ul style="list-style-type: none"> ▪ Wage income benefit for extension workers and community workers in early childhood development ▪ Early childhood development (ECD) centres for ages 0-4 beneficiaries receive training in extension health services and receive certification to operate centres ▪ Infrastructure for clean water, latrines and crèche is developed
MDG 5: Improve Maternal Health	<ul style="list-style-type: none"> ▪ Wage income benefit for maternal health care education programme extension workers ▪ Education/training certification programmes ▪ Beneficiaries can be engaged in auxiliary community care activities
MDG 6: Combat HIV/AIDS, Malaria & Other Diseases	<ul style="list-style-type: none"> ▪ Home based and community based care worker development in education/training programmes ▪ Beneficiaries are engaged in providing auxiliary community care services
MDG 7: Ensure Environmental Sustainability	<ul style="list-style-type: none"> ▪ Engage beneficiaries in environmental remediation, reforestation, development of ponds, traditional irrigation systems, water projects and ecological latrines
MDG 8: Develop a Global Partnership for Development	<ul style="list-style-type: none"> ▪ Youth targeting design elements ▪ Learning from the international experiences of job creation programmes by engaging with women's groups, experts in the area and global networks

CONCLUDING REMARKS

This policy brief joins the efforts of others that consider public job creation to be part of the policy mix in addressing unemployment and poverty. One of the concerns in implementing such initiatives is that scarce resources may be wasted in meaningless types of projects. We have proposed job creation that addresses such concerns. In evaluating the desirability, feasibility and sustainability of such a policy, the multidimensional benefits that can accrue must be kept in mind. Drawing in marginalized segments of the population via the types of job creation proposed in this analysis has the strong potential to contribute to many policy objectives, including reversing outward migration, revitalization of marginalized communities, increasing human capital, turning around crime trends and promoting social inclusion. Above all, by reducing unpaid care burdens off the shoulders of poor women, the specific jobs we have proposed contribute towards the goal of gender equality.

ⁱ This policy brief is based on a 2007 research project of the Levy Economics Institute titled the “Impact of Public Employment Guarantee Strategies on Gender Equality and Pro-poor Development: The Case of South Africa.” The study received generous support from UNDP/BDP, Gender Team. Many thanks are due to Dr. Irwin Friedman, Research Director of Health Systems Trust for his extraordinary support in sharing data and to Jean Mzisa of EPWP for her time and generosity during my visit to South Africa. The full report and technical papers of this project are available upon request from the author.

ⁱⁱ Examples include India, Argentina, Korea, Morocco and Australia, among others. See Antonopoulos, R. 2007. “The Right to a Job, the Right Type of Projects.” Working Paper 516. Annandale-on-Hudson, NY: The Levy Economics Institute of Bard College.

ⁱⁱⁱ Statistics South Africa. 2007. *Labour Force Survey*. March. Pretoria: Statistics South Africa.

^{iv} There is no official poverty line in South Africa, although the Treasury is in the process of finalizing documentation that will establish such a threshold. Some researchers adopt R5,057 per annum according to which the headcount ratio (defined as the proportion of the population living below the poverty line) for South Africa is 49.8 percent. The 20th percentile cut-off of adult equivalent income (R2,717 per annum) is sometimes used as the “ultra-poverty line.” About 28.2 percent of the South African population lives below this poverty line. For this study we have adopted comparable measures using 2000 prices and poverty levels.

^v Sadan, M. 2006. “Gendered Analysis of the Working for Water Program.” Occasional Paper. Pretoria: Southern African Regional Poverty Network.

^{vi} See Altman, M. 2007. *Employment Scenarios to 2024*. Pretoria: Human Science Research Council (HSRC) August 30 and Pollin, R., G. Epstein, J. Heintz, and L. Ndikumana. 2006. “An Employment-Targeted Economic Program for South Africa.” International Poverty Center, UNDP Country Study No. 1, June.

^{vii} Antonopoulos, R. 2007. *ibid*

^{viii} Drèze J. and A. Sen. 1989. *Hunger and Public Action*. Oxford: Oxford University Press.; Minsky, H. 1986. *Stabilizing an Unstable Economy*. New Haven: Yale University Press.; Papadimitriou, D.B. 1998. “(Full) Employment Policy: Theory and Practice.” Working Paper 258. Annandale-on-Hudson, N.Y.: The Levy Economics Institute of Bard College.; Wray R. 2007. “The Employer of Last Resort Programme: Could It Work for Developing Countries?” ILO, Employment Analysis and Research Unit, Economic and Labour Market Analysis Department, *Economic and Labour Market Papers*, #5. Geneva: International Labour Organization.; Mitchell, W. 2001. “Fiscal Policy and the Job Guarantee.” Working Paper No. 01/09. Newcastle, Australia: Center for Full Employment and Equity.

^{ix} National Rural Employment Guarantee Act (NREGA), 2005; Registered No. DL-(N)O4/000/72 003–5. New Delhi.

^x The goal of skill creation and accreditation (*learnerships*) must be contextualized against the racist practice of apartheid that enforced a deliberately inferior system of education and deskilling on Africans. For example, the Bantu Building Workers Act, Act No. 27 of 1951 made it a criminal offence for a black African person to perform any skilled work in urban areas except in segregated sections designated for black residence and the Bantu Education Act of 1953 established a Black Education Department in the Department of Native Affairs that compiled a curriculum suited to the “nature and requirements of the black people.” The author of the legislation, Dr. Hendrik Verwoerd (then Minister of Native Affairs, later Prime Minister), stated explicitly that its aim was to prevent Africans from receiving an education that would lead them to aspire to positions they wouldn’t be allowed to hold in society.

^{xi} The South African Reserve Bank. 2006. “Expanded Public Works Program 4th Quarter Report 2004/05, Annexures A–E and Quarterly Bulletin.” No. 242, December. Pretoria: The South African Reserve Bank.

^{xii} Other types of interventions have been modeled and are available upon request from the author.

^{xiii} A learnership combines work-based experience with structured learning and results in a qualification that is registered within the National Qualifications Framework (NQF) by the South African Qualification Authority (SAQA). A learner who completes a learnership will have a qualification that signals occupational competence and is recognised throughout the country.

^{xiv} This idea is first addressed in Pollins, Robert, Gerald Epstein, James Heintz, and Léonce Ndulkumana. 2006. “An Employment-Targeted Economic Program for South Africa” A project of the Poverty Group of the Bureau of Development Policy, New York and the International Poverty Center in Brazil, United Nations Development Programme. We are deeply indebted to their original idea on financing of expanded public works programme in South Africa. All figures are updated to terms in 2007 and 2008 fiscal years

^{xv} Islam, R. (ed). 2006. *Fighting Poverty-The Development Employment Link*. Boulder-London: Lynce Riener Publishers; and numerous publications of the UNDP International Poverty Centre in Brasilia, available at <http://www.undp-povertycentre.org/>.