



# **Macro-micro Impacts of scaling up Employment Guarantee Policies: the case of EPWP**

A gender disaggregated SAM application

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# Why an EGS,ELR,EPWP?

- The *Right to Work*, dignity, “social inclusion”
- Jobless growth, structural, seasonal, cyclical
- Economic Growth: but is it pro-poor growth?
- Direct and indirect job creation
- Labour based, labour intensive asset creation to expand public, “commons” and private assets as well as enhance access to basic services



# Background on the Study

- **Research project** on micro-macro impact of scaling up public job creation (UNDP supported)
- **Two teams of researchers** involved, one on South Africa study and one on India
- **This presentation:** Kijong Kim (Levy Institute), EPWP, Irwin Friedman (Health Trust Fund) and PROVIDE team (Dept. of Agriculture)
- **Type of Intervention** : scaling up Early Childhood Development and Home/Community Based Care
- **The right to work , the right types of projects?**  
unpaid work and gender issues



# Women and Employment Guarantee Programs

**Observation:** High participation rates across countries

**Issue#1:** Supply of labor issues (unpaid work)

**Issue#2:** types of projects women want -  
Participation in design of projects  
(unpaid work, cooperatives, skill enhancement)

**Issue#3:** evaluation criteria (reduction unpaid work)

# Policy Simulations

- **All Existing Types of Projects** have the potential to reduce unpaid work and facilitate creation and access to basic services
  - EPWP Working for Water; environment sector (*Tsitsikamma 2004/05*)
  - EPWP Social Sector** (*Health Trust Fund*)
  - EPWP Infrastructure; Access roads and Water Reticulation (*SCIP Engineering Group*)
- **Options for Job allocation scheme**
  - Jefes variation by population weights (part time year around)
  - NREGA scheme (100 days)
  - Poverty weights-normalized by population
  - Unemployment weights normalized by poverty incidence
- **Target population**
  - Poor and ultra poor households comprising (50% of the unemployed); “unskilled” wages according to programme stipulations and skilled according to SAM

# Impact of EPWP Injection

## **ex-ante evaluation of policy scenarios**

- Direct and indirect job creation (skill level/gender/sector)
- Direct and indirect income received by type of hh
- Depth of poverty reduction
- GDP growth? Pro-poor growth? Sectoral growth?
- Fiscal space expansion?
- *Impact of new assets and service delivery for participants and community???* BIA?
- *No dynamic affects!!! No inflation!!!  
fixed coefficient model!!!*

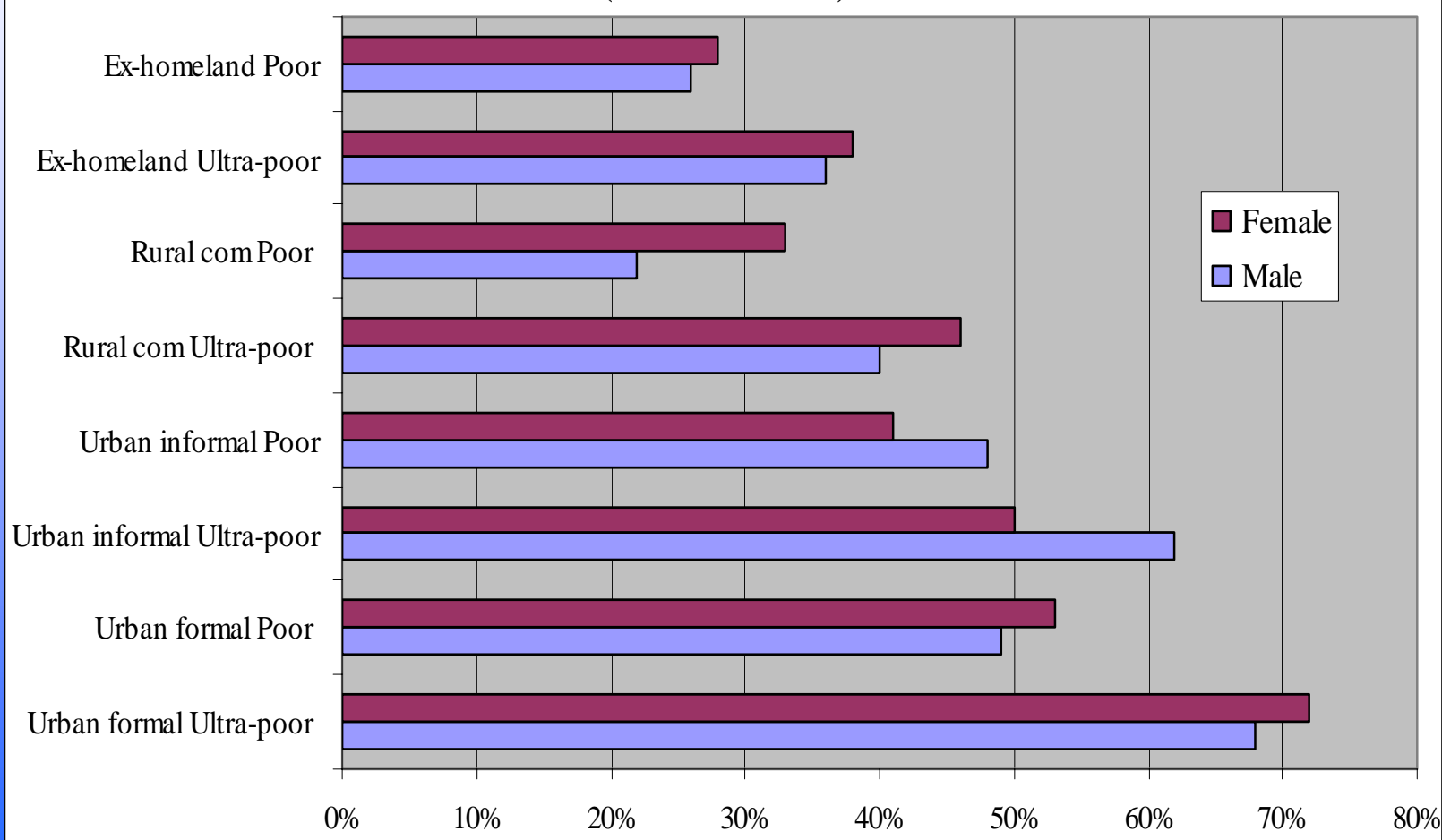
# The SAM for South Africa

- Based on PROVIDE, Dept. of Agriculture
- Factors disaggregated by skill and gender
  - 1 FGOS
  - 2 FMaleUS
  - 3 FMaleSk
  - 4 FFemUS
  - 5 FFemSk
- 26 sectors
  - A 27 1 Cagric
  - C 28 2 Cmining
  - T 29 3 Cfood
  - I 30 4 Ctext
  - V 31 5 Cpaper
  - I 32 6 Cpetro
  - T 33 7 Cnonmet
  - I 34 8 Cmetals
  - E 35 9 Cmachin
  - S 36 10 Ccomeq
  - 37 11 Ctrnseq
  - 38 12 Comanuf
  - 39 13 Celec
  - 40 14 Cwater
  - 41 15 Cbuild
  - 42 16 Cconstr
  - 43 17 Ctradacc
  - 44 18 Ctrnscom
  - 45 19 Cfinsev
  - 46 20 Cbusserv
  - 47 21 Ceduc
  - 48 22 Cogovserv
  - 49 23 Chealth
  - 50 24 Csocial
  - 51 25 Coserv
  - 52 26 Cdomserv
- 20 types of hhs
  - 1 HUF\_Af1\_3
  - 2 HUF\_Af4
  - 3 HUF\_Af5
  - 4 HUF\_Co1\_3
  - 5 HUF\_Co4
  - 6 HUF\_Co5
  - 7 HUF\_Wh
  - 8 HUI\_Af1\_3
  - 9 HUI\_Af4
  - 10 HUI\_Af5
  - 11 HRF\_Af1\_3
  - 12 HRF\_Af4
  - 13 HRF\_Af5
  - 14 HRF\_Co1\_3
  - 15 HRF\_Co4
  - 16 HRF\_Co5
  - 17 HRF\_Wh
  - 18 HRI\_Af1\_3
  - 19 HRI\_Af4
  - 20 HRI\_Af5
- 7 exogenous sectors
  - E 53 1 SALTAX
  - X 54 2 INDTAX
  - O 55 3 DIRTAX
  - G 56 4 GOVT
  - 57 5 KAP
  - 58 6 DSTOC
  - 59 7 ROW

# Types of Households

1 HUF_Af1_3	Urban Formal African Non-Poor
2 HUF_Af4	Urban Formal African Poor
3 HUF_Af5	Urban Formal African Ultra Poor
4 HUF_Co1_3	Urban Formal Colored Non-Poor
5 HUF_Co4	Urban Formal Colored Poor
6 HUF_Co5	Urban Formal Colored Ultra Poor
7 HUF_Wh	Urban Formal White Non-Poor
8 HUI_Af1_3	Urban Informal African Non-Poor
9 HUI_Af4	Urban Informal African Poor
10 HUI_Af5	Urban Informal African Ultra Poor
11 HRF_Af1_3	Rural Commercial African Non-Poor
12 HRF_Af4	Rural Commercial African Poor
13 HRF_Af5	Rural Commercial African Ultra Poor
14 HRF_Co1_3	Rural Commercial Colored Non-Poor
15 HRF_Co4	Rural Commercial Colored Poor
16 HRF_Co5	Rural Commercial Colored Ultra Poor
17 HRF_Wh	Rural Commercial White Non-Poor
18 HRI_Af1_3	Ex-homeland African Non-Poor
19 HRI_Af4	Ex-homeland African Poor
20 HRI_Af5	Ex-homeland African Ultra Poor

## Unemployment Rate - African, poor/ultra-poor (strict definition)





# EPWP: Infrastructure, Water Reticulation

- A sample of EPWP infrastructure projects needed.
- *Data sources*
  - (a) cash flow information of Makhwilema Construction Company on a water reticulation contract-Tweenfontein B.
  - (b) a tender submitted for a bulk water master plan for Jackaroo Ringfeed by SCIP Engineering Group.



# EPWP:Infrastructure

<b>Name of Contractor:</b>	Makhwilema Construction cc					
<b>Project Name</b>	Water Reticulation - Tweefontein B					
<b>Contract Value:</b>	754,908.00		<b>Start Date</b>		<b>Completin Date</b>	
	754,908.00		2007/03/09		2007/06/15	
<b>Financial Institution:</b>			<b>Contact Person</b>		<b>Contact Number</b>	
ABSA			Andries Pretorius		(013) 656-5401	
<b>Period No</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>Total</b>
	25-Mar-07	25-Apr-07	25-May-07	25-Jun-07	25-Jul-07	Total
Progress payment %age		13.42%	33.54%	40.25%	12.79%	100.00%
Period ending date						
<b>Receipts</b>						
Own Capital/opening balance	0.00	0.00	0.00	0.00	0.00	0.00
Progress payment	0.00	101,308.65	253,196.14	303,850.47	96,552.73	754,908.00
Other income	0.00	0.00	0.00	0.00	0.00	0.00
Income from previous period	0.00	(160,885.00)	(168,236.35)	(50,700.20)	172,490.27	
<b>Total Receipts (A)</b>	0.00	(59,576.35)	84,959.80	253,150.27	269,043.00	<b>754,908.00</b>
<b>Expenses</b>						0.00
Site establishment	12,000.00	0.00	0.00	0.00	0.00	12,000.00
Equipment Hire / Purchase and tools	36,500.00	0.00	0.00	0.00	0.00	36,500.00
Maintenance of equip& running	725.00	0.00	0.00	0.00	0.00	725.00
Rent	900.00	900.00	900.00	900.00	900.00	4,500.00
Insurances	5,500.00	0.00	0.00	0.00	0.00	5,500.00
Wages	18,000.00	18,000.00	35,000.00	20,000.00	15,000.00	106,000.00
CLO	1,600.00	1,600.00	1,600.00	1,600.00	0.00	6,400.00
WCA	7,500.00	0.00	0.00	0.00	0.00	7,500.00
Salaries	13,000.00	13,000.00	13,000.00	13,000.00	13,000.00	65,000.00
Materials	55,000.00	65,000.00	75,000.00	35,000.00	0.00	230,000.00
Fuel	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	10,000.00
Accounting Fees	1,500.00	1,500.00	1,500.00	1,500.00	0.00	6,000.00
Toilet	2,160.00	2,160.00	2,160.00	2,160.00	0.00	8,640.00
Phone	1,000.00	1,000.00	1,000.00	1,000.00	0.00	4,000.00
Computer running costs	400.00	400.00	400.00	400.00	400.00	2,000.00
Stationery	350.00	350.00	350.00	350.00	0.00	1,400.00
Bank charges	750.00	750.00	750.00	750.00	750.00	3,750.00
Interest Repayment	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	10,000.00
<b>Total Expenses (B)</b>	160,885.00	108,660.00	135,660.00	80,660.00	34,050.00	<b>519,915.00</b>
Closing Balance (A-B) (Loan Required)	(160,885.00)	(168,236.35)	(50,700.20)	172,490.27	234,993.00	
Profit / Loss						

# EPWP: Social Sector

- Social Sector consists of ECD/Education and HCBC/Health
- High female intensity (60 and 69% respectively)  
→ addresses female unemployment in the short run and builds skills in the long-term
- *Data source:* Friedman, Irwin, Bhengu, L., Mothibe, N., Reynolds, N., and Mafuleka, A., (2007) *Scaling up the EPWP*, Health Systems Trust, November, Volume 1-4. Study commissioned by Development Bank of South Africa and EPWP.

# EPWP: Social Sector

## Matching Gender Decomposition

Matching into SAM activities		Unskilled		Skilled	
Titles	Matching activity	Male	Female	Male	Female
School nutrition workers	Domestic services	0.17	0.83	0.22	0.78
Sports coaching facilitators	Education	0.51	0.49	0.39	0.61
School caretakers	Building	0.96	0.04	0.90	0.10
Adult education workers	Education	0.51	0.49	0.39	0.61
Special school teaching aide	Education				
School clerical workers	Government services	0.77	0.23	0.61	0.39
Peer educators	Education				
Social security workers	Social care	0.52	0.48	0.20	0.80
Food security workers	Government services				
VCT counselors	Health care	0.26	0.74	0.34	0.66
Community health facilitators	Health care				
Community health workers	Health care				
Community caregivers	Health care				
TB & DOTS supporters	Health care				
Treatment supporters	Health care				
Malaria workers	Health care				

# EPWP: Social Sector

<b>DESIGNATION &amp; MANDATES</b>	
Title	<b>Adult Education Workers</b>
Department responsible	Education
Support Departments	
<b>ROLES AND RESPONSIBILITIES</b>	
Scope of practice	Assist with the development of literacy and numeracy of people who have not completed primary education with the emphasis an approach that is relevant for adult learners
Target group	Adults who have not completed their primary school education.
Target group:EPWP worker ratio	20
Monthly stipend	500
Special responsibilities	Encouraging empowerment as well & literacy
<b>EDUCATION &amp; TRAINING</b>	
Recruitment	Chosen by School Governing Boards from among people living in the area served by school
Educational entrance requirements	at least a Grade 12 or NQF level 4 qualification.
Entrance level of training (NQF)	NQF level 5
Target qualification	Certificate or diploma at NQF level 5
Exit opportunities and career pathways	Adult education, teaching, occupational training
<b>SUPERVISION, MENTORING &amp; MONITORING</b>	
Supervisory community structure	School Governing Board
Direct supervisor title	Adult Educator Mentor
Function of supervisor	Provide training and supervision. Ensure the quality of the programme
EPWP worker: Supervisor ratio	20
Remuneration of supervisor	R 2,500
Minimum educational level of supervisor NQF	NQF Level 5 - certificate



# Simulation Results

- Direct job creation
- Indirect job creation
- GDP, pro-poor growth, tax-base expansion
- Poverty reduction

<b>EPWP Intervention - Direct job creation</b>					
(# of annual jobs - 240 working days)					
Types of	Male	Male	Female	Female	Total
Intervention (9.29 bn)	Unskilled	Skilled	Unskilled	Skilled	Jobs
Social sector	228,184	9,928	317,007	16,386	571,505
Double 60 40	407,948	15,235	611,922	25,143	1,060,248
Working for Water	87,353	113,428	344,864	80,026	625,670
Water reticulation	127,374	36,488	3,036	2,294	169,192
McCord L	373,218	13,824	0	0	387,043
McCord M	70,291	26,832	0	0	97,124
Social sector	39.9%	1.7%	55.5%	2.9%	100.0%
Double 60 40	38.5%	1.4%	57.7%	2.4%	100.0%
Working for Water	14.0%	18.1%	55.1%	12.8%	100.0%
Water reticulation	75.3%	21.6%	1.8%	1.4%	100.0%
McCord L	96.4%	3.6%	0.0%	0.0%	100.0%
McCord M	72.4%	27.6%	0.0%	0.0%	100.0%

<b>EPWP Intervention - Indirect job creation</b>					
(# of annual jobs - 240 working days)					
Types of	Male	Male	Female	Female	Total
Intervention (9.29 bn)	Unskilled	Skilled	Unskilled	Skilled	Jobs
(daily wage)	83	317	47	195	
Social sector	69,875	33,455	66,053	23,511	192,893
Double 60 40	65,449	35,032	61,948	28,098	190,526
Working for Water	61,197	33,631	61,292	25,211	181,331
Water reticulation	47,933	26,037	46,264	17,835	138,069
McCord L	55,578	27,189	50,148	18,257	151,172
McCord M	51,919	25,394	45,557	16,749	139,618
Social sector	36.2%	17.3%	34.2%	12.2%	100.0%
Double 60 40	34.4%	18.4%	32.5%	14.7%	100.0%
Working for Water	33.7%	18.5%	33.8%	13.9%	100.0%
Water reticulation	34.7%	18.9%	33.5%	12.9%	100.0%
McCord L	36.8%	18.0%	33.2%	12.1%	100.0%
McCord M	37.2%	18.2%	32.6%	12.0%	100.0%

## GDP, Tax, and Income change by household type

Types of Intervention (9.29 bn)	GDP	TAX	POOR	ULTRA POOR	NON POOR
Social sector	1.8%	1.5%	5.6%	9.2%	1.3%
Double 60 40	2.1%	1.5%	9.3%	16.2%	1.3%
Working for Water	2.1%	1.6%	5.5%	9.0%	1.7%
Water reticulation	1.7%	1.3%	2.8%	4.3%	1.3%
McCord L	1.7%	1.5%	4.4%	7.2%	1.3%
McCord M	1.4%	1.5%	2.0%	2.8%	1.2%

# Poverty impact

EPWP social sector intervention	Population weights	Household participation rate	Household Income (Rand)			Adult equiv. Poverty line	Depth of Poverty			No of HHs
			Before	After	Change		Before	After	% Reduction	
Urban Formal African Poor	16.1%	14%	15033	21753	45%	15,513	(480)	6240	1399%	87965
Urban Formal African Ultra Poor	7.7%	14%	7818	14538	86%	18,770	(10952)	(4232)	61%	41962
Urban Formal Colored Poor	2.6%	14%	16029	22749	42%	16,458	(429)	6291	1567%	14057
Urban Formal Colored Ultra Poor	1.0%	14%	7417	14137	91%	16,277	(8861)	(2141)	76%	5514
Urban Informal African Poor	7.8%	14%	11336	18056	59%	12,196	(860)	5860	781%	42615
Urban Informal African Ultra Poor	4.1%	14%	6134	12854	110%	14,630	(8496)	(1776)	79%	22210
Rural Commercial African Poor	7.7%	14%	12750	19470	53%	13,801	(1051)	5669	639%	42094
Rural Commercial African Ultra Poor	7.2%	14%	7801	14521	86%	18,595	(10794)	(4074)	62%	39014
Rural Commercial Colored Poor	1.1%	14%	13420	20140	50%	13,622	(203)	6517	3313%	5748
Rural Commercial Colored Ultra Poor	0.2%	14%	7733	14453	87%	15,833	(8100)	(1380)	83%	1213
Ex-homeland African Poor	21.2%	14%	12746	19466	53%	14,079	(1333)	5387	504%	115463
Ex-homeland African Ultra Poor	23.4%	14%	7021	13741	96%	17,375	(10354)	(3634)	65%	127621

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	Poverty- Population weights	Household Participation rate	Household income (Rand)			Adult equiv. Poverty line	Depth of Poverty			Reduction %	No of HHs	Average HH income change
			Before	After	Change		Before	After				
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Ex-homeland African Poor	5.6%	19%	12746	14080	10%	14,079	(1333)	1	100%	155011	2%	
Ex-homeland African Ultra Poor	48.3%	29%	7021	13741	96%	17,375	(10354)	(3634)	65%	263525	19%	



# Costs and Benefits

- Social inclusion
- Income-Poverty reduction? This depends on the length and duration of jobs, wages and targeting method
- Asset poverty reduction!!!
- Service delivery!!!
- Gender equality in unpaid (and paid ?) work
- Pro-poor development?
- Monetary cost: 1% of GDP ....?3% of GDP?
- Opportunity cost of not mobilizing domestic resources?

Thank you!