Unlocking **Employment Opportunities by Restoring Natural** Infrastructure: Key Lessons in Rural **Development** for Developing Countries

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Nelson Mandela







CONTRIBUTING TO A NATION AT WORK

Green Jobs

 The ILO defines that a job is green when "they help to reduce negative environmental impact ultimately leading to environmentally, economically and socially sustainable enterprises and economies. More precisely green jobs are decent jobs that: reduce consumption of energy and raw materials; limit greenhouse gas emissions; minimize waste and pollution; protect and restore ecosystems".

Background

• WHAT IS NATURAL INFRASTRUCTURE?

- Biodiversity/Natural Diversity
- Ecosystem structure and functioning

• IMPACTS OF LAND MANAGEMENT PRACTICES ON THE QUALITY AND QUANTITY OF SELECTED ECOSYSTEM SERVICES.

- Invasive alien plants
 - Impacts on stream flow
 - Impacts on fire regimes
 - Grazing potential
- Land degradation other than invasive alien plants
 - Bush encroachment and its impacts on grazing
 - Unsustainable grazing and fire regimes
 - Erosion
 - Sediments
 - Flood flows
 - Dry season flows
 - The carbon balance.

THE WORKING FOR PROGRAMMES AND SOME OF ITS ACHIEVEMENTS

• Working for Water

- Working for Forests
- Value Added Industries
 - Working for Energy (Biomass to Energy)
 - Eco-Furniture Factories
- Working for Land
- Working for Fire
- Working for Wetlands

CURRENT EMPLOYMENT IMPLICATIONS OF THE WORKING FOR PROGRAMMES

High Level Indicators	Outputs	Total Investment to Date (\$ millions)	2012/13 Budgets (\$ millions)
Wow Hectares Treated	2 310 294	\$864	\$160
WfL Hectares Restored/Treated	5 883		
Wow (incl. WfL) Person Years of Work	152 026		
WoF Burnt Hectares	2 453 223	\$90.18	\$51
Number of Fire	5 474		
WoF Person Years of Work	13 049		
Total		\$954	\$211

FUTURE EMPLOYMENT IMPLICATIONS OF THE WORKING FOR PROGRAMMES

	Number of Full Time Jobs	Income to people	Total budget requirement
Estimated size of Market 2025	#	\$'mil	\$'mill
Working for Water	111 632	1 050	3 001
Value added industries:	38 480	456	1 839
WfWater (Electricity) Working for Land	63 749	659	1 884
Working for Wetland restoration	6 945	78	223
Working for Wetland prevention	2 976	25	49
Working on Fire	7 042	57	162
Total	230 824	2 326	7 159

FUTURE EMPLOYMENT IMPLICATIONS OF THE WORKING FOR PROGRAMMES

	Number of Full Time Jobs	Income to people	Total budget requirement
Estimated size of Market 2017	#	\$'mil	\$'mill
Working for Water	42 979	237.91	679.74
Value added industries: WfWater (Electricity)	14 293	91.55	296.23
Working for Land	23 941	133.80	382.28
Working for Wetland restoration	4 936	32.33	92.37
Working for Wetland prevention	2115	10.23	20.46
Working on Fire	7 042	33.16	94.73
Total	95 305	538.97	565.82

THE POTENTIAL FOR BIOMASS TO ENERGY

- Working for Water
- Working for Land (Bush Encroachment)
- Employment potential of a biomass to energy programme
- The potential challenges of a biomass to energy programme

ESCOM CSIR study indicating that 165 million tons of biomass.

POTENTIAL OF SOUTH-SOUTH AND TRIANGULAR COOPERATION (SSTC) AND THE DEVELOPMENT OF A NATURAL RESOURCE MANAGEMENT SUB SECTOR

- The potential for implementing South-South and Triangular Cooperation.
- The Decent Work Agenda is advanced through SSTC with the engagement of governments, social partners, UN agencies and non-state actors.
- Mainstream forms of renewable energy (or clean energy) include: (1) wind power; (2) hydropower; (3) solar energy; (4) biomass; (5) bio fuel; and (6) geothermal energy.

South-South Activities

- 2005 South-South Ministerial exchange and study tour between the Expanded Public Works Programme (EPWP) and India's Mahatma Gandhi National Rural Employment Scheme (MGNREGA)
- 2007 South Africa hosted the 12th Regional Seminar for Labour-Based Practitioners on "Prioritising Employment Creation in government Policies and Investments in Infrastructure Programmes".
- 2010-Present South Africa's EPWP and Community Work Programme (CWP) have been key partners in the development of a South-South Learning Package on "Innovations in Public Employment Programmes" offered annually by the ILO.
- 2011 ILO assisted by Trade & Industry Policy Strategies (TIPS) facilitated a course for the CWP to exchange international experiences between India, Brazil and RSA.
- 2012 India Brazil & South Africa (IBSA) Conference in New Delhi, SA focused on "Innovations in Public Employment Programmes and Sustainable Inclusive Growth"

Potential for collaboration between countries involved in South-South initiatives.

- Linkages with neighbouring countries Lesotho, Swaziland, Mozambique, Zimbabwe, Botswana and Namibia with regards to the management of watersheds.
- Working on Fire and its Tanzanian fire wise teams but voluntary.
- Limpopo Transfrontier project.

Questions & Challenges

- Especially developing countries need to unlock more resources than what the tax payers can afford. How can developing countries engage with the market to unlock the full employment potential of the natural resource management sector?
- What are the optimum institutional models for maximizing the number of jobs created through employment programmes? In South Africa small community contractors are being used as a vehicle to create many of the jobs, while others are done through government and private sector commercial implementing agents. Does the not-for profit sector has a role to play and are the more efficient than either of the other two options?
- Possible need for an event focusing on the impacts, benefits and challenges of employment in the environment?