

**AGRICULTURAL SUPPORT
SYSTEMS:
Empowerment of Black Farmers in
the South African
Potato industry**

Nonie Moliehi Mokose
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Presentation Outline

1. Study background
2. Defining empowerment
3. Operationalising
 - SA context
 - International context
4. Research study & findings
5. Nexus relationship to land reform
6. Lessons learnt



BACKGROUND Empowerment through FSP (Farmer Support Programmes)

- FSP is a dimension contributing to farmer empowerment
- Has been applied (DBSA) and continues to be applied by government to support farmer development (DAFF)



Farmer Support FSP's context to empowerment study

- **DBSA FSP:** developmental approach targeting small scale farmers
- Objective to spread effects of agriculture projects to farmers
- Providing complementary coordinated and timely services
- Potential to increase utilisation efficiency of resources and productivity
- Farmer settlement strategy 1987 to 1993

Singini & van Rooyen, 1995.

FSP's (cont.)

- **DAFF and Provincial Departments of Agriculture FSP's** (Mr. Msomi)
- **E.g. W. Cape FSP**
 - Broad developmental agenda
 - Design & implementation of SHF support
 - Enhance land reform programmes: facilitation of capacity & skills development and resources to achieve equitable and diverse sector
 - Impact measurement, partnership leverage
 - Extension support, address food security

Problem statement

- Potato industry undergoing transformational challenges evidenced by low numbers of black potato farmers visible in industry and known to commodity organisation PSA
- PSA serves interests of only its members reflecting few black farmers
- Little empirical evidence testing the state of empowerment in SA potato industry
- Seed potato industry supplies growing volumes of seed potatoes to black farmers
(Wesgrow, 2016)

Empowerment

- In order to assess empowerment status need to have clear definition
- Described as a latent, complex and multi-dimensional phenomenon occurring over many aspects of people's lives (Ibrahim and Alkire, 2007; Mahmut *et al.*, 2012).
- Is centred on transformation of power relations
- Is difficult to observe and measure (*What gets measured gets done*)
- Characterised by definitional disparities

Definitions

- Multiple and context-specific definitions (Ibrahim and Alkire, 2007) including:
- An emancipatory process where the disempowered and disadvantaged are enabled and empowered to exercise their rights and agency in decision-making to gain access to resources and capabilities, therefore enabling them to actively participate in decisions to positively enhance their livelihoods Lutrell *et al.*, 2009

Definitions (cont.)

- Empowerment is the expansion of assets and capabilities of individuals to participate in, negotiate with, influence, control and hold accountable institutions that affect their lives

Narayan, 2002

- In an agricultural context Alkire *et al.*, (2013) describe empowerment as *one's ability to make decisions on matters related to agriculture as well as on one's access to the material & social resources needed to carry out those decisions*

Operationalising empowerment: SA context

- Operationalised through the application of the AgriBEE sector codes, whose key objective is to ensure increased access and equitable participation in all levels of the agriculture value chain
 - Focus of codes primarily targets agribusinesses, commodity organisations, employees, entrepreneurs
 - 2008: 7 pillars and 2017: 5 pillars
 - Farmer-centric empowerment not clearly defined

SA: Operationalising (cont.)

Period	Transformation Guideline
1998	No specific transformation allocation
2001	Minimum of 10 % statutory levy
2005	Approximately 20 % statutory levy
2009	Minimum of 20 % statutory levy
2015	Minimum of 20 % statutory levy across 7 pillars
2017	Minimum of 20 % statutory levy across 5 pillars

SA: Operationalising (cont.)

2008 Transformation Pillars (7)	2017 Transformation Pillars (5)
Ownership and land ownership	Ownership
Management control	Management control
Employment equity	
Skills development	Skills development
Preferential procurement	Enterprise development
Enterprise development	
Socio-economic development	Socio-economic development

Transformation Guidelines NAMC

Element	Percentage
Enterprise and Supplier Development	60 %
Skills Development	20 %
Management Control Ownership Socio-Economic Development	20 %

Limitations

- Potatoes commodity organisation services needs of its members, thus excluding non-members (PSA, 2015)
- Contrary to spirit of AgriBEE sector codes, MAP Act of 1996, SA constitution, Ntsebesa *et al.*, 2009 . Excludes majority of black potato farmers
- Data are aggregated
- Measurement variables not specific and telling on individual farmers and their empowerment

Operationalising empowerment: global context

- Transformation through empowering individuals from lower position to higher one resulting in significant changes to lives and livelihoods targeting 3 aspects
 - **Means** (enabling factors including rights, resources, capabilities, opportunities)
 - **Processes** (decision-making actions including internal empowerment capabilities)
 - **Ends** (greater control of livelihood assets)

Bartlett, 2004

Operationalising (cont.)

- Longwe, 1991 (degrees of empowerment)
- Sen, 1999 (interplay between agency and capability: existence of choice, use of choice, achievement of choice)
- Narayan, 2002 (opportunity structure / institutional climate, agency/ assets and capabilities leading to development outcomes)
- Gaventa, 2003 (power cube levels, spaces and forms of power)
- Alsop and Heinsohn, 2005 (agency, opportunity structure, empowerment outcomes)
- OPHI, USAID, IFPRI, 2012 WEAI addressing 5DE (Women's Empowerment in Agriculture addressing five domains of empowerment)

WEAI and 5DE methodology

- The study applied the Women's Empowerment in Agriculture (WEAI) focusing on five domains of empowerment (5DE production, resources, income, leadership, time)
- Advantages over BEE methodology focused on single domain
 - Agriculture-specific tool, measurable, tracks progress over time, assesses empowerment state and prevailing barriers, enables targeted interventions and policies, disaggregates data (region, demographics, scale, etc.)
- A survey-based instrument which can be adapted and contextualised
- Enables targeted and needs-based farmer support to facilitate empowerment in agriculture

Methods and procedures

- Cross-sectional and mixed methods research designs including qualitative and quantitative approaches conducted across 5 provinces Mpumalanga, KwaZulu Natal, Eastern Cape, Free State, Limpopo
- Areas defined as agriculturally significant StatsSA (2017) and key to addressing poverty alleviation through agricultural production DAFF(2016)
- Addressing research objectives
- Non-random sampling covering 132 respondents who planted disease-free certified seed potatoes over past 2 seasons individual households, co-operatives drawn from various data bases
- Varied locations within PSA defined production regions geographic and epidemiologically diverse areas, multiple and heterogeneous locations

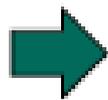
Methods (cont.)

- Semi-structured questionnaire interrogating socio-economic, demographic, farming systems, and empowerment domain indicators
- Data cleaned, captured, coded, exported to Excel and STATA 14 for analysis
- Descriptive analysis, inferential analysis applied

Summary of Methodology



Development of semi-structured questionnaire based on WEAI tool (Table 1)



Peer review, pre-testing and adaptation



Study Area:
Mpumalanga, KwaZulu Natal,
Eastern Cape, Free State
and Limpopo provinces



Data collection:
Purposively selected 132
respondents



Data analysis:
Excel and
STATA

In addressing the single domain limitation of BEE, the WEAI presents advantages including the following:

- Specifically addresses empowerment in agriculture
- Measurable and can be tracked over time (*what gets measured gets done*)
- Can assess the state of empowerment and reveal barriers to empowerment
- Has the ability to identify and target policy, strategies and programme focus areas
- Presents a disaggregation of data (demographics, spatial, infrastructure, etc.) enhancing data analysis.

Limitations

- Limited sample used (132)
- Time and resources
- Limited testing of full extent of WEAI methodology and its analysis

Methods: WEAI and 5DE

Domain	Indicator
Production	<ul style="list-style-type: none">• Input in productive decisions (autonomy in production)• Potato yield per ha• Land tenure institution
Resources	<ul style="list-style-type: none">• Tractor access or ownership (asset)• Information through extension• Frequency of extension access per season
Income	<ul style="list-style-type: none">• Attained income from agricultural production during previous season• Control over income use
Leadership	<ul style="list-style-type: none">• Leadership effectiveness• Capacity to influence change
Time use	Indicator not explored as study focus not of a gender-specific nature

Results Summary and Findings

Domain	Selected Indicators	Responses	MP	KZN	EC	FS	LP	Total
Production	Who makes decisions on input use?	Government or other Institution	0%	0%	0%	0%	32%	7%
		Outside household female	14%	13%	20%	0%	4%	12%
		Outside household male	39%	20%	31%	27%	7%	25%
		Household jointly	46%	67%	49%	73%	57%	56%
	Potato Yield per Hectare	0-4t/ha	32%	30%	31%	0%	21%	26%
		4-10t/ha	57%	50%	46%	0%	21%	48%
		10-20t/ha	11%	17%	17%	27%	25%	20%
		Over 20t/ha	0%	3%	6%	73%	32%	5%
		Not certain	17%	18%	10%	29%	0%	18%
	Land tenure	Private land-title deeds	2%	0%	0%	3%	0%	4%
Tribal land –PTO		71%	68%	80%	68%	82%	64%	
Private land lease		10%	14%	10%	0%	18%	14%	
Resources	Tractor Ownership	No	100%	83%	91%	45%	11%	70%
	Information Through Extension	Yes	0%	17%	9%	55%	89%	30%
		No	54%	50%	71%	18%	21%	48%
	Extension Frequency	Yes	46%	50%	29%	82%	79%	52%
Never		54%	50%	71%	18%	21%	48%	
Once a season		18%	33%	14%	9%	33%	23%	
Twice a season		29%	3%	12%	73%	46%	27%	
More than 2 times a season	0%	7%	3%	0%	0%	20%		

Results Summary and Findings

Domain	Selected Indicators	Responses	MP	KZN	EC	FS	LP	Total
Income	Income	<R42000	69%	87%	38%	9%	50%	56%
		R42000-R100000	17%	3%	18%	36%	7%	14%
		R100001-R150000	10%	7%	21%	27%	4%	12%
		R150001-R200000	3%	0%	0%	0%	0%	1%
		Over R200000	0%	3%	24%	27%	39%	17%
	Who makes decisions on revenue use?	Family outside household	0%	0%	0%	0%	11%	2%
		Outside household female	14%	7%	26%	0%	0%	9%
Outside household male		39%	10%	20%	18%	11%	20%	
Within the household		46%	83%	54%	82%	79%	69%	
Leadership	Leadership effectiveness	Not effective Fairly	46%	13%	54%	54%	9%	32%
		Effective	18%	10%	9%	9%	9%	4%
		Very effective	36%	77%	37%	37%	82%	64%
		Yes but with great difficulty	0%	10%	6%	18%	0%	5%
	Capacity to influence change	Yes but with great difficulty	0%	30%	0%	9%	29%	14%
	Capacity to	Yes fairly easily	0%	23%	3%	45%	50%	20%
	Yes very easily	100%	37%	91%	27%	21%	61%	

Nexus relationship to land reform

- Conceptual model linking land tenure with agricultural sustainability and productivity
- Reference: Roth and Haase (1998)

Lessons learnt

- Important to quantitatively measure empowerment
- Evaluate applying agriculture-specific tool
- Disaggregate data reflecting farmer heterogeneity as per DAFF; Pienaar (2013) typology
- Capture domain specific impact of interventions
- Track and evaluate domain-specific progress over time

Challenges, solutions and lessons

- Survey too long (respondent fatigue)
- Apply shorter adapted version of WEAI
(5DE: 10 indicators to 5DE 6 indicators)
- Cognitive challenges with autonomy module in particular
- Apply cognitive testing of challenging modules to enhance responses and data quality: adapt and contextualise

Lessons (cont.)

- Engage in further quantitative research in empowerment in agriculture
- Enhance validation of farmer empowerment by commodities adding to current industry empowerment measures currently applied
- Add questions on StatsSA household surveys and census' related to farmer empowerment

Lessons (cont.)

- Farmers were found to be **heterogeneous**
- Are **diverse**
- Farming systems are **dynamic** and constantly evolving
- Farming systems are **complex**
- Services need to consider these factors

Certified Potato Seed





Baba Khanyile

Maswaimane

Select challenges experienced



Marketing

Production



Challenges



Figure 1: Conceptual Model Linking Tenure Security with Agricultural Sustainability and Productivity

