

# THE MANDELA INITIATIVE

*Dialogue and action to overcome poverty and inequality*

A summary of research undertaken for the Mandela Initiative, May 2017  
Supported by the Department of Science and Technology and National Research Foundation

## Job creation in citrus

*Amelia Genis, independent researcher who contributed to the study  
“Job creation in agriculture, forestry and fisheries”, led by Ben Cousins,  
DST-NRF Research Chair in Poverty; Land and Agrarian Studies,  
University of the Western Cape*

### 1. What is the project about and why is it important?

Rural employment is a key policy issue in South Africa, and the National Development Plan (NDP) of 2012 suggests that one million jobs can be created in agricultural production, processing and related activities. A matrix depicting “agricultural growth and employment potential” in chapter 6 of the NDP shows that citrus, nuts, subtropical and deciduous fruit and vegetables demonstrate potential for both high growth and labour intensity. The plan suggests that more jobs can be created by increased investment in water and irrigation infrastructure, linking small scale farmers with markets, creating tenure security for farmers in communal areas, innovative financing and joint ventures. The citrus sub-sector is believed to be one of the biggest employers in agriculture as well as one of the sub-sectors with the biggest potential for job creation due to the dynamic nature of its expansion. For the past decade the citrus sub-sector has also managed to increase export volumes from 72 000 boxes in 2007 to 118 000 boxes in 2015. Different authors put the number of people employed in the sub-sector at between 85 200 and 125 000 workers.

### 2. What are the main research findings to date?

- Citrus farms operate on a large scale and focus on citrus for export.
- Big divide between permanent and seasonal workers in terms of status, job security, training and remuneration, with permanent workers enjoying more job security and training opportunities than seasonal workers, earning more and receiving other benefits as well.
- Skills profiles of workers changed during past 10 years towards a larger proportion of workers in managerial and supervisory positions, and more technically skilled workers.



# THE MANDELA INITIATIVE

*Dialogue and action to overcome poverty and inequality*

A summary of research undertaken for the Mandela Initiative, May 2017  
Supported by the Department of Science and Technology and National Research Foundation

- This is because farms are larger and require more intensive management, while quality standards required by buyers of citrus fruit are becoming higher all the time.
- Remuneration for senior positions are on par with other industries, while permanent workers at lower levels receive more than minimum wage according to the level of the post.
- Seasonal workers (fruit pickers and packers) are paid the hourly minimum wage, but opportunities exist to earn more for piece work.
- Recruitment of seasonal workers is no longer informal and arbitrary; temporary employment services, generally known as “labour services”/“labour contractors”/“labour managers”, are common.
- Farm workers are not well organised, with only three Limpopo farmers recording unions on some farms. Unions exert pressure for higher wages, but do not have impact on wage levels. All farms have workers’ committees, farm committees and/or employment equity (EE) committees that meet regularly and keep minutes of meetings. Only one farmer in Limpopo reported a strike during the past five years.
- Farmers consider the productivity of labour to be key to profitability, and would be willing to pay higher wages if these could be linked to higher levels of productivity.
- Other key factors affecting employment are the profitability of the business, labour legislation, the level of the minimum wage and the Extension of Security of Tenure Act.
- Wages have risen annually since the introduction of a minimum wage for agriculture in 2003. In 2013, when the minimum wage was increased by 50%, some farmers reduced working hours from 9 hours to 8 hours per day.
- On-farm accommodation is supplied for permanent workers at a nominal rent.
- Mechanisation is expensive and machines need to be maintained, while labour is still relatively cheap, and human workers are more flexible than machines.
- Farmers would mechanise to a greater extent if a higher national minimum wage ‘forced’ them to. Cut-off point between human workers and machines depends on the exchange rate.
- Farmers seem to have mechanised and re-organised everything they can in relation to production, e.g. pest, weed and disease control, irrigation, and organisation of fruit pickers. Even though farm operations are not mechanised and automated to their full



# THE MANDELA INITIATIVE

*Dialogue and action to overcome poverty and inequality*

A summary of research undertaken for the Mandela Initiative, May 2017  
Supported by the Department of Science and Technology and National Research Foundation

capacity, farmers are aware of the promise and cost of every machine able to undertake key tasks.

- Pruning of trees cannot be mechanised without compromising productivity of citrus trees, and teams of workers prune in winter and summer to improve the distribution of light amongst trees.
- Farmers employ many different methods to ensure that citrus trees are yielding more, e.g. monitoring productivity, effective soil preparation and planting productive rootstocks.
- All these efforts appear to have improved the efficiency of production and increased the productivity of labour, as indicated by the measure: 'hectares per worker'.
- Farmers are optimistic about the future of the citrus sub-sector and its ability to create more jobs. But this requires the development of export markets, and changing policies and legislation that cause uncertainty, and hamper employment creation and competitiveness.
- Farmers are concerned that government officials are not negotiating for new markets as effectively as possible.

### 3. What is the significance of these findings?

- Expansion of citrus production is key to creating more jobs, but there are real constraints, e.g capital, water, regulation and markets.
- Increased citrus production can generate jobs upstream and downstream of farms.
- Farmers are actively trying to employ fewer workers, expressed in hectares per worker.



# THE MANDELA INITIATIVE

*Dialogue and action to overcome poverty and inequality*

A summary of research undertaken for the Mandela Initiative, May 2017  
Supported by the Department of Science and Technology and National Research Foundation

Table 1: Opportunities for job creation on farms and rest of chain: scenarios and numbers

Place	Additional land (ha)	PERMANENT JOBS			TEMPORARY JOBS		LINKAGES			
		CGA @2016	Limpopo (4 ha=1 job) 0.25 worker/ha	Accumulator: 6 ha=1 job, 0.17 worker/ha	CGA business as usual (0.772 picker/ha)	Bins in row#: Less 40% pickers (0.46 picker/ha)	Packers per hectare			All linkages (BFAP)
							CGA business as usual	Mechanise packhouse		
							Optic sizer	Auto packer		
Labour multiplier		0.363	0.25	0.17	0.772	0.4632	0.651	0.52	0.11	0.66
2026 CGA projection	27318	9916.4	6829.5	4644.1	21089.5	12653.7	17784.02	14227.2	2964.00	18029.88
Gillimburg citrus	357	129.6	89.3	60.7	275.6	165.4	232.41	185.93	38.73	235.62
Injaka Waterval	1000	363.0	250.0	170.0	772.0	463.2	651.00	520.80	108.50	660.00
Lets.vall	500	181.5	125.0	85.0	386.0	231.6	325.50	260.40	54.25	330.00
Moletele	300	108.9	75.0	51.0	231.6	139.0	195.30	156.24	32.55	198.00
Badplaas	2000	726.0	500.0	340.0	1544.0	926.4	1302.00	1041.60	217.00	1320.00
Sundays Riv. Vall.	675	245.0	168.8	114.8	521.1	312.7	439.43	351.54	73.24	445.50
Alice-Kat	800	290.4	200.0	136.0	617.6	370.6	520.80	416.64	86.80	528.00
<b>TOTAL</b>	<b>32 950</b>	<b>11 961</b>	<b>8 238</b>	<b>5 602</b>	<b>25 437</b>	<b>15 262</b>	<b>21 450</b>	<b>17160.4</b>	<b>3575.08</b>	<b>21747.00</b>

#### 4. What are the wider policy implications of these findings?

- More citrus jobs are possible, but not to the extent of "1 ha: 1 job" as proposed by the NDP and the CGA, and could be constrained by access to water, finance and markets and the ability to include new black entrants in an equitable and sustainable manner.
- Development of markets is important, requiring strengthened capacity of government departments to negotiate reduction or removal of technical trade barriers, and conclude beneficial trade agreements with receiving countries.

# THE MANDELA INITIATIVE

*Dialogue and action to overcome poverty and inequality*

A summary of research undertaken for the Mandela Initiative, May 2017  
Supported by the Department of Science and Technology and National Research Foundation

- More research is needed into joint ventures to develop more plausible models that address equity and sustainability adequately, transfer knowledge to new farmers, and strengthen their capacity to become independent farmers.
- Smaller-scale citrus enterprises exist alongside the very large enterprises. The former could be an appropriate model for new farmers, and needs investigation.
- Government should launch a co-ordinated study into the potential and feasibility of citrus processing, other than juice production (e.g. citrus oil and pectin, waste products as fodder for livestock).
- In many cases citrus production is expanded by replacing relatively labour-intensive sub-sectors such as wine grapes and potatoes, and this may lead to a zero-sum situation.
- Efforts to create more jobs by expanding export citrus production are capital, water and time- intensive, compared to, say, vegetables, extensive or intensive livestock production. This means that choices must be made where funds are limited.

*For more on the Mandela Initiative research projects, see:*

[www.mandelainitiative.org.za/research/research-areas-themes.html](http://www.mandelainitiative.org.za/research/research-areas-themes.html)

