

# LEARNING FROM CRISIS

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A series of modular learnings from the 2017-2018  
Cape Town water crisis

☺☺☺ THE RESILIENCE SHIFT

THE CAPE TOWN  
DROUGHT RESPONSE  
LEARNING INITIATIVE

module

# 13

## Agriculture and agribusiness

Agriculture and related sectors were heavily impacted, with a R5bn production loss, 30,000 jobs lost, and longer-term damage to vineyards and orchards. Better integration between urban and agriculture is called for.

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Text component of module 13, accompanying the film [www.vimeo.com/cinesouth/ctdri-trs-lfc-module-13](http://www.vimeo.com/cinesouth/ctdri-trs-lfc-module-13)

Duration: 22:31

## Agriculture and agribusiness

The agriculture and agriprocessing sectors in the Western Cape were hard hit by the drought and the water crisis, from the 2014/15 production year onwards, culminating in releases to agriculture from national dams being curtailed altogether in early 2018. The loss of agricultural output in the 2017/18 production year is estimated at R5bn. Vineyards and orchards also suffer longer-term damage, with detrimental impacts on yields in subsequent years, if irrigation is insufficient during one season. Furthermore, the Day Zero messaging had a damaging effect on overseas markets, creating uncertainty as to whether Western Cape producers would be able to deliver on their commitments. Around 30,000 jobs were lost in the agricultural sector due to the drought. The agriprocessing sector tends to be water intensive and was also severely impacted, with production lines or production hours cut in many instances. What was happening on the farms was often lost in the urban debate during the crisis. The question after the crisis is how these two sectors can be better integrated, with dialogue and cooperation on common interests.



The farmers sacrificed first

*Carl Opperman*

The sluice gates of the dams were closed and no more water was released for the farmers

*André Roux*

The farmers' livelihood was jeopardised with their Day Zero

*Carl Opperman*

## EXECUTIVE SUMMARY

- The agriculture and agribusiness sectors in the Western Cape were hard hit by the drought and the water crisis
- Agriculture saw the crisis building up from the production year 2014/15 to early 2018 when it hit rock bottom
- Low rainfall resulted in both low dam levels on farms and reduced allocation from dams managed by the national Department of Water and Sanitation
- Early in 2018 agriculture reached its Day Zero: no more water was released to it from dams managed by national department
- The loss in the 2017/18 production year in the Western Cape agricultural sector due to the drought is estimated at around R5bn
- In addition, there is also longer-term damage to orchards and vineyards: poor irrigation in one season affects fruit trees and reduces yields also in subsequent years; in some instances where insufficient water was available for the whole farm parts of orchards and vineyards were not irrigated at all and left to die; this resulted in much higher annual replacement rates than the normal 5%; farmer's investment was damaged, and cashflow in subsequent years affected
- Around 30,000 agricultural jobs were lost, mainly seasonal workers who rely on this income during a part of the year for survival throughout the year
- Furthermore, the Day Zero messaging had a negative effect on agricultural export markets, with doubts arising with overseas buyers whether suppliers will be able to meet commitments; when shelf space is lost with a retailer it is very difficult to get it back; this contributes to long-term impact from the drought
- The agriprocessing industry tends to be very water intensive, and found it difficult to reduce water use; it was heavily impacted by the drought, with production hours and production lines cut in many instances
- During the crisis, with the focus in the city on the urban situation, the conversation around what was happening on the farms was lost to some extent; even worse, there was a degree of polarisation between urban and agricultural needs
- The question after the crisis is how to start integrating the agricultural and urban use of water, how to get a dialogue going between the two sectors, and how to foster cooperation on their common interests

**Interviewees in order of appearance:**

**Carl Opperman**

CEO: Agri Wes Cape

**André Roux**

Director: Sustainable Resource Management, Western Cape government

**Dr Kevin Winter**

Senior lecturer: Environmental and Geographical Science, University of Cape Town

**Helen Davies**

Chief Director: Green Economy, Western Cape Government

**Andrew Boraine**

CEO: Western Cape Economic Development Partnership

Full interviews on [Cape Town Drought Response Learning Initiative](#) website

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Opinions expressed by interviewees are personal viewpoints  
and do not necessarily reflect those of their organisations

**STRUCTURE**

00:00:05

Hooks:

- The farmers sacrificed first (CO)
- The sluice gates of the dams were closed and no more water was released for the farmers (AR)
- The farmers' livelihood was jeopardised with their Day Zero (CO)

00:00:50

**INTRODUCTION: CITY AND AGRICULTURE**

- Conversation around what was happening on the farms during the drought period was lost in the urban debate
- Separation and polarisation between urban and agricultural needs (KW)

00:02:09

**IMPACT ON AGRICULTURE**

- Crisis built up over a number of production years, getting to rock bottom by 2018
- Low rainfall resulted in both low dam levels on farms and reduction in allocation from dams managed by national Department of Water and Sanitation
- Early in 2018 agriculture reached its Day Zero: no more water released to it from dams managed by national department
- Loss in 2017/18 production year in Western Cape agricultural sector due to drought estimated at around R5bn
- Longer-term damage as well: fruit trees are affected in subsequent years by poor irrigation in one season; in some instances where insufficient water was available for whole farm parts of orchards and vineyards were not irrigated at all and left to die; higher replacement rate, with detrimental impact on return on investment and cashflow
- 30,000 jobs were lost, mainly seasonal workers
- Day Zero messaging also had detrimental impact on export market
- Agriprocessing sector also very hard hit (CO, AR, HD)

00:16:32

**PROPOSALS FOR DIFFERENT APPROACH TO URBAN / AGRICULTURE RELATIONSHIP AFTER THE CRISIS**

- Question after the crisis: how do we start to integrate agricultural and urban use of water? How do we get a dialogue going between the sectors, and foster cooperation between the two on their common interests? (KW, AB)

00:19:17

**CLOSE: SUFFERING AND HARDSHIP ON FARMS DURING DROUGHT – BECAUSE WE HAVEN'T LEARNT TO MANAGE OUR RESOURCES**

- Tremendous suffering and hardship on farms should serve as a warning to us to learn to manage our resources (CO)

## INDEX

- 00:00:50 “So one of the areas I think that caused a conflict, at least in conversation, is our separation during the water crisis right now, is the separation in our discourse between urban requirements for the city of Cape Town and the requirements for the agricultural sector. And it almost felt like a lot of these conversations were polarised, that the allocation for the city was completely independent from what was happening just outside of the city, of farmers who were struggling in the drought to try to continue to keep their farms productive, to keep farm workers on their farms and to try and be responsible at the same time for the amount of water that they were using. And it’s a tough task, and I think the conversation around what farmers were doing, what they experienced, was lost in the whole urban debate, and we were highly focused obviously as a city on our urban, and neglected to some extent to hear the stories and how in fact there could have been a much stronger, improved relationship between the city of Cape Town and the agricultural sector.”
- 00:02:09 Agriculture saw the crisis building up every production year from 2014/15 through to 2017/18, with lower rainfall each year negatively affecting dam levels both on farms and those managed nationally, getting to rock bottom by 2018. “The crisis that I saw was happening was that we’ve realised it in the province, we’ve realised it in disaster management, cabinet level we’ve realised it, department of Water Affairs did not realise it. Locally: yes; nationally: no.”
- Water Act sets out priority ranking for water use: first human beings and animals, then environment and agriculture. During drought periods, not only do the dams on farms dry up, but at the same time the allocation to agriculture from dams managed by the national Department of Water and Sanitation is reduced. This was the situation that agriculture had to manage.
- Post-harvest irrigation required for horticulture and vineyards, with fertilisers and nourishment; then in springtime pre-harvest watering needed. In past three hydrological years, tremendous heat, with higher need for water. With empty farm dams, farmers were reliant on allocation from nationally managed dams. “Knowing that we’re getting this big cut [in allocation] that’s coming in November 2017, there was a request for to borrow on that, just to take this crop through. And if you go and look at those graphs you will see that the drawdown was quite heavy on the basis of what the normal planning allocation was. That’s when we knew that we’re going to hit, on that system, we’re going to hit Day Zero end of January, first week of February [2018]. Then the water was cut.”
- 00:06:40 58 million cubic metres allocated to agriculture, and when it was used, agriculture reached its Day Zero. Severe consequences for agriculture. Impact of the drought on agriculture in Western Cape amounted to a R4.9 billion loss. Average production down by about 20%. One of the most serious impacts was that about

30,000 people, mostly seasonal workers, lost their jobs. Devastating impact for the affected people.

- 00:08:19 Effect of the drought is only going to run out in the next three to four years, so the impact of around R5bn can escalate, depending on what happens in subsequent years. Also fiscal implications, due to loss of tax income, as well as loss of revenue from water not sold.
- 00:09:55 There is a saying that a fruit tree does not forget when it is treated badly; insufficient irrigation does longer-term damage to a tree's yields: quality, quantity and size of fruit. If export size requirements not met, then sold locally or to canning, with much lower revenue. Very challenging situation for farmers. Normal replacement programme for vineyards around 5% per annum; drought has resulted in a higher rate, closer to 10% or 15% that had to be replanted. In some cases, faced with a situation of insufficient water for the whole farm, farmers had to take decision to leave parts of farm without water, leaving those fruit trees or vineyards to die. Serious impact on following year's harvest and cashflow.
- 00:12:42 Farmers reporting drop in yields of between 5% and 15% in wine grapes, attributed directly to lack of post-harvest irrigation in previous season.
- 00:13:05 "We started making plans for how we're going to manage this. But unfortunately the way that Day Zero was used must also be very carefully handled in the future." While farmers were making innovative plans to still deliver despite the drought, the implicit message of Day Zero to export market was that producers did not have enough water to deliver promised output. This unintended consequence had a damaging impact on the overseas market: "They get the message: it's dry, production is not getting the water, and with that situation that's coming through, they say: are you still going to source us? Must we look for sourcing somewhere else? So the message that you send out you've got to manage."
- 00:14:23 Not only drop in volume of sales that is detrimental, also loss of shelf space with retailers in overseas markets; very difficult to get back once lost.
- 00:14:43 Agriprocessing sector very water intensive, and one of the hardest hit during the drought. Water used either in the product itself or in the making of the product – as a result found it fairly hard to reduce water use substantially. Includes bread manufacturers, fruit and vegetable processing, dairy and meat industries, beverage industries. Many ended up having to cut production hours or production lines. Also impact on agriprocessing from reduced quantity and quality of agricultural output.
- 00:16:09 Exporters of canned fruit to China and Japan were unable to meet contractual obligations.

00:16:32 “During the crisis the conversation about urban water was often independent of the agricultural sector just outside of the city. And so I think the thought here is, how do we start to integrate agricultural use of water and the urban water, given that we’re in the same region. How do we become more able to relate to the lives of people who are working in the agricultural sector, involved in production, and also share the same resources as the city. I think that conversation was missing.”

00:17:13 “Getting a bit of a dialogue going between agricultural sector and the urban sector, because they may have competing interests, and they often have different interests, you know, agriculture uses water intensively in the summer months, and less so, depending on the commodity that we’re talking about, in the winter months. Whereas it’s more even across the spectrum for the urban sector water users. So they are different interests at different times of the year, which make it difficult, but to start talking about where are their common interests, is there a common agenda between agriculture as a 30 percent user of the system and the urban sector is the 70 percent user of the system. Do they have a common approach to engaging with national government? Who in national government can we talk to? If the department doesn’t want to talk, or is incapable of talking, who else in national government can we talk to, you know, is it Treasury? There are ways to start the conversation.”

00:18:20 “So how do we think differently now around how we share water from the same dams with farmers? Wouldn’t it make more sense if we started to become increasingly independent and / or at least use less water from those storage dams so that we could literally give back to the farmers, and to see agricultural production as a very important part of the symbiotic relationship, this important interrelationship that we have with the agricultural sector and the city. And that discussion I think was lost in a lot of the crisis management, let’s look for new sources of water, let’s try and use our allocation obviously wisely, but we lost the actual pain that many of these agricultural industries and agri-industries were suffering.”

00:19:17 “The farmers sacrificed first. Then we started seeing sacrificing on the consumers’ side, in the cities, but not to the extent that their livelihoods was jeopardised. The farmers’ livelihood was jeopardised with their Day Zero.”

Tremendous hardship and suffering on farms during the drought, and extensive support was required.

“I know of farms where they’ve said to me when we go there they can’t offer you tea, because they haven’t got it. That is because we haven’t learnt to manage our resources, and we better get around it asap, or we all are going to sit in that situation.”

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