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**Multi-stakeholder Dialogue on
Climate Disaster Solutions
Summary Report**

Summary Report on the Multi-stakeholder Dialogue on Climate Disaster Solutions

Moving from relief to resilience and risk reduction

Date: 24-25 April 2023

Venue: Die Keldery Conference Centre, Vredendal

Objectives

1. Learning from lessons of the past (post-2016)
2. Revisit existing relief tools and resources
3. Forward planning for greater resilience

Background

The Dialogue was a follow-up to the Drought Dialogue for the Agricultural sector held in June 2016, which concluded with 32 jointly identified challenges, prioritised to 5 actionable points that were subsequently implemented. The April 2023 Dialogue went beyond drought to cover all climate-related extremes and disasters across the Western Cape Province, aiming to "Move from relief to resilience and risk reduction".

Since 2016, climate-related disasters have persisted and appeared to be occurring with increasing frequency, intensity and impact on agriculture. The reliance on disaster relief is not sustainable in the longer term. A new emphasis on disaster risk reduction and the building of climate resilience is necessary, with stronger collaborations and partnerships and more efficient use of resources.

The SmartAgri plan (Climate Change Response Framework and Implementation Plan for the Agricultural Sector of the Western Cape, 2016) is based on four Strategic Focus Areas, the second of which aims to "Strengthen effective climate disaster risk reduction and management". The SmartAgri external evaluation of 2020 concluded that only patchy progress had been made thus far in implementing the objectives under this Focus Area. Therefore, we must identify and implement adaptation actions that proactively respond to inevitable future extreme circumstances such as heat waves, wind and storms, hail, floods, droughts, fires, increased pressure of pests and predators, and devastating diseases/epidemics to reduce impacts through greater preparedness and resilience.

The Multi-stakeholder Dialogue on Climate Disaster Solutions for the Western Cape brought together 81 government decision-makers at District and Provincial levels, with critical National level officials, smallholder and commercial farmers and representatives of organised agriculture and industry commodity organisations, conservation bodies, representatives of the banking sector, related agri-businesses, and selected subject experts (see Appendix for list of participants).

Outputs of Day 1: 24th April

On 24th April, 11 working groups discussed the risks, impacts and vulnerabilities of climate disasters in the Western Cape Province, as well as the negative lessons (challenges, barriers) learned since 2016 that must be turned into positive actions, and the positive lessons (successes) that should be further developed and scaled up. The following tables provide a summary of the results of the group discussions.

Identify the climate disaster risks since 2016

Sub-optimal rainfall patterns – timing of rainfall
Drought, dams not filling, groundwater levels decreasing
Water quality decreasing
Floods
High temperatures / heatwaves
Extreme cold temperatures
Wind + high temperatures: extremes of evapotranspiration
Strong winds
Increase in disease/pest pressure and severity (human, animal & crop)
Hail / severe thunderstorms
Frost
Fires
Locusts
Predators
Electricity crisis

Identify the impacts of these risks

Decreased production, crop/animal losses, fluctuations in production
Loss of quality of fodder, veld and product
Financial losses, income variability, increased input costs, increased insurance costs, altered credit ratings
Loss of investor confidence, reduced value of land
Loss of market share and markets
Soil erosion and degradation, loss of nutrients
Loss of biodiversity and ecological infrastructure
Production on increasing or decreasing land area - negatives
Increased pressure on veld (stocking rates)
Increasing pressure from pests, predators, diseases
Damage to infrastructure, additional infrastructure costs
Energy crisis: cost of supply and energy alternatives
Job losses, increased youth unemployment
Human health risks, mental health, violence, substance abuse
Increased food prices, increased food insecurity
Pressure on resources and service delivery, informal settlements
Increased social unrest
Severe economic consequences, no growth, reduction in GDP

Identify the crops, livestock, people and regions that were most vulnerable

Crops	<ul style="list-style-type: none"> • Wheat, canola, barley, lupins, medics, oats, coriander (north-west) • Maize/wheat under pivot irrigation • Potatoes (Sandveld) • Rooibos tea • Vegetables (Garden Route) • Lucerne, onion seed production (Klein Karoo) • Deciduous fruit, table grapes, wine grapes, citrus, berries
Livestock	<ul style="list-style-type: none"> • Dairy (Garden Route) • Small stock, large stock, ostriches (drought: Central Karoo, Klein Karoo, Matzikama) • Small stock, large stock, ostriches (pests & diseases: everywhere) • Small stock (predation: Central Karoo, Klein Karoo, Matzikama) • All livestock (floods: Overberg, Cape Winelands, Central Karoo, Garden Route) • All livestock (wildfires: Overberg, Cape Winelands, Garden Route, West Coast)
People	<ul style="list-style-type: none"> • Farmers (subsistence to commercial) • Agri-workers (permanent and seasonal) and all other labour • Communities, especially vulnerable and marginalized groups e.g. agri-workers, women, children and people in informal settlements • Urban dwellers have more access to resources and quicker reaction times even if marginally • Whole agri value chain: Agri-processors, storage facilities, transport industry • Rural agri-businesses/economies (towns depending on agriculture as main business) • Related businesses in rural towns e.g. tourism
Regions (depends on risk)	<ul style="list-style-type: none"> • More arid areas: drought and predation • North-west (Matzikama), then southwards to Sandveld and Swartland • Marginal areas in the west • Rural economies relying heavily on rain fed crops and not having other options: northwest, Rooi Karoo, northern parts of the Swartland (>80% reliant on dryland agriculture) • Warm Bokkeveld and Tankwa • Berg River and south-west (Cape Winelands, CT Metro) • Central Karoo • Klein Karoo and Langkloof • Kannaland: arid, little resilience, and political instability • Overberg, Ruensveld, South Cape, to Mossel Bay (especially floods) • Coastal mountains and plains: wildfires

What were the negative lessons (challenges, barriers) learned since 2016?

These were grouped into seven themes.

Theme	Description
Lack of financial support	Financial losses led to producers taking more financial risks in the years after droughts. Farmers are not sharing losses to relevant entities. Challenge to obtain external investment and no sustainable financial bridging models.
Lack of information and data	Lack of information, e.g. support available to farmers and agri-workers. Climate data/monitoring. Access to climate services and info for planning. Measurement/ monitoring systems need to improve.
Lack of management of water and irrigation systems	Illegal dams. Water use authorisations, verification and validation. Illegal abstraction (from rivers and boreholes). Ineffective irrigation systems. Insufficient legal storage capacity. Some areas had dams but no water and others water and no dams – infrastructure. Over-allocation of resources. Infrastructure not maintained. Lack of strategic Provincial water planning.
Problematic laws and regulations	Disaster Management Act not making provision for perennial crops during drought.
Lack of coordination and government support	Government red tape to access support services. Multi-stakeholder approach – not all spheres of government and stakeholders are engaging at the right levels. Integrated IGR Planning and Coordination.
Lack of proper communication	Method and lag in communication. More frequent “check ins”. Non-inclusion of communities. Community unrest.
Lack of access to new technology – not affordable	Diminished ability to transform to CA practices because of financial position. Lack of funding, e.g. introduction of new technology. Affordability of technology. Lack of resources and affordability to improve systems.

What were the positive lessons (successes) learned since 2016?

These were grouped into nine themes.

Theme	Description
Improved production methods	Conservation agriculture showed the benefits of soil water retention and soil fertility, spreading risks, etc, so more producers started implementing CA. Diversification into other crops and livestock in these dryland production systems. Plant according to natural resources – plant smart! Adjusting and advancing farming practices.
Improved Information sharing	Sharing of information, e.g. provincial advisory forums. Collaborations in information sharing.
Good communication – one voice	Organised agriculture, e.g. commodity partners well integrated and speak with one voice. Dialogue at District and Provincial levels - advisory forums. Disaster situation and de-briefing reports. Better collaboration and partnerships: JOC, platforms such as RASS (Rural and Agricultural Sector Support committee) of DoA.
Improved technology and innovation	Renewable power – alternative energy options. Efficient irrigation – technology has improved - AI/ Netting/ Mulching/ Innovations – irrigation efficiency (more production per liter of water), irrigation scheduling. Technology for irrigation has changed/improved and seasonal amounts should take this into account.
Better cultivars/ material	Continued R&D of cultivar development and evaluation in affected areas. Cultivars – better selection, more drought resistant cultivars.
Better water usage and irrigation	Increased recycling of water/ alternative water sources/ groundwater to augment surface water – same water cycle. Efficient water conservation. Build capacity in good years – assurance of supply and more storage. Increased measurement of usage (needs further improvement).
Effective support systems	Support systems (from provincial government and organised agriculture). Strong Provincial and political supports. Good relationships within the sector and beyond. Local government role in managing scenarios – as an additional issue. Role of NGOs such as Gift of Givers.
Improved resource management	Learnt to do “more with less” – what is possible with scarce resources. Drought awareness increased/ better management of resources/ focus on natural resources and own value such as human capital.
Scientific data, forecasting and early warning	Using early warnings – seasonal outlook. Expansion of weather stations. Early warning standard operating procedures. Forecasting and early warning. Focus on scientific data – evidence, monitor, sense-making.

Outputs of Day 2: 25th April

On 25th April, the working groups re-convened to discuss the seven “negative to positive” themes and the nine “positive to scale up” themes in more detail. The task was to choose the two most important themes from each group, and to develop specific actions that are required for each. After the group work, the themes were scored based on how many of the 11 groups chose each theme. Thus, the maximum would be 11. In the following table, the themes are ranked from the highest score to the lowest. The seven themes that scored between 3 and 6 are boxed in a thick black line, and these will be taken forward for further discussion by task teams and development into an Action Plan. The suggested specific actions for each, as discussed in the groups, will be consolidated and taken into the task team workshops. Task teams will be convened consisting of smallholder and commercial farmers, a small group of WC-DOA officials, managers of key industry organisations, and specific stakeholders as necessary e.g. banks and insurance companies, and officials from other government departments and institutions.

Ranked themes from negative (orange) and positive (green) lessons

Theme	Description	SCORE
Lack of financial support	Financial losses led to producers taking more financial risks in the years after droughts. Farmers are not sharing losses to relevant entities. Challenge to obtain external investment and no sustainable financial bridging models.	6
Improved [adaptive] production methods	Conservation agriculture showed the benefits of soil water retention and soil fertility, spreading risks, etc, so more producers started implementing CA. Diversification into other crops and livestock in these dryland production systems. Plant according to natural resources – plant smart! Adjusting and advancing farming practices.	6
Lack of management of water [infrastructure] and irrigation systems	Illegal dams. Water use authorisations, verification and validation. Illegal abstraction (from rivers and boreholes). Ineffective irrigation systems. Insufficient legal storage capacity. Some areas had dams but no water and others water and no dams – infrastructure. Over-allocation of resources. Infrastructure not maintained. Lack of strategic Provincial water planning.	4
Problematic laws and regulations [that impede disaster risk management]	Disaster Management Act not making provision for perennial crops during drought.	3
Improved [adaptive] technology and innovation	Renewable power – alternative energy options. Efficient irrigation – technology has improved - AI/ Netting/ Mulching/ Innovations – irrigation efficiency (more production per liter of water), irrigation scheduling. Technology for irrigation has changed/improved and seasonal amounts should take this into account.	3

Better water usage and irrigation	Increased recycling of water/ alternative water sources/ groundwater to augment surface water – same water cycle. Efficient water conservation. Build capacity in good years – assurance of supply and more storage. Increased measurement of usage (needs further improvement).	3
[Greater use of] Scientific data, forecasting and early warning	Using early warnings – seasonal outlook. Expansion of weather stations. Early warning standard operating procedures. Forecasting and early warning. Focus on scientific data – evidence, monitor, sense-making.	3
Lack of coordination and government support	Government red tape to access support services. Multi-stakeholder approach – not all spheres of government and stakeholders are engaging at the right levels. Integrated IGR Planning and Coordination.	2
Lack of access to new technology – not affordable	Diminished ability to transform to CA practices because of financial position. Lack of funding, e.g. introduction of new technology. Affordability of technology. Lack of resources and affordability to improve systems.	2
Improved resource management	Learnt to do “more with less” – what is possible with scarce resources. Drought awareness increased/ better management of resources/ focus on natural resources and own value such as human capital.	2
Lack of information and data	Lack of information, e.g. support available to farmers and agri-workers. Climate data/monitoring. Access to climate services and info for planning. Measurement/ monitoring systems need to improve.	1
Lack of proper communication	Method and lag in communication. More frequent “check ins”. Non inclusion of communities. Community unrest.	1
Effective support systems	Support systems (from provincial government and organised agriculture). Strong Provincial and political supports. Good relationships within the sector and beyond. Local government role in managing scenarios – as an additional issue. Role of NGOs such as Gift of Givers.	1
Improved Information sharing	Sharing of information, e.g. provincial advisory forums. Collaborations in information sharing.	0
Good communication – one voice	Organised agriculture, e.g. commodity partners well integrated and speak with one voice. Dialogue at District and Provincial levels - advisory forums. Disaster situation and de-briefing reports. Better collaboration and partnerships _ JOC, Platforms such as RASS (Darryl's platform).	0
Better cultivars/ material	Continued R&D of cultivar development and evaluation in affected areas. Cultivars – better selection, more drought resistant cultivars.	0

Appendix: List of registered participants

Name of Participant	Institution
Dr Ivan Meyer	WC-DOA Minister of Agriculture
Ms Marietjie van Jaarsveld	WC-DOA Ministry
Mr Daniel Johnson	WC-DOA Ministry
Dr Mogale Sebopetsa	WC-DOA Head of Department
Dr Ilse Trautmann	WC-DOA Agricultural Research and Regulatory Services (DDG:ARRS)
Mr Darryl Jacobs	WC-DOA Agricultural Development and Support Services (DDG:APSS)
Dr Dirk Troskie	WC-DOA Business Planning & Strategy
Mr Japie Kritzinger	WC-DOA Business Planning & Strategy
Ms Mary James	WC-DOA Communications
Ms Giselle Terblanche	WC-DOA Communications
Ms Ashia Petersen	WC-DOA Sustainable Resource Use & Management
Ms Jody Wentzel	WC-DOA Sustainable Resource Use & Management
Mr Rudolph Röscher	WC-DOA Sustainable Resource Use & Management
Mr Jan Smit	WC-DOA Sustainable Resource Use & Management
Ms Phyllis Pienaar	WC-DOA Sustainable Resource Use & Management
Mr Hannes Muller	WC-DOA Sustainable Resource Use & Management
Mr Grant Jephthas	WC-DOA Sustainable Resource Use & Management
Mr Jerry Aries	WC-DOA Agricultural Producer Support and Development
Mr Willem Burger	WC-DOA Agricultural Producer Support and Development
Mr Marius du Randt	WC-DOA Agricultural Producer Support and Development
Mr Albertus Dyason	WC-DOA Agricultural Producer Support and Development
Dr Gininda Msiza	WC-DOA Veterinary Services
Dr Chanel Lombard	WC-DOA Veterinary Services
Dr Chris de Brouwer	WC-DOA Research & Technology Development Services
Ms Annelene Swanepoel	WC-DOA Research & Technology Development Services
Dr Stephanie Midgley	WC-DOA Research & Technology Development Services
Dr Mike Wallace	WC-DOA Research & Technology Development Services
Ms Nelmarie Saayman	WC-DOA Research & Technology Development Services
Ms Theresa Smit	WC-DOA Research & Technology Development Services
Ms Bongiswa Matoti	WC-DOA Agricultural Economic Services
Ms Hayley Rodkin	WC-DOA Agricultural Education & Training
Ms Jacqui Pandaram	WC-DOA Rural Development
Mr Rasheeq Williams	WC-DOA Rural Development
Ms Karen Shippey	WC-DEA&DP Environmental Sustainability
Mr Gerard van Weele	WC-DEA&DP Climate Change

Mr Mpfunzeni Tshindani	WC-DEA&DP Climate Change
Ms Coral Birss	WC-DEA&DP CapeNature
Mr Marius Wheeler	WC-DEA&DP CapeNature
Mr Zaid Omer	WC-DOTP Department of the Premier
Mr Stanley Nomdo	WC-DH Department of Health
Mr Colin Deiner	WC-DLG Provincial Disaster Management Center (PDMC)
Ms Jessica van Schalkwyk	WC-DLG Provincial Disaster Management Center (PDMC)
Ms Leilani Christian	WC-DLG Provincial Disaster Management Center (PDMC)
Mr Shaun Minnies	WC-DLG Disaster Centre Cape Winelands District
Ms Shané Summers	WC-DLG Disaster Centre Overberg District
Dr Ikalafeng Kgakatsi	National Department of Agriculture, Land Reform and Rural Development (DALRRD)
Ms Oboneng Nonjola	National Department of Agriculture, Land Reform and Rural Development (DALRRD)
Mr Matiga Motsepe	National Department of Agriculture, Land Reform and Rural Development (DALRRD)
Ms Ntombizanele Bila-Mupariwa	National Department of Water and Sanitation (DWS)
Mr Rassie Nieuwoudt	National Department of Water and Sanitation (DWS)
Mr Mkhevu Mnisi	National Department of Water and Sanitation (DWS)
Ms Elani Heyneke	South African Weather Services (SAWS)
Ms Lebogang Makgati	South African Weather Services (SAWS)
Mr Jannie Strydom	Agri Western Cape and commercial farmer
Mr Mark Botha	Agri Western Cape and commercial farmer
Mr Liam Viljoen	Agri Western Cape and commercial farmer
Mr Sas Oosthuizen	Agri Western Cape and commercial farmer
Mr Laubscher Coetzee	Agri Western Cape and commercial farmer
Mr Heinie du Toit	Agri Western Cape and commercial farmer
Mr Dawie van Deventer	Agri Western Cape and commercial farmer
Ms Glaudi Skog	Agri Western Cape and commercial farmer
Mr Niël Joubert	Agri Western Cape and commercial farmer
Mr Daniël Minnaar	Agri Western Cape and commercial farmer
Mr Petrus Saal	Smallholder farmer
Ms Wadea Japie	Smallholder farmer
Mr Agmat Brinkhuis	Smallholder farmer
Mr Whernit Dirks	Smallholder farmer
Ms Alfreda Mars	Smallholder farmer
Mr Johannes Jacobs	Smallholder farmer
Mr Stuart van Rooy	Smallholder farmer
Dr Peter Johnston	University of Cape Town Climate System Analysis Group
Ms Anathi Makamane	University of the Free State
Ms Anel Jansen van Vuuren	Standard Bank
Ms Christmaine Abrahams	First National Bank
Ms Gabrielle Redelinghuys	Winfield United South Africa
Mr Conrad Schutte	Vinpro
Prof Wiehann Steyn	Hortgro Science

Ms Eurica Scholtz	South African Table Grape Industry (SATI)
Mr Nico Uys	Red Meat Producers' Organization (RPO)
Mr Jannie Fourie	Wool Growers' Association (WGA)
Dr Keith du Plessis	CASIDRA

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