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The Southern Africa 2026/27 Climate-to-Cashflow Briefing.

SARCOF-33 places much of central and southern SADC in the below-normal rainfall category for October to December 2026, with above-average temperatures across most of the region. This is the technical edition: the decision model, the assumption register, the sensitivity analysis and the sources. We make no forecast of our own anywhere in it.

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The Southern African Regional Climate Outlook Forum released its thirty-third consensus outlook from Swakopmund, Namibia on 26 August 2026¹, and SADC published the regional summary on 27 August². For October to December 2026 the forum places much of the central and southern subregion in the below-normal rainfall category, with high confidence for the zone covering much of Angola, southern Zambia, Zimbabwe, Mozambique, Namibia, Botswana, most of South Africa, Eswatini and Lesotho. The dry signal persists into January to March 2027. Above-average temperatures are expected across most of the region.

This briefing translates that signal into commitments, cash and dated triggers. It reaches a conclusion its author did not expect, and which is set out in full in section 3:

On the illustrative farm modelled here, the climatological base rate alone already justifies holding the input decision open. The outlook confirms that decision; it does not create it. Where that is true, the finding is not about the weather. It is that the operation's existing commitment structure was already fragile, and a dry outlook merely reveals it.

1 What the outlook says, and what it withholds

SARCOF-33 met in Swakopmund from 25 to 28 August 2026 and issued its consensus statement on 26 August. The outlook covers four overlapping three-month periods from October 2026 to March 2027. For October to December, Zone 1 (the Democratic Republic of Congo, north-western Angola, northern Zambia, central Malawi, northern Mozambique and the southern fringes of Tanzania) is placed in the normal to above-normal category; Zone 3, covering much of Angola, southern Zambia, Zimbabwe, Mozambique, Namibia, Botswana, most of South Africa, Eswatini and Lesotho, is placed in the below-normal category with high confidence. For January to March 2027 below-normal rainfall continues across Angola, Namibia, Botswana, Zimbabwe, Zambia and parts of South Africa, while eastern Tanzania and Comoros are placed above normal. On drivers, the statement records El Niño conditions already established and expected to strengthen to strong or very strong intensity, with peak intensity around October to December, and a neutral Indian Ocean Dipole with a high likelihood of turning positive.

The probability discipline, and one thing that changed this year

Categories are defined against the 1991 to 2020 record: above-normal is the wettest third, normal the middle third, below-normal the driest third. **This year the statement does not print a numerical probability table by zone.** In previous cycles a reader could take a printed tercile split and carry it into a decision model. SARCOF-33 instead uses map categories based on relative probabilities, supported by confidence descriptors in the text.

That is a defensible scientific choice and a practical problem for anyone building a decision model. It should be stated plainly rather than papered over: you cannot read a precise probability off this year's statement, so any model that appears to contain one has invented it. This briefing therefore does not assume a probability. It sweeps a range and reports where the decision changes.

"This Outlook is relevant only to seasonal (overlapping three-monthly) timescales and relatively large areas and may not fully account for all factors that influence regional and national climate variability, such as local and month-to-month variations (intra-seasonal)."¹

Users are directed to their National Meteorological and Hydrological Services for downscaled interpretation. That instruction is not a formality. A seasonal category cannot tell you when your planting window opens, and every operational trigger in section 5 is driven by a national or sub-seasonal product, not by this statement.

Decision this section forces. Stop asking whether the season will be dry. Ask what probability of a dry outcome would change what you are about to spend, then ask whether you are already past it.

2 Exposure map

Summer grain, rainfed. The zone placed in the below-normal category is the zone in which the summer grain planting window opens. Exposure sits in two distinct places: the planting commitment, where a false start commits seed and fertiliser against an unreliable onset; and the flowering window, where a dry spell converts a mediocre season into a failed one. These are separate risks, and section 3 models them as separate dimensions, because a season can post near-normal totals and still fail if the distribution places a dry spell across tasselling.

Irrigated annual crops. Rainfall matters here mainly through water allocation and dam levels; the temperature signal acts directly, raising evaporative demand and pumping volumes while allocations tighten. Case B models an annual irrigated crop only. A permanent orchard cannot respond to an allocation cut by reducing planted area, and its decision set is different: block prioritisation, crop load and thinning, quality targets, supplementary water purchase, and in the limit block abandonment. That case is not modelled here and should not be inferred from Case B.

Livestock. Pasture growth follows early-season rainfall closely, so the below-normal category for October to December points to reduced early grazing and higher fodder purchase in the months when livestock water demand rises with temperature. Destocking economics deteriorate through the season because everyone destocks at once.

Input supply and rural trade. Agro-dealers commit stock capital in September and October against demand that materialises only if farmers plant, so a below-normal season transfers risk up the chain into unsold stock and a deteriorating credit book, after the stock has been paid for. Case C models this.

Northern SADC sits on the other side of the line: eastern DRC, Tanzania, extreme northern Malawi and Zambia and the island states are placed in normal to above-normal categories. Deficit and surplus areas are not the same areas, and the trade response is a separate analysis from the production response.

Decision this section forces. Identify which profile you actually are. They fail through different mechanisms and on different dates, and an operation that is two profiles at once must run two decision calendars.

3 The decision model

Three operations are modelled. **Every parameter is illustrative and registered. None is a forecast, market data or a benchmark.** The structure is the deliverable: replace the parameters with your own and the machinery still runs.

Case A: dryland summer grain, 200 hectares

The season is modelled on **two dimensions**, because seasonal total and within-season distribution are different risks. Dimension one is the seasonal rainfall category. Dimension two is whether a damaging dry spell occurs at flowering, with a probability conditional on the category. The six resulting states are mutually exclusive and exhaustive.

Two strategies are compared. **Strategy A** commits the full input programme at planting. **Strategy B** commits a base programme at planting and retains the right, but not the obligation, to apply top dressing at a decision date roughly six weeks later, once establishment and the sub-seasonal update are visible. B is therefore not a cheaper programme; it is the same programme with an option attached, and the option costs money: buying nitrogen later in split application costs R300 per hectare more in total and carries a small timing penalty.

Table 1. Assumption register, Case A. Every value is assumed unless a source is given.

PARAMETER	VALUE	BASIS
Area	200 ha	Assumed representative unit
Full programme, at planting (A)	R11,500 / ha	Assumed
Base programme, at planting (B)	R8,200 / ha	Assumed: seed, basal, herbicide
Top dressing, if exercised (B)	R3,600 / ha	Assumed. Total if applied R11,800/ha, so the option premium is R300/ha
Timing penalty on split application	×0.98	Assumed
Fixed costs and overheads	R1,150,000	Assumed
Debt service due February	R620,000	Assumed
Opening own cash	R450,000	Assumed
Yield, full programme, no spell	5.5 / 4.2 / 2.6 t/ha	Assumed, by category
Yield, full programme, flowering spell	3.4 / 2.6 / 1.2 t/ha	Assumed, by category
Yield factor if top dressing skipped	0.68 / 0.74 / 0.92 no spell; 0.82 / 0.88 / 0.97 with spell	Assumed: nutrient response falls as water becomes limiting

PARAMETER	VALUE	BASIS
P(flowering spell category)	0.10 / 0.20 / 0.40	Assumed conditional probabilities
Price	R3,900 / 4,400 / 5,900 per t	Assumed, inverse to regional supply. Set regionally, so modelled on category only
Category weights	swept, see Table 3	The outlook publishes no probabilities this year, so none is assumed

The exercise rule. At the decision date the category is observable; the flowering spell is not. Taking expectations over the spell only, top dressing is worth applying in an above-normal season (by R480,732) and marginally in a normal season (by R35,392), and is not worth applying in a below-normal season (it destroys R603,888). The option has real content: it is exercised in two states out of three, and the normal-season call is close enough to be genuinely difficult.

Table 2. The six states, with net position after fixed costs under each strategy. Strategy B is shown after the exercise rule is applied.

SEASONAL TOTAL	FLOWERING SPELL	WEIGHT AT CLIMATOLOGY	YIELD, A	NET, A	NET, B	B – A
Above-normal	no	0.300	5.50	R840,000	R694,200	–R145,800
Above-normal	yes	0.033	3.40	–R798,000	–R911,040	–R113,040
Normal	no	0.267	4.20	R246,000	R112,080	–R133,920
Normal	yes	0.067	2.60	–R1,162,000	–R1,267,760	–R105,760
Below-normal	no	0.200	2.60	–R382,000	R32,560	+R414,560
Below-normal	yes	0.133	1.20	–R2,034,000	–R1,416,480	+R617,520

The option is not free insurance. In the two wetter categories the farm would have been better off committing everything at planting, and in the above-normal season with a spell the option is exercised on the observable and still turns out wrong. That is the honest shape of a real option: it is paid for in the good states and earns its keep in the bad ones.

Where the decision changes

Because the outlook publishes no probabilities, none is assumed. Instead the weight on the below-normal category is swept, with the remaining mass split evenly between above-normal and normal. This weighting rule is a registered assumption and is the only one under which the figures below reproduce.

Table 3. Expected net position by weight on the below-normal category. Option value is the difference.

P(BELOW-NORMAL)	EXPECTED NET, A	EXPECTED NET, B	OPTION VALUE, B – A
0.333 (climatology)	–R134,067	–R59,089	+R74,977
0.400	–R224,940	–R107,886	+R117,054
0.450	–R293,095	–R144,483	+R148,612
0.500	–R361,250	–R181,081	+R180,169
0.550	–R429,405	–R217,678	+R211,727
0.600	–R497,560	–R254,276	+R243,284

21.5%

The weight on the below-normal category at which holding the option becomes the better decision on these parameters. The climatological base rate for the driest tercile is **33.3%**, before any outlook is consulted. The decision is therefore already made by climatology on this farm, and the outlook confirms rather than creates it.

That conclusion is only worth stating if it survives the parameters. Table 4 recomputes the threshold under ten variations.

Table 4. Sensitivity of the threshold. In every variation tested, the climatological base rate of 33.3% already exceeds it.

VARIATION	THRESHOLD
Base case	21.5%
Top dressing R3,000 / ha	21.5%
Top dressing R4,200 / ha	21.5%
No timing penalty on split application	10.8%
Timing penalty $\times 0.95$	30.2%
Spell probabilities 5 / 15 / 30 per cent	22.4%
Spell probabilities 15 / 25 / 50 per cent	20.6%
Below-normal price R5,200 / t	20.8%
Below-normal price R6,600 / t	22.1%
Milder penalty for skipping top dressing	10.4%

The range is 10.4 to 30.2 per cent, and the climatological base rate clears it in all ten cases. Note also that the cost of the top dressing itself does not move the threshold: raising or lowering it changes which states the option is exercised in, and the exercise rule absorbs the change. The threshold is governed by the agronomy of split application, not by the price of the bag.

Break-even yields: two different questions

Two break-evens are reported because they answer different questions, and conflating them is a common and expensive error. The **operating** break-even covers variable and fixed costs. The **cash-solvency** break-even additionally covers the February debt service, net of opening cash, and is the one that matters for the trigger in section 5.

Table 5. Break-even yields at the below-normal price of R5,900 per tonne.

STRATEGY	OPERATING	CASH-SOLVENCY
A, full programme	2.92 t/ha	3.07 t/ha
B, base plus top dressing exercised	2.97 t/ha	3.12 t/ha
B, base only, option not exercised	2.36 t/ha	2.51 t/ha

In Case A, and on these parameters only, the immediate binding constraint is liquidity rather than yield. Peak input outlay at planting is R2,300,000 under A against R1,640,000 under B, a difference of R660,000 in cash held back until the option is either exercised or abandoned. In the worst modelled state, below-normal with a flowering spell, the position after debt service is negative R2,204,000 under A and negative R1,586,480 under B.

Both are severe. Whether either is survivable depends on the balance sheet, facility headroom and shareholder support, none of which is modelled here, and no claim about solvency should be read from these figures.

Case B: irrigated annual crop, 30 hectares

Assumed: gross output R110,000 per hectare, variable cost R74,000 per hectare, giving a contribution of R1,080,000. Pumping at 1,900 kWh per hectare at R2.65 per kWh gives base energy of R151,050, which is 14.0 per cent of contribution.

Apply the temperature signal as an assumed 22 per cent increase in pumping volume, together with the actual tariff adjustment. Eskom's approved increase for 2026/27 is **8.76 per cent for directly supplied customers from 1 April 2026** and **9.01 per cent for municipal and local authority tariffs from 1 July 2026**, under the NERSA MYPD6 decisions³. Applying the direct-customer figure, energy rises to R200,424, an increase of R49,374, or 32.7 per cent. Contribution falls to R1,030,626 before any water restriction.

Table 6. Irrigated annual crop: contribution and energy under water allocation cuts, with the temperature signal and the 2026/27 direct-customer tariff applied.

ALLOCATION CUT	AREA PLANTED	CONTRIBUTION	ENERGY	NET OF ENERGY
None	30 ha	R1,080,000	R200,424	R879,576
20 per cent	24 ha	R864,000	R160,339	R703,661
30 per cent	21 ha	R756,000	R140,297	R615,703
40 per cent	18 ha	R648,000	R120,254	R527,746

On these parameters the allocation cut dominates the energy effect: a 20 per cent cut removes R216,000 of contribution against R49,374 from the tariff and volume increase together. **The temperature signal is material but secondary here**, and any stronger claim would need a comparator this model does not contain.

Whether a reduced area under full irrigation beats deficit irrigation across the whole area is **commodity-specific and is not established by this model**. Where price is set by quality grade rather than volume, partial stress can destroy grade and the reduced-area strategy is usually preferred; where price is set by volume, the calculation can go the other way. Test it for your crop and your buyer specification before acting on it.

Case C: agro-dealer

Assumed: season stock purchase R6,200,000, **margin of 18 per cent as a markup on cost** (not a gross margin on sales), carrying cost 11.5 per cent per annum on unsold stock, credit book R3,400,000.

Table 7. Agro-dealer exposure. The 18 per cent is applied to the cost of stock sold, and is therefore a markup on cost.

SEASON	SELL-THROUGH	GROSS PROFIT	UNSOLD STOCK	SIX-MONTH CARRY	GROSS PROFIT AFTER CARRY
Normal	92 per cent	R1,026,720	R496,000	R28,520	R998,200
Below-normal	62 per cent	R691,920	R2,356,000	R135,470	R556,450

That is a 44.3 per cent fall in gross profit after carrying cost. Add credit losses: bad debt on the book at an assumed 4 per cent in a normal season is R136,000, and at an assumed 14 per cent in a below-normal season is R476,000. The swing is roughly R782,000 on a business whose normal-season gross profit after carry is under R1,000,000.

Decision this section forces. For each unit, name the single commitment that cannot be reversed after a stated date, and price the cost of keeping it open. For the grain farm it is the input programme. For the irrigated unit it is area committed. For the dealer it is the September stock order and its credit terms.

4 Contract, credit and insurance

Volume commitments. A contract promising tonnage into a season the outlook places in the below-normal category transfers real risk onto the seller. Three things are worth establishing now rather than in March: whether the obligation is tonnage or best endeavours; what the force majeure clause actually covers and at what defined threshold; and whether the shortfall remedy is replacement purchase at market, which in a regional deficit is when replacement is dearest. Force majeure is jurisdiction- and contract-specific, and drought is not automatically covered. **Have the clause reviewed rather than assuming what it will do.**

Seasonal facility sizing. Strategy B holds back R660,000 of peak outlay until the option is exercised. The value of that headroom is not the interest saved but the room it leaves to respond. Size the facility against the below-normal state and keep the difference as headroom rather than converting it into inputs.

Input credit. Credit extended across a district in one season is repaid, or not, out of the same rainfall for every borrower. The correlation is the exposure, and concentration limits by crop and district are the only real mitigation. They must be set before the season.

Index insurance. Index products pay against a measured index, not against your loss. Where the loss mechanism is a flowering-stage dry spell rather than a seasonal-total deficit, a seasonal-rainfall index can leave a farm devastated and uncompensated. That is basis risk, and it is largest in exactly the seasons that matter. Ask the provider, in writing, what the product would have paid at your location in each of the last five seasons against your actual outcome in each. If the answer is not available, the product has not been evaluated. It has only been sold.

What a lender should ask of any farm model presented this season. One question, and it is a conformance question: can every displayed number be traced to a named, dated input, with the assumptions registered and the calculation visible? A model that produces a confident single figure from a seasonal outlook has either invented a probability the outlook does not contain, or hidden the assumption doing the work.

For context on the financing environment, the South African Climate Finance Landscape 2025 records R188.3 billion a year of tracked climate finance against an estimated need of up to R499 billion a year, with 11.3 per cent flowing to adaptation against an African average of 33.7 per cent⁴.

Decision this section forces. Pull your three most important contracts this week and read the shortfall clause. If you cannot state what happens at 40 per cent of contracted volume, you do not know your exposure.

5 Early-action triggers and the decision calendar

Every trigger below is drawn from an official monitoring product. None is a forecast of ours. The SARCOF-33 statement is a seasonal product and cannot trigger an operational decision on its own; national and sub-seasonal products can.

Table 8. The decision calendar. Set every threshold before the evidence arrives, and name an owner for each row.

WHEN	DECISION	TRIGGER TO WATCH	DEFAULT ACTION
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WHEN	DECISION	TRIGGER TO WATCH	DEFAULT ACTION
Early September	Input order: full commitment or base plus option	National meteorological service monthly update; ENSO update	Order the base programme; price and reserve the top dressing without committing it
Mid September	Agro-dealer stock and credit terms	Same, plus early district demand signals	Reduce the order; tighten terms; shorten credit tenor
Late September	Facility sizing and headroom	Facility review against the below-normal state	Size to the below-normal state; hold the difference as headroom
October	Livestock: early destocking	Pasture condition, NDVI and soil moisture products; national early-warning bulletins	Destock the lowest-productivity cohort early rather than the whole herd late
October to November	Planting window by zone	National onset guidance; soil moisture at planting depth	Plant on the published onset criterion, not on the calendar
November to December	Replant or abandon	Established stand count against the pre-stated threshold	Apply the threshold set in October, not one invented in December
Six weeks after planting	Exercise or abandon the top dressing option	Establishment plus the sub-seasonal update	Apply in an above-normal or normal season; do not apply in a below-normal season
January to February	Facility drawdown and debt-service planning	Yield estimate against the cash-solvency break-even: 3.07 t/ha under A, 3.12 t/ha if the option was exercised, 2.51 t/ha if it was not	Open the lender conversation before the shortfall, not after

Two rules govern the calendar. **Set every threshold before the evidence arrives:** a replant threshold decided after seeing the stand is not a threshold, it is a rationalisation. **Name an owner and a date for each row:** a trigger with no owner does not fire.

One observation on the information environment. Monitoring capacity across the region is under pressure at the moment the need for it rises⁵. When the data thin out, the quality of the model interpreting what remains decides more, not less. That is an argument for conservatism in commitments and for explicit assumptions, not for confidence.

Decision this section forces. Put dates and owners against these eight rows this week, and diarise the September triggers before the first one arrives.

6 Smallholder and household consequences

The mechanics above describe operations with facilities, contracts and reserves. Most producers in the affected zone have none of these, and the transmission runs differently.

Price transmission arrives before harvest failure does. Grain prices respond to the expectation of a deficit, so a household that buys maize meal begins paying more months before a household that grows it discovers its own shortfall. Where households are net buyers, they take the effect first and take it twice. The share of rural households that are net buyers varies substantially by district and by year and should be established from current household survey data for any specific programme area rather than assumed⁶.

The informal trade leg. In Auctus Agri's Beitbridge corridor work⁷ we observed that import-substitution pressure in a deficit year falls first on small cross-border traders, and that women traders in that sample carried higher transaction costs, weaker formal recourse and thinner working capital. That is a field observation from one corridor, offered as a hypothesis to test in others, not as a general finding.

What extension can realistically trigger. Not everything in section 5 is available to a smallholder. Three things are, and each is free: publishing the zone's onset criterion in plain language so planting follows a criterion rather than the calendar; publishing a stand-count replant threshold before planting so the decision is pre-set; and naming in advance the date after which a late replant is not worth the seed.

Who receives the advisory, and who decides. In our field engagements the planting, input and destocking decisions frequently sit with different household members, and the person holding the phone that receives an advisory is not always the person deciding⁷. Advisory systems that ignore this deliver information to the wrong person and then record the result as an adoption failure. This is an Auctus Agri field observation and is offered as such.

Decision this section forces. For any programme reaching households in the affected zone, publish the onset criterion and the replant threshold in September, in the local language, and name who in the household the message is for.

7 What Auctus Agri offers

The 90-minute institutional briefing. A closed session for a lender, programme or department, running your portfolio or district through the exposure map and the decision model with your parameters rather than the illustrative ones.

From Forecast to Finance, a two-day course. How climate information becomes a financeable agricultural decision: the interfaces where forecasts fail to reach finance, and the appraisal discipline that closes them.

The climate-adjusted investment diagnostic. A structured evaluation of a portfolio or proposed investment against the season's exposure, with assumptions registered and the conformance question answered rather than asserted.

We do not sell forecasts and we do not make them. What we sell is the machinery that turns somebody else's forecast into a decision you can defend to a lender, a board or an auditor. Every client result is auditable: assumptions are registered, formulas are visible, and displayed results trace to named inputs.

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Notes and sources

1. Southern African Regional Climate Outlook Forum, *SARCOF-33 Consensus Statement on the 2026/27 Rainfall Season*, Swakopmund, Namibia, issued 26 August 2026. https://www.sadc.int/sites/default/files/2026-08/EN_FINAL%20SARCOF-33%20STATEMENT-final-26Aug2100hrs.pdf
2. Southern African Development Community, "SADC outlook favours drier conditions across much of Southern Africa during 2026/27 rainy season", 27 August 2026. <https://www.sadc.int/latest-news/sadc-outlook-favours-drier-conditions-across-much-southern-africa-during-202627-rainy>
3. Eskom Holdings SOC Ltd, *2026/2027 tariff increase*: 8.76 per cent for Eskom direct customers effective 1 April 2026 and 9.01 per cent for municipal and local authority tariffs effective 1 July 2026, in accordance with NERSA MYPD6 decisions of 30 January 2025 and 7 February 2026. <https://www.eskom.co.za/distribution/2026-2027-tariff-increase/> Applicable customer tariffs may differ; verify against your own account before use.

4. Climate Policy Initiative and Presidential Climate Commission, *The South African Climate Finance Landscape 2025*.
<https://www.climatepolicyinitiative.org/publication/the-south-african-climate-finance-landscape-2025/>
5. World Food Programme, "World Food Programme ramps up preparedness and response plans as El Niño threatens to push tens of millions into hunger", 5 August 2026. <https://www.wfp.org/news/world-food-programme-ramps-preparedness-and-response-plans-el-nino-threatens-push-tens>
6. No source is cited for a regional net-buyer share because none was verified for this edition. The claim is stated as a conditional and should be established from current household survey data for any specific programme area.
7. Auctus Agri field observation, Beitbridge corridor work, Working Paper AuctusWP2026-03. Field observations are identified as such throughout and are not offered as generalisable findings.

All financial parameters are illustrative and registered as assumed. They are not forecasts, market data or benchmarks. Auctus Agri makes no weather or climate forecast of its own; every climate statement above is attributed to its official source. This document is not investment, legal or agronomic advice for any specific operation. Recommended citation: Auctus Agri Research Desk (2026). "The Southern Africa 2026/27 Climate-to-Cashflow Briefing, Technical Edition." *Augere*, Volume I, Issue 6 (AA · 2026 · 006). Auctus Agri, Gqeberha.