The changing landscape of South Africa wine grape age distribution

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Introduction

- South Africa is experiencing a significant decrease in total hectares (2006= 102146ha to 2024= 86544ha)
- Increase in vines older than 20 years(2010= 16% to 2024=37%)

- Worldwide consumption down from (2006=3.7L to 2024=2.6L)
- Total worldwide Production (2006= 28 300 000Kl to 2024= 22 580 000Kl)

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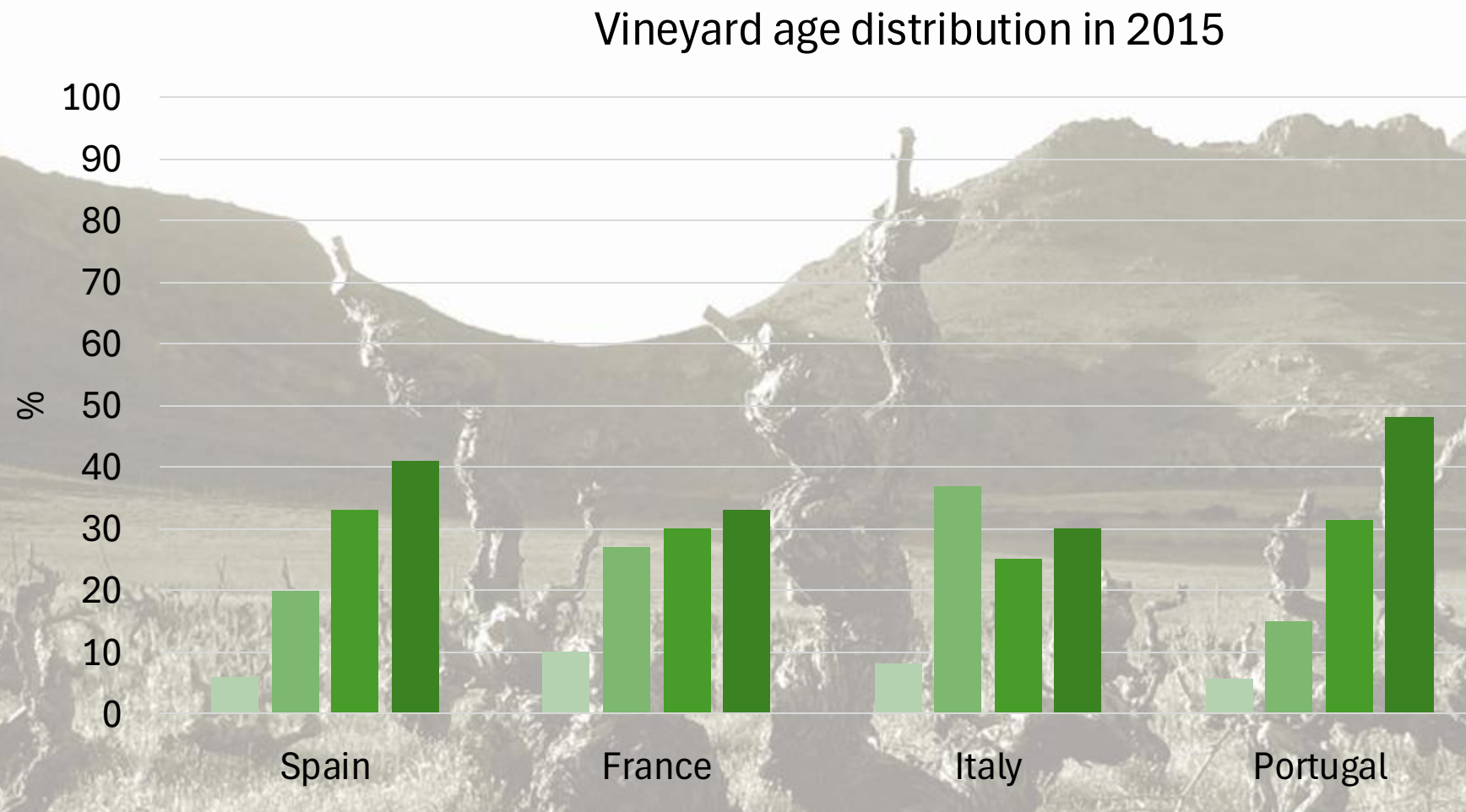
Age distribution in the rest of the world



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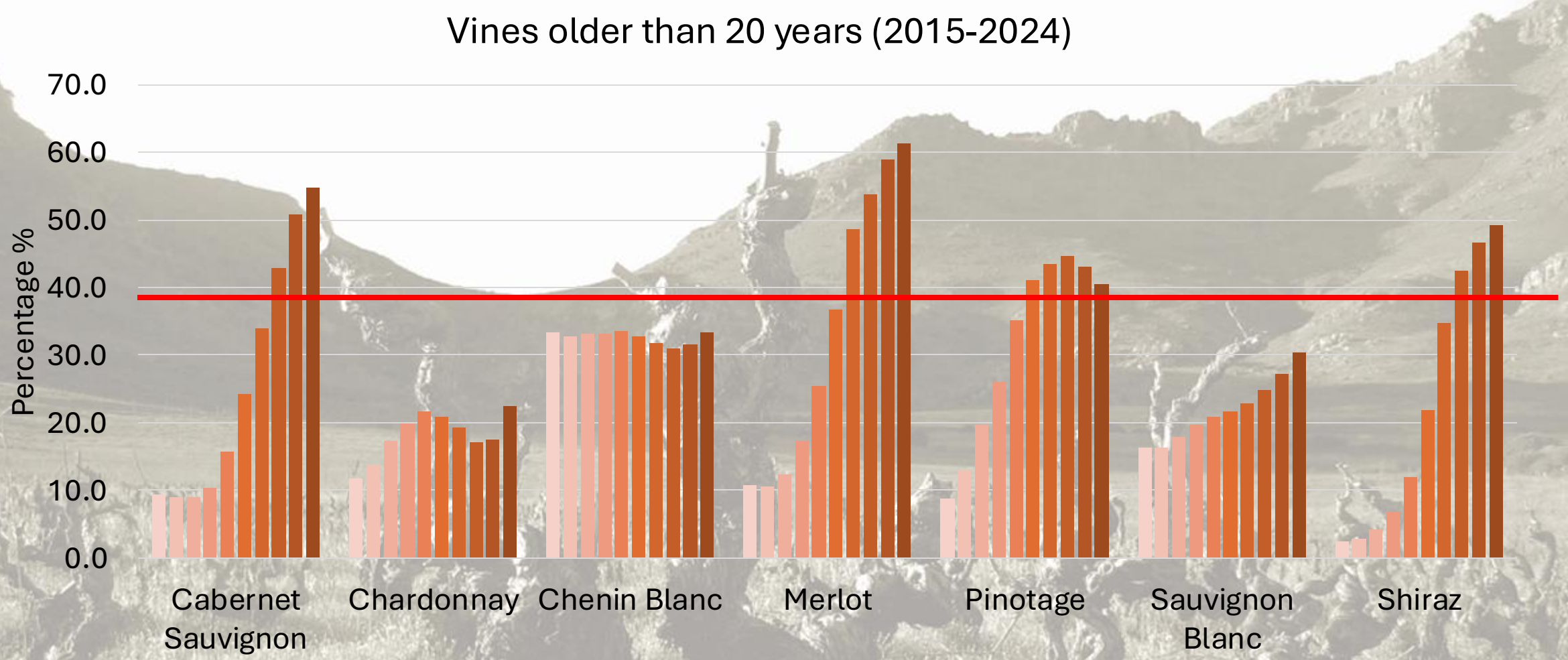
Current situation in South Africa



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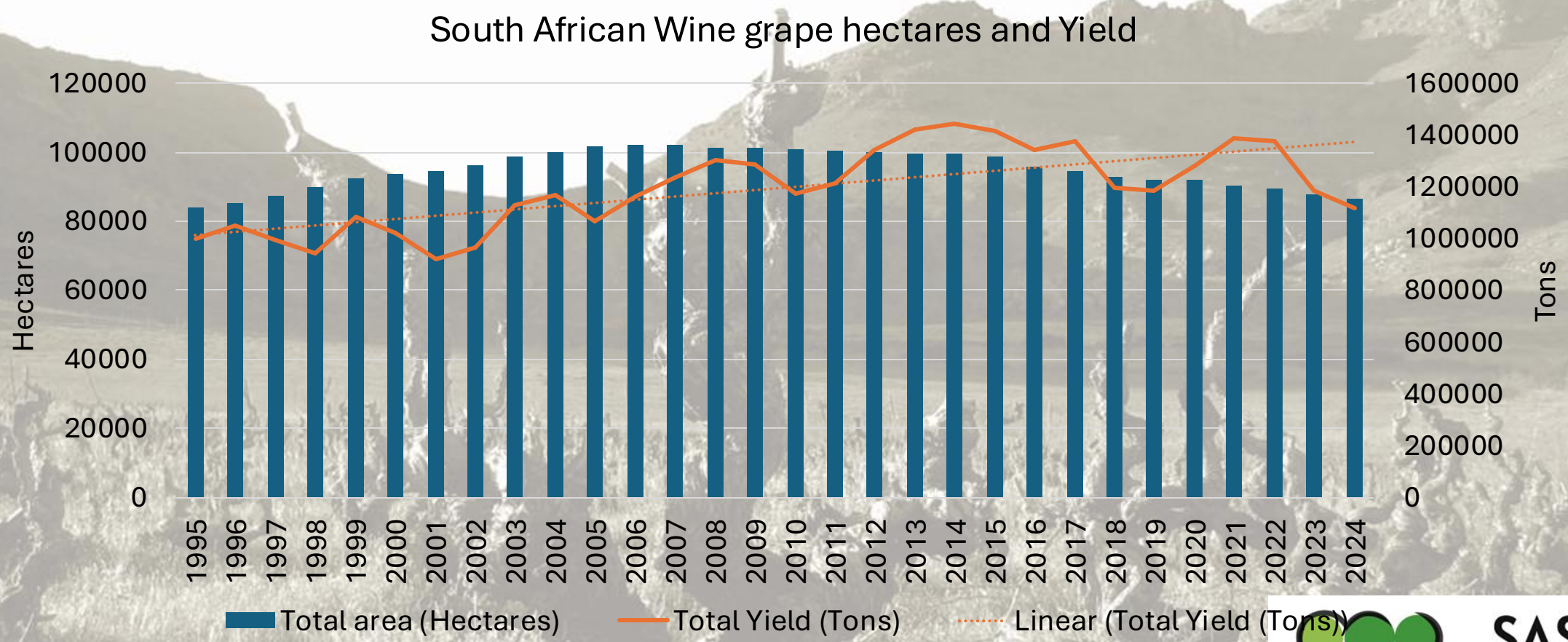
South African Wine Production



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Old Vines and Yield

- Industry reported yields (2018-2024)
- Vineyards older than 20 years (Age range 20-50+ years)
- 4 or more years of yield data per block
- Stellenbosch and Breedekloof regions were used as representative areas as these are the biggest study groups
- Regression analysis between vine age and Yield were done
- Chenin Blanc, Sauvignon Blanc, Colombar were selected to account for cultivar differences and had sufficient data points for analysis

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Old Vines and Yield

n		R^2	Coefficient (in tons/ha)	P value
460	Stellenbosch all vines older than 20 years	0.06	-0.111497003	0.008953
297	Breedekloof all vines older than 20 years	0.10	0.009530222	0.310628
62	Stellenbosch Chenin Blanc	0.10	-0.133365711	0.104635
56	Breedekloof Chenin Blanc	0.26	-0.42966953	0.05876
88	Stellenbosch Sauvignon Blanc	0.11	-0.09007119	0.205647
53	Breedekloof Colombar	0.14	-0.288969627	0.149403

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Old Vines and Yield

- Aligns with studies conducted by Vegas *et al*. (2022) on Zinfandel vineyards in California, which found no negative effects on yield in older vines compared to younger ones when looking at age of vineyards.
- The yield and pruning weight of these vines, as well as their berry composition, were comparable to those of the older vines. On German Riesling (Nader *et al*, 2018)

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Potential Influences: Pruning and Management

Key Challenge

- Viral & bacterial infections → premature vineyard decay in South Africa. Leafroll virus

Simonit & Sirch Method: precision, minimal cuts, preserve vine structure

- Adapted by the **Old Vine Project** (Rosa Kruger, 2002)

Sustainability Practices

- Improved wound care & phytosanitary methods
- Enhanced resilience & longevity of older vines

Insights from Survivors

- Old vines (>50 yrs) thrive in remote, low-density zones
- Minimal pruning supports vine health & longevity

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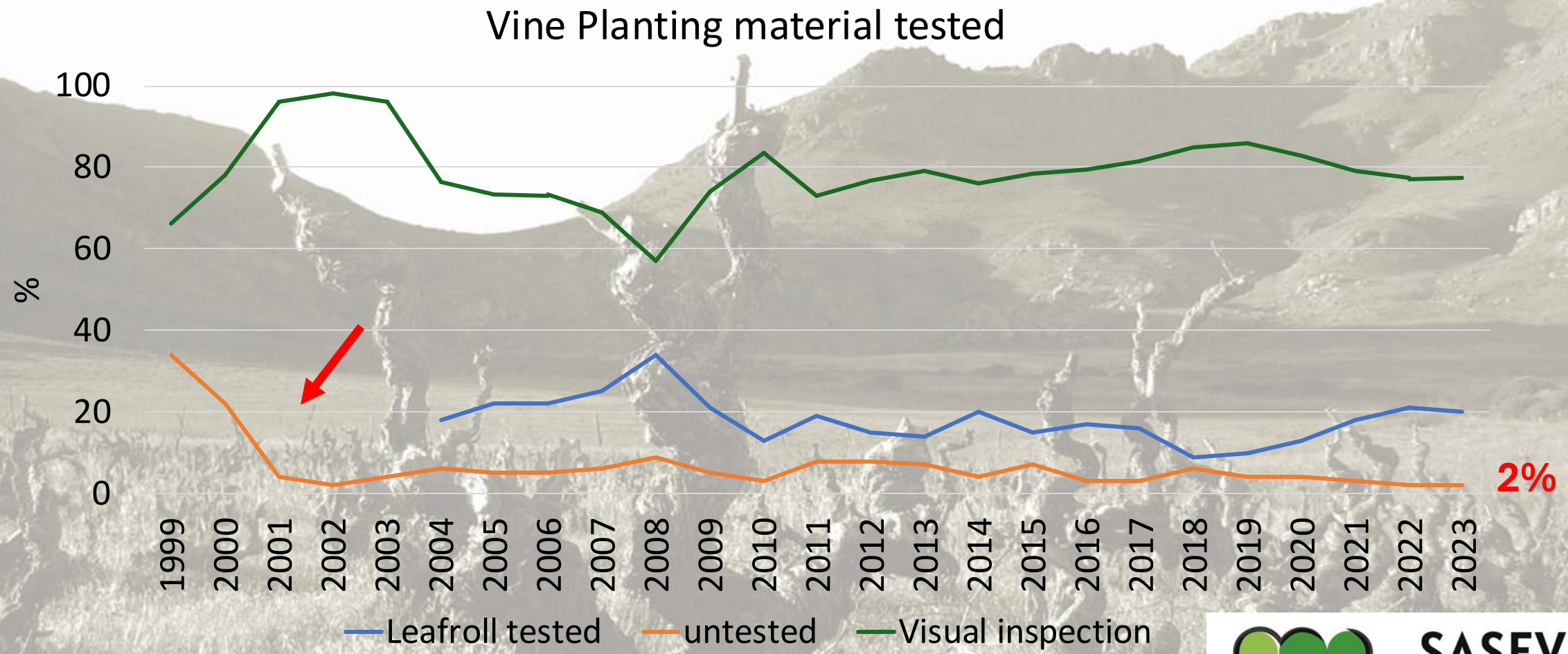
Potential Influences: Planting Material



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The Role of old vines

Inverse Relationship

- •New plantings ↓ in low-profit cycles
- •Surge ↑ in high-profit cycles, driven by consumer demand

Low-Profit Cycles

- •Limited investment in vineyard renewal
- •Reliance on aging vines despite rising costs

High-Profit Cycles

- •Increased replanting of high-demand cultivars
- •Strategy to maximize short-term returns

Paradox of Old Vines

- •Older vineyards remain economically sustainable in high-profit periods
- •Premium reputation & wine quality offset higher maintenance costs

Strategic Balance

- •Profit-driven replanting vs long-term sustainability of old vines
- •Essential for industry health, diversity, and competitiveness

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Conclusion

Reassessing Definitions

- Age alone ≠ sustainability
- Need clear criteria for old vine contributions & replacement

Holistic Approach

- Consider **plant health** + **economic viability**
- Align expectations with vineyard realities

Strategic Perspective

- Supports both immediate and long-term industry goals
- Ensures competitiveness, quality, and market responsiveness

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