VinPro

KOSTEGIDS | COST GUIDE

2015/16

Samestelling / Composition

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'n Spesiale woord van dank aan ons borge wat die druk van hierdie Kostegids, asook die gratis verspreiding daarvan aan alle VinPro-lede en rolspelers in die wynbedryf moontlik maak.

A special word of thanks to our sponsors without whom this Cost Guide could not have been published or distributed for free to all VinPro members and role-players in the wine industry.

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Die samestellers van die VinPro Kostegids het deurgaans te goeder trou opgetree. Enige besluit voortspruitend, of aksie gebaseer op die inligting soos vervat in die gids, word op eie risiko gedoen. Nie die samestellers of VinPro kan verantwoordelik gehou word vir enige finansiële verlies weens so 'n besluit of aksie nie, terwyl enige finansiële wins slegs tot die voordeel van die gebruiker daarvan is.

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Voorwoord / Foreword

In die strewe na 'n volhoubare en deelnemende wynprodusentegemeenskap bly die VinPro Landbou-ekonomiese Diens verbind tot effektiewe en waardetoegevoegde ekonomiese dienslewering aan VinPro se lede en ander rolspelers in die bedryf.

Die Suid-Afrikaanse wyndruifprodusent is die afgelope paar jaar blootgestel aan stygende insetkostes en dalende winsmarges, wat daartoe lei dat die produsent se winsgewendheid onder geweldige druk verkeer. Met hierdie in ag geneem, openbaar die VinPro Landbou-ekonomiese Dienste jaarliks kritiese finansiële aanwysers wat regdeur die wynbedryf erken en gebruik word as 'n betroubare maatstaf. 'n Uitvloeisel daarvan is die samestelling van hierdie meer gedetailleerde Kostegids – wat jaarliks in Mei opgedateer en beskikbaar gestel word – ter verdere ondersteuning van die produsent.

In the quest towards a sustainable and participating wine producer community, VinPro Agricultural Economic Services are committed to providing effective and value-added economic services to all members of VinPro, as well as other role players in the industry.

The South African wine producer's profitability has been under enormous pressure over the past few years due to rising input costs, as well as low and decreasing profit margins. With this in mind, VinPro Agricultural Economic Services annually reveal financial indicators that are accepted and used throughout the wine industry as a trusted benchmark. As an extension of its support to producers, VinPro compiled this more detailed Cost Guide, which is updated annually and available in May.

VinPro Landbou-ekonomiese Dienste

- Lewensvatbaarheidstudies, koste- en winsgewendheidsanalises, asook skadebepalings.
- Koördinering van finansiële studiegroepe/Produksieplan – finansiële geheelplaas- en bedryfstak-analises op plaasvlak.
- Ekonomiese en bedryfsverwante artikels en aanbiedings.
- Versameling en verspreiding van verteenwoordigende landbou-ekonomiese bedryfsinligting.

VinPro Agricultural Economic Services

- Feasibility studies, cost- and profitability analyses, as well as damage assessments.
- Coordinating financial study groups/Production Plan – financial analyses of total farm or operational enterprise.
- Economic and industry-related articles and presentations.
- Collecting and distributing relevant financial industry information.

Doel / Purpose

Die hoofdoel van hierdie Kostegids is om sekere noodsaaklike ekonomiese aspekte in 'n eenvoudige formaat te verpak wat as hulpmiddel kan dien vir die opstel van begrotings deur wyndruifprodusente. Weens dramatiese prysskommelinge is dit baie moeilik om sinvol en akkuraat te begroot en kan hierdie gids as riglyn daarvoor aangewend word.

The main purpose of this guide is to provide wine grape producers with specific financial indicators to assist them in compiling a budget. Due to the fact that prices vary dramatically, it is difficult to compile a budget that is both meaningful and accurate. This guide is a useful aid in compiling a more accurate budget.

Koste van wyndruifproduksie (2014-oes) / Cost of wine grape production (2014 harvest)

Die 2014 rekord-oes en die impak op primêre wyndruifprodusente se finansiële volhoubaarheid

Inleiding / Introduction

VinPro Landbou-ekonomiese Dienste het met die ondersteuning van Winetech, die Nasionale Landboubemarkingsraad (NLBR), Standard Bank, Absa, Land Bank, ENB, Nedbank en Capital Harvest, in 2014 geheelplaas ontledings in al nege wyndistrikte uitgevoer. Die primêre doel bly steeds om die produksiestruktuur, kostestruktuur en winsgewendheid per distrik te bepaal, om sodoende die finansiële welstand van die produsente te bepaal.

Altesaam 236 boerdery-eenhede uit nege wyndistrikte het aan die 2014 Produksieplan Opname deelgeneem. Die steekproef het in 2014 uit 22 117 ha (22% van die totale Suid-Afrikaanse wingerdstand in 2013) bestaan, wat 352 209 ton lewer (24% van die totale Suid-Afrikaanse oes in 2014). Hiervan was 63% wit- en 37% rooi wyndruiwe, en 59% van die tonne is meganies gepars.

Die ontleding hanteer die wingerdvertakking in geheel (draende en nie-draende hektare) en daar word nie onderskeid tussen kultivars en sekere blokke tydens die koste-ontleding gemaak nie, die groter meerderheid van die deelnemers is gediversifiseerd en verskil ten opsigte van plaasgrootte. Die verslag verteenwoordig bedryfsgemiddelde syfers, wat bereken word deur die geweegde gemiddelde van al die deelnemers te bepaal. Die Malmesbury-distrik word deurgaans apart geëvalueer en vorm nie deel van die bedryfsgemiddelde syfers nie, aangesien dié studiegroep 'n groot komponent droëlandwingerd verbou, wat 'n alternatiewe produksie-, koste- en kapitaalstruktuur benodig.

VinPro Agricultural Economic Services conducted comprehensive analyses in all nine wine districts with the support of Winetech, the National Agricultural Marketing Council (NAMC), Standard Bank, Absa, Land Bank, FNB, Nedbank and Capital Harvest. The primary objective remains to determine the production structure, cost structure and profitability per district, so as to determine the financial wellbeing of the producers.

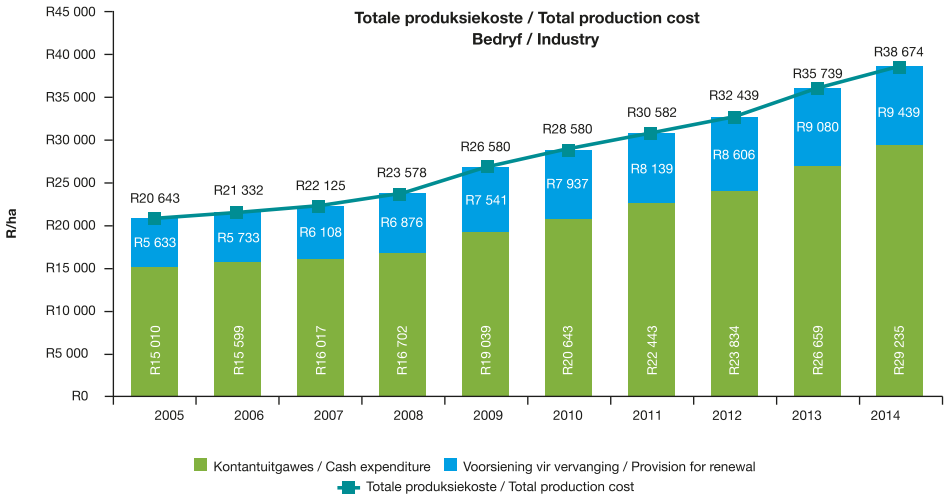
Altogether 236 farming units from nine wine districts participated in the 2014 Production Plan Survey. In 2014 the sample consisted of 22 117 ha (22% of the total South African surface planted to grapevines in 2013), which produced 352 209 tons (24% of the total South African crop in 2014). This consisted of 63% white and 37% red wine grapes, and 59% of the tons were mechanically harvested.

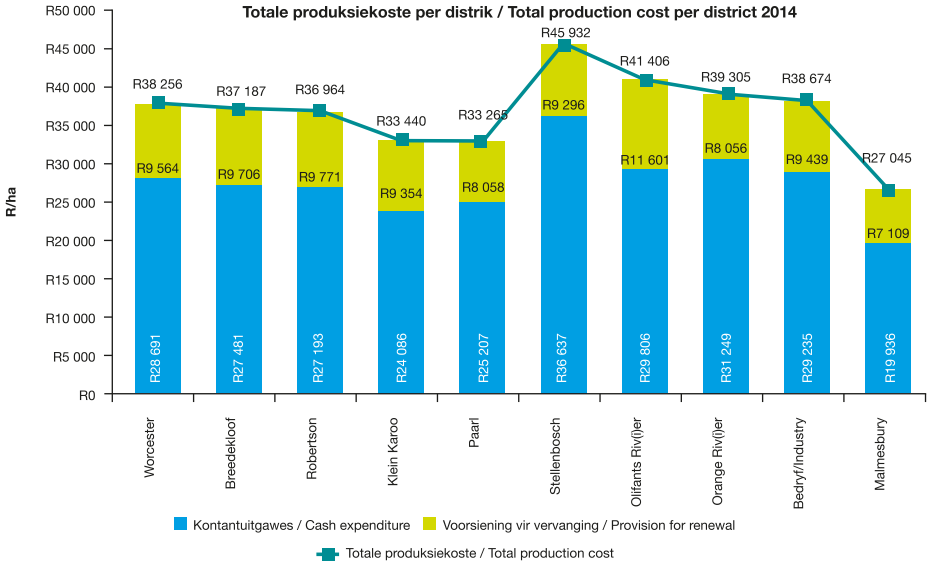
The analysis applies to overall grapevine production (bearing as well as non-bearing hectares) and the cost analysis makes no distinction between cultivars and specific blocks. The greater majority of participants are diversified and differ with regard to farm size. The report represents industry average figures, calculated by determining the weighted average of all participants. The Malmesbury district is always evaluated separately and does not form part of industry average figures, in view of the fact that this study group cultivates a large component of dryland vineyards, which require an alternative production, cost and capital structure.

Die koste van wyndruifproduksie / The cost of wine grape production

Die jaarlikse koste wat aangegaan is om die 2014-oes voor te berei, het uit kontantuitgawes en voorsiening vir vervanging bestaan, alle belasting, rente en ondernemersloon verpligtinge uitgesluit. Die bedryfsgemiddelde totale produksiekoste (Malmesbury uitgesluit) het sedert 2013 met 8% na R38 674/ha in 2014 toegeneem.

The annual cost incurred to prepare the 2014 crop comprised cash expenditure and provision for replacement, excluding all tax, interest and entrepreneurial remuneration. Compared to 2013 the industry average total production cost (excluding Malmesbury) increased by 8% to R38 674/ha in 2014.





Kontantuitgawes

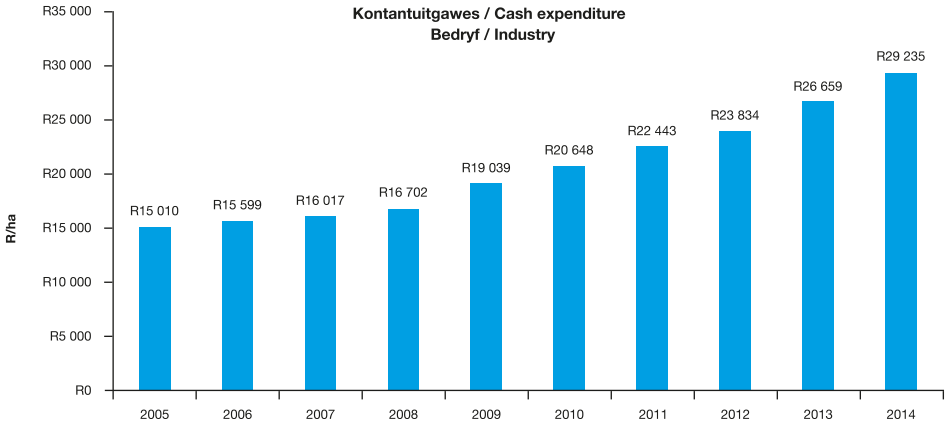
Kontantuitgawes word as direkte koste, arbeid, meganisasie, vaste verbeteringe en algemene uitgawes gespesifiseer. Totale kontantuitgawes toon 'n 10% styging sedert 2013 tot R29 235/ha in die 2014-oesjaar.

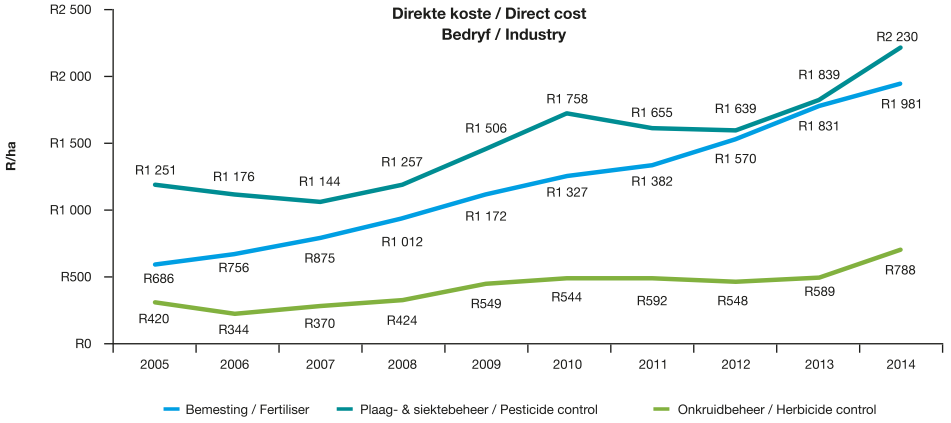
Hierdie verhoging word hoofsaaklik aangevuur deur die eerste jaar wat die verhoogde minimumloon ten volle in werking getree het, veral in die distrikte waar daar 'n groter afhanklikheid op seisoenale arbeid was. Dit het bygedra tot die verhoogde komponent wyndruiwe wat meganies gepars word, asook al hoe meer praktyke, byvoorbeeld snoei wat meganies hanteer word. Die rekord-oes het ook tot die verhoging bygedra weens verhoogde insette wat verlang word, sodat wyndruiwe winsgewend vir 'n spesifieke wyndoelwit geproduseer word.

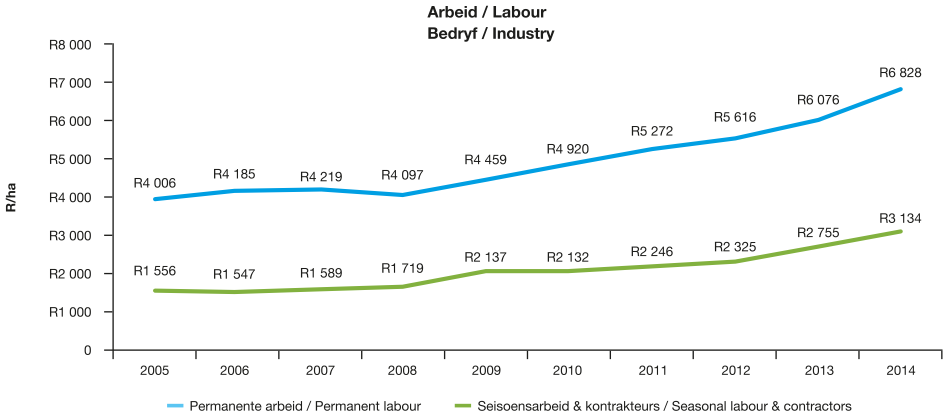
Cash expenditure

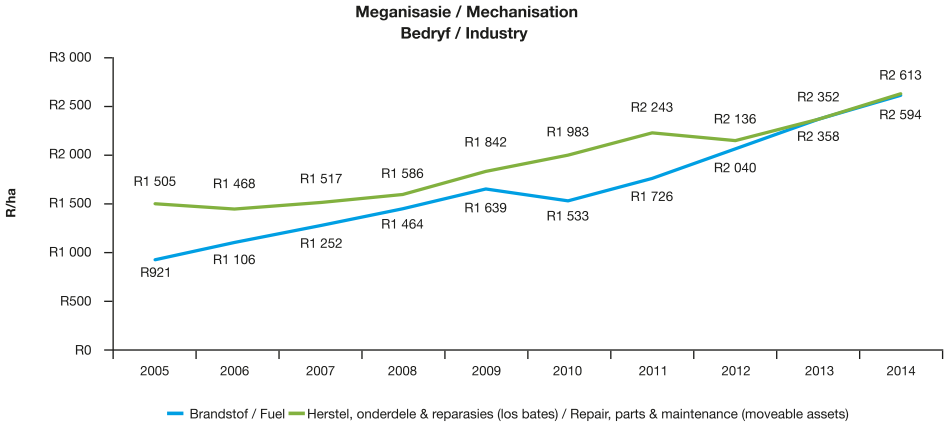
Cash expenditure is specified as direct cost, labour, mechanisation, fixed improvements and general expenses. Total cash expenditure indicates a 10% increase from 2013 to R29 235/ha in the 2014 production year.

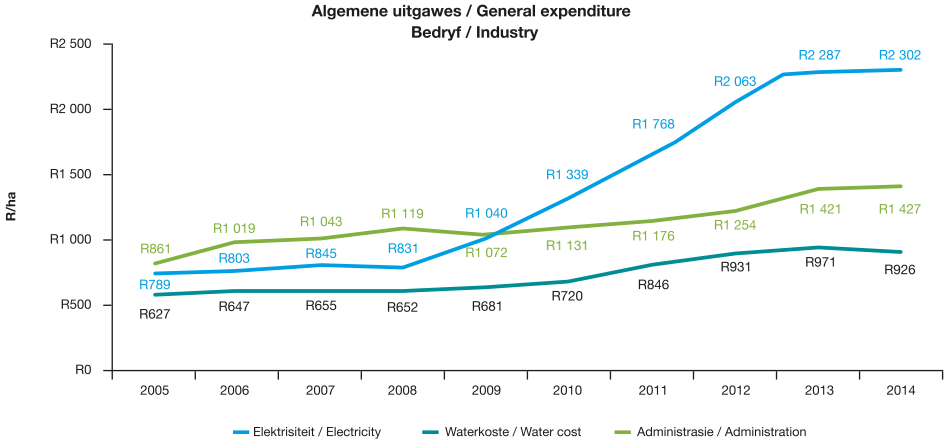
The increase is driven mainly by the increased minimum wage – this being the first financial year when it was applied in full – especially in the districts that rely more heavily on seasonal labour. This contributed to the increased mechanisation component, including an increase in alternative practices such as mechanical pruning. The record crop also contributed to the increase, seeing that increased inputs are required to produce wine grapes profitably for a specific wine style objective.











Die kostesamestelling verskil egter tussen die onderskeie areas weens die mate van meganisering, alhoewel die totale produksiekoste nie noemenswaardig tussen die areas verskil nie. Noukeurige kostebestuur, met die balans tussen wyndoelwit en insetbehoefte per blok, bly krities in siklusse van onder-inflasie inkomstestygings.

The cost component differs among the various areas due to the level of mechanisation, although the total production cost does not differ significantly from one area to the next. Stringent cost management, with a balance between wine style objective and input requirement for each block, remains critical in cycles of sub-inflationary increases in income.

Samestelling van jaarlikse kontantuitgawes / Composition of annual cash expenditure
Bedryf / Industry

Voorsiening vir vervanging

Produksiekoste word nie net tot kontantuitgawes beperk nie, maar kapitale items moet ook oor tyd vervang word, om sodoende die besigheid in stand te hou en dit sorg vir 'n volhoubare besigheidsmodel. Trekkers, gereedskap, ander produksiemiddele, wingerde en geboue gaan agteruit en moet vervang word, dus moet die aankoopwaarde van die item oor 'n spesifieke leeftyd verhaal word. Deur die beginsel 'voorsiening vir vervanging' te gebruik, word 'n groter bedrag as in die geval van 'depresiasie' verhaal. Dit spreek die probleem van reglynige waardevermindering tot 'n mate aan.

Provision for renewal

Production cost is not only limited to cash expenditure; capital items also have to be renewed in due course of time so as to maintain the business as a running concern and ensure a sustainable business model. Tractors, tools, other means of production, vineyards and buildings deteriorate and have to be renewed, therefore the purchase value of the item has to be recovered over a specific lifetime. By using the principle 'provision for renewal', a larger amount is recovered than in the case of 'depreciation'. To a certain extent this addresses the problem of rectilinear depreciation in value.

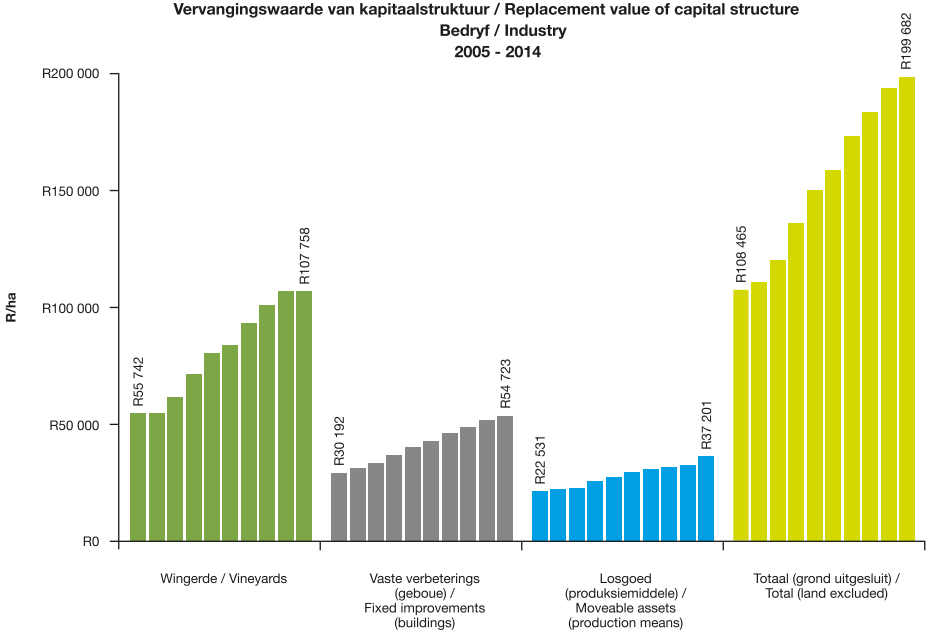
Met die berekening van voorsiening vir vervanging word items oor verskillende termyne teen vervangingswaarde afgeskryf:

Geboue	60 jaar
Wingerde	20 jaar
Los bates / produksiemiddele	7 - 15 jaar

When calculating provision for renewal, items are written off over different periods at renewal value:

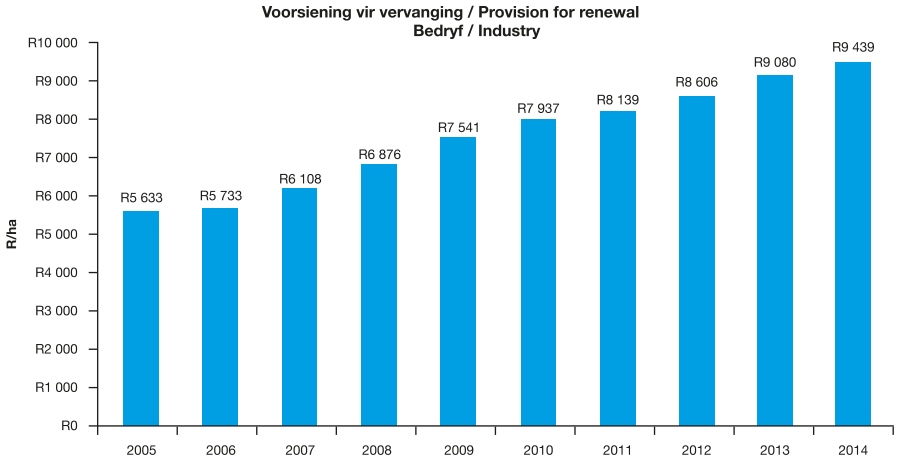
Buildings	*60 years*
Grapevines	*20 years*
Moveable assets / means of production	*7 - 15 years*

Vervangingswaarde van kapitaalstruktuur / Replacement value of capital structure
Bedryf / Industry
2005 - 2014



Totale voorsiening vir vervanging het in die 2014-oesjaar R9 439/ha beloop – 'n 4% styging sedert 2013.

Total provision for renewal amounted to R9 439/ha in the 2014 production year – a 4% increase from 2013.

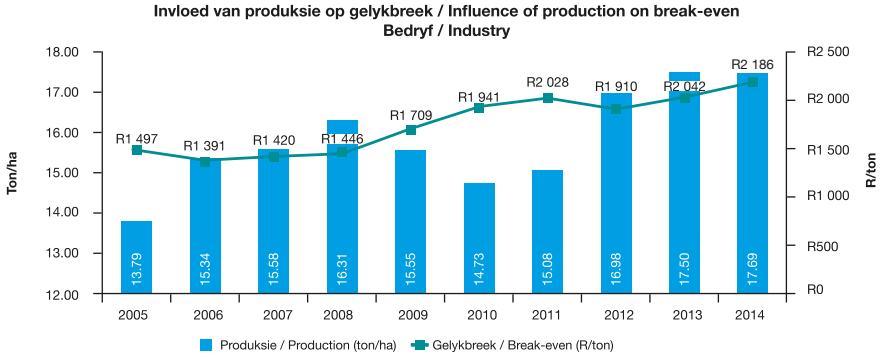


Gelykbreek

Die impak van verhoogde produksie is wesenlik op die gelykbreekprys van die totale produksiekoste in rand per ton. Totale produksiekoste per hektaar, wat met 8% sedert 2013 gestyg het, het daartoe gelei dat die gelykbreek in terme van rand per ton van R2 042/ton na R2 186/ton in 2014 toegeneem het. Anders gestel: die eerste R2 186 wat die produsent gedurende die 2014-oes vir 'n ton druiwe ontvang het, behoort vir totale produksiekoste aangewend te word – geen ondernemersloon, rente of belasting is nog in berekening gebring nie.

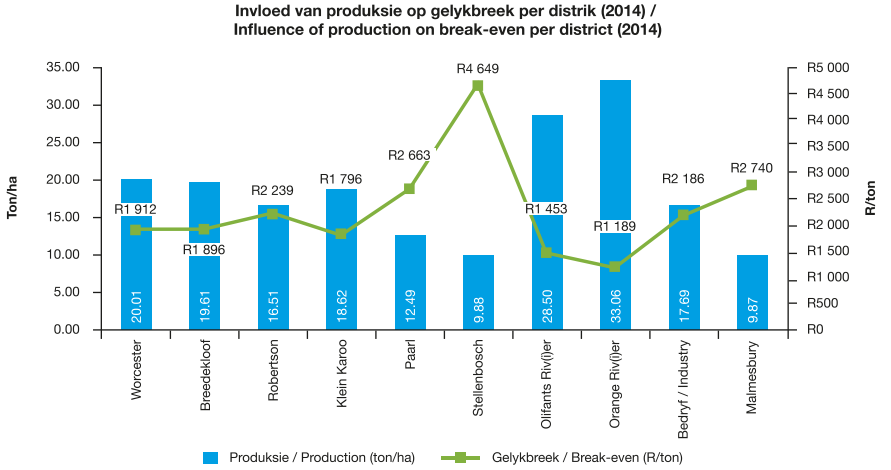
Break-even

The impact of increased production is significant on the break-even price of the total production cost in rand per ton. Total production cost per hectare, which increased by 8% from 2013, caused the break-even in terms of rand per ton to increase from R2 042/ton to R2 186/ton in 2014. In other words: the first R2 186 a producer received for a ton of grapes during the 2014 harvest, should be applied for total production cost – no entrepreneurial remuneration, interest or tax has been taken into account yet.



Die gemiddelde opbrengste verskil noemenswaardig tussen die distrikte, asook tussen die verskillende kultivars, terwyl die produksiekoste nie noemenswaardig verskil nie. Dit gee aanleiding tot groot verskille in gelykbreekprys ten opsigte van totale produksiekoste in die onderskeie distrikte en tussen die verskillende kultivars.

The average yields differ considerably among the districts, as well as among the various cultivars, while the production cost does not differ to the same extent. This gives rise to large differences in break-even price in terms of total production cost in the respective district and among the various cultivars.



PRODUKSIEKOSTE VIR WYNDRUIWE – KOSTE AS RAND PER HEKTAAR (2014-OES)
PRODUCTION COST FOR WINE GRAPES – COST AS RAND PER HECTARE (2014 HARVEST)

DISTRIK / DISTRICT	Stellenbosch	Paarl	Robertson	Breedekloof	Olifants Riv(i)er	Worcester	Oranje Riv(i)er	Klein Karoo	Bedryf Industry	Malmesbury
KOSTESTRUKTUUR / COST STRUCTURE				R/ha						
DIREKTE KOSTE / DIRECT COST	**5 333**	**4 297**	**5 770**	**6 315**	**5 723**	**6 645**	**2 950**	**4 365**	**5 382**	**3 883**
SAAD / SEED	126	32	64	106	15	115	56	81	75	154
KUNSMIS / FERTILISER	843	1 231	1 830	1 502	2 607	2 425	1 187	1 538	1 591	1 245
ORGANIESE BEMESTING / ORGANIC MATERIAL	45	118	129	1 018	615	200	150	310	315	41
PLAAG- & SIEKTEBEHEER / PESTICIDE CONTROL	2 903	2 042	2 414	2 365	1 661	2 474	652	1 678	2 230	1 857
ONKRUIDBEHEER / HERBICIDE CONTROL	960	571	1 007	928	415	964	583	360	788	493
HERSTEL- & BINDMATERIAAL / REPAIR & BINDING MATERIAL	457	302	326	396	409	467	322	398	383	94
ARBEID/ LABOUR #	**18 660**	**11 239**	**9 489**	**9 961**	**9 270**	**9 718**	**16 871**	**8 973**	**12 001**	**8 604**
TOESIG & BESTUURSHULP / SUPERVISION	3 435	1 182	2 208	2 012	1 881	1 143	2 092	1 359	2 039	848
PERMANENTE ARBEID / PERMANENT LABOUR	9 470	6 485	5 385	6 530	5 788	7 000	6 496	6 089	6 828	4 163
SEISOENSARBEID & KONTRAKTEURS / SEASONAL & CONTRACT WORKERS	5 755	3 572	1 896	1 419	1 602	1 575	8 283	1 524	3 134	3 593
MEGANISASIE / MECHANISATION	**6 321**	**4 837**	**6 168**	**5 639**	**7 385**	**5 962**	**5 809**	**5 537**	**5 952**	**4 788**
BRANDSTOF / FUEL	2 504	2 396	2 393	2 510	3 387	2 737	2 898	2 471	2 613	2 021
HERSTEL, ONDERDELE & REPARASIES / REPAIR, PARTS & MAINTENANCE	3 126	1 630	3 190	2 433	2 902	2 620	1 988	2 470	2 594	1 485
LISENSIES & VERSEKERING / LICENCES & INSURANCE	521	451	418	486	790	531	695	379	523	350
VERVOER GEHUUR / TRANSPORT HIRED	170	360	167	210	306	74	227	218	222	932
VASTE VERBETERINGE / FIXED IMPROVEMENTS	**1 207**	**787**	**768**	**1 331**	**737**	**1 207**	**836**	**817**	**985**	**531**
HERSTEL & ONDERHOUD / REPAIR & MAINTENANCE	1 032	604	559	1 074	500	942	427	677	763	424
VERSEKERING / INSURANCE	174	182	209	257	237	265	408	140	222	108
ALGEMENE UITGAWES / GENERAL EXPENDITURE	**5 116**	**4 048**	**4 998**	**4 237**	**6 691**	**5 159**	**4 783**	**4 395**	**4 914**	**2 130**
ELEKTRISITEIT / ELECTRICITY	1 796	1 710	2 975	2 695	2 922	2 528	1 613	1 463	2 302	721
WATERKOSTE / WATER COST	715	555	905	203	1 959	1 365	1 430	1 843	926	646
GROND- EIENDOMS- & MUN BELASTINGS / LAND- PROPERTY- & MUN TAXES	383	218	146	238	272	199	534	159	259	99
ADMINISTRASIE / ADMINISTRATION *	2 223	1 566	972	1 101	1 539	1 067	1 206	930	1 427	664
TOTALE KONTANTUITGAWES / TOTAL CASH EXPENDITURE	**36 637**	**25 207**	**27 193**	**27 481**	**29 806**	**28 691**	**31 249**	**24 086**	**29 235**	**19 936**
VOORSIENING VIR VERVANGING / PROVISION FOR RENEWAL	**9 296**	**8 058**	**9 771**	**9 706**	**11 601**	**9 564**	**8 056**	**9 354**	**9 439**	**7 109**
WINGERDE / VINEYARDS	5 379	5 398	5 443	5 510	5 005	5 589	5 300	5 432	5 388	4 593
VASTE VERBETERINGS / FIXED IMPROVEMENTS	1 148	666	936	998	1 061	903	463	661	912	600
LOSGOED OF PRODUKSIEMIDDELE / MOVEABLE ASSETS OR PRODUCTION MEANS	2 769	1 994	3 392	3 198	5 534	3 073	2 293	3 261	3 140	1 916
TOTALE UITGAWES / TOTAL EXPENDITURE	**45 932**	**33 265**	**36 964**	**37 187**	**41 406**	**38 256**	**39 305**	**33 440**	**38 674**	**27 045**
GEMIDDELDE OPP GEPLANT / AREA PLANTED (HA)	**101**	**101**	**107**	**114**	**56**	**91**	**19**	**48**	**92**	**162**
AREA ONDER BESPROEIING / AREA UNDER IRRIGATION (%)	**92%**	**95%**	**100%**	**100%**	**100%**	**99%**	**100%**	**100%**	**98%**	**31%**
OUDERDOMSAMESTELLING / AGE COMPOSITION (%)										
3 JAAR & JONGER / 3 YEARS & YOUNGER	7.83	10.74	13.80	15.40	11.24	15.41	4.16	16.53	**11.77**	9.49
TUSSEN 4 & 7 JAAR / BETWEEN 4 & 7 YEARS	16.80	11.61	19.60	14.44	15.12	18.76	24.57	14.90	**16.32**	10.09
TUSSEN 8 & 15 JAAR / BETWEEN 8 & 15 YEARS	38.58	50.08	33.56	36.53	37.24	35.14	41.54	43.70	**39.38**	59.07
TUSSEN 16 & 20 JAAR / BETWEEN 16 & 20 YEARS	18.32	18.48	18.11	17.90	17.89	14.14	17.05	17.86	**17.69**	16.13
OUER AS 20 JAAR / OLDER THAN 20 YEARS	18.47	9.09	14.93	15.70	18.51	16.55	12.68	7.28	**14.85**	5.22
GEMIDDELDE OPBRENGS / AVERAGE YIELD (TON/HA)	9.88	12.49	16.51	19.61	28.50	20.01	33.06	18.62	**17.69**	9.87
KONTANTUITGAWES / CASH EXPENDITURE (R/TON)	**3 708**	**2 018**	**1 647**	**1 401**	**1 046**	**1 434**	**945**	**1 294**	**1 652**	**2 020**
TOTALE UITGAWES / TOTAL EXPENDITURE (R/TON)	**4 649**	**2 663**	**2 239**	**1 896**	**1 453**	**1 912**	**1 189**	**1 796**	**2 186**	**2 740**

Ingesluit: Voorsorgfonds, WVF, medies, beskermde klere, klerasie, bonusse, rantsoene, ongevalle / vergoeding kommisaris, ens.
Included: Provident fund, UIF, medical, protected clothes, clothing, bonus, rations, workman's compensation comission, etc.

* Ingesluit: Bankkoste, ouditeursgelde, lidmaatskappe, sekuriteit, rekenaaronderhoud, professionele dienste, kursusse/opleiding, posgeld, telefoon, skryfbehoeftes, besproeiingsmonitering en diverse uitgawes.
* Included: Banking costs, bookkeeping fees, membership fees, security, computer maintenance, professional fees, training/courses, postage, telephone, stationery, irrigation monitoring and sundries.

Kostestruktuur van top presteerders / Cost structure of top achievers

Die top presteerders word volgens beste netto boerdery inkomste (NBI) geselekteer. Top presteerders se jaarlikse kontantuitgawes (R27 334/ha) was gedurende die 2014-oesjaar minstens 7% laer as dié van die bedryf (R29 235/ha), terwyl die voorsiening vir vervanging van die top presteerders (R9 503/ha) 1% hoër was as die bedryfsgemiddeld (R9 439/ha). Totale produksiekoste van die top presteerders het R36 837/ha teenoor die bedryfsgemiddelde R38 674/ha beloop – 5% laer.

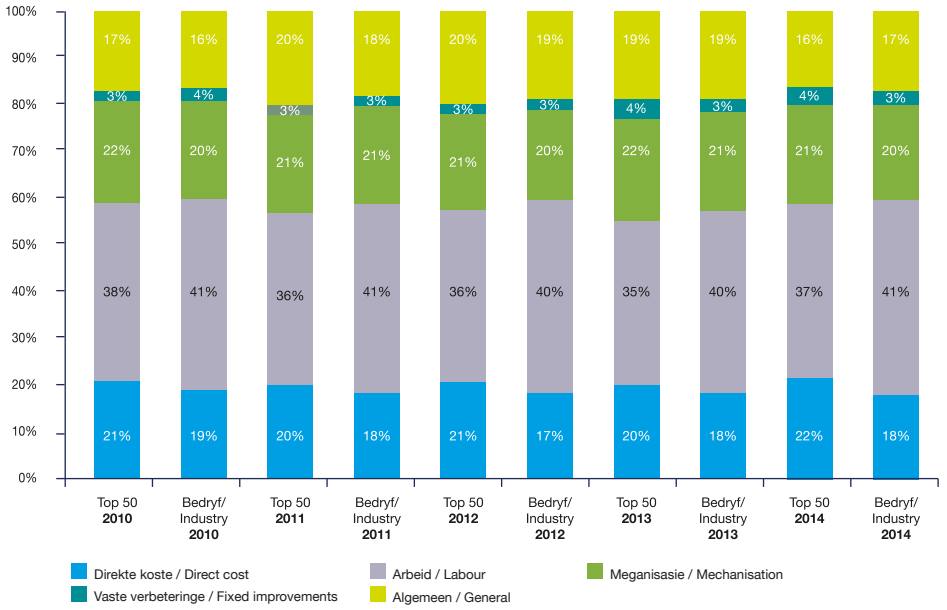
The top achievers are selected according to highest net farming income (NFI). Top achievers' annual cash expenditure (R27 334/ha) was at least 7% lower than that of the industry (R29 235/ha) during the 2014 production year, while the provision for replacement of the top achievers (R9 503/ha) was 1% higher than the industry average (R9 439/ha). Total production cost of the top achievers amounted to R36 837/ha compared to the industry average of R38 674/ha, which was 5% lower.

PRODUKSIEKOSTE VIR WYNDRUIWE (R/HA) / PRODUCTION COST FOR WINE GRAPES (R/HA)						
KOSTESTRUKTUUR / COST STRUCTURE	Top 50 2012 R/ha	Bedryf Industry 2012 R/ha	Top 50 2013 R/ha	Bedryf Industry 2013 R/ha	Top 50 2014 R/ha	Bedryf Industry 2014 R/ha
DIREKTE KOSTE / DIRECT COST	4 530	4 150	5 063	4 670	6 080	5 382
SAAD / SEED	84	107	109	110	133	75
KUNSMIS / FERTILISER	1 393	1 221	1 327	1 405	1 577	1 591
ORGANIESE BEMESTING / ORGANIC MATERIAL	417	242	569	316	779	315
PLAAG- & SIEKTEBEHEER / PESTICIDE CONTROL	1 661	1 639	1 963	1 839	2 310	2 230
ONKRUIDBEHEER / HERBICIDE CONTROL	552	548	594	589	812	788
HERSTEL- & BINDMATERIAAL / REPAIR & BINDING MATERIAL	422	393	501	411	469	383
ARBEID / LABOUR	7 937	9 630	8 751	10 639	10 216	12 001
TOESIG & BESTUURSHULP / SUPERVISION	1 568	1 689	1 648	1 808	1 720	2 039
PERMANENTE ARBEID / PERMANENT LABOUR	5 092	5 616	5 668	6 076	6 590	6 828
SEISOENSARBEID & KONTRAKTEURS / SEASONAL & CONTRACT WORKERS	1 278	2 325	1 435	2 755	1 906	3 134
MEGANISASIE / MECHANISATION	4 543	4 868	5 369	5 501	5 680	5 952
BRANDSTOF / FUEL	1 820	2 040	2 350	2 358	2 629	2 613
HERSTEL ONDERDELE & REPARASIES / REPAIR PARTS & MAINTENANCE	2 059	2 136	2 208	2 352	2 334	2 594
LISENSIES & VERSEKERING / LICENCES & INSURANCE	464	460	522	497	532	523
VERVOER GEHUUR / TRANSPORT HIRED	199	232	289	294	185	222
VASTE VERBETERINGE / FIXED IMPROVEMENTS	715	720	953	913	1 095	985
HERSTEL & ONDERHOUD / REPAIR & MAINTENANCE	488	490	721	635	875	763
VERSEKERING / INSURANCE	227	230	231	278	220	222
ALGEMENE UITGAWES / GENERAL EXPENDITURE	4 328	4 466	4 670	4 936	4 263	4 914
ELEKTRISITEIT / ELECTRICITY	2 269	2 063	2 245	2 287	2 036	2 302
WATERKOSTE / WATER COST	861	931	963	971	803	926
GROND- EIENDOMS- & MUN BELASTINGS / LAND- PROPERTY- & MUN TAXES	172	218	222	257	224	259
ADMINISTRASIE / ADMINISTRATION	1 026	1 254	1 241	1 421	1 201	1 427
TOTALE KONTANTUITGAWES / TOTAL CASH EXPENDITURE	22 054	23 834	24 806	26 659	27 334	29 235
VOORSIENING VIR VERVANGING / PROVISION FOR RENEWAL	8 815	8 606	9 509	9 080	9 503	9 439
WINGERDE / VINEYARDS	5 143	5 082	5 509	5 408	5 449	5 388
VASTE VERBETERINGS / FIXED IMPROVEMENTS	910	832	936	880	888	912
LOSGOED OF PRODUKSIEMIDDELE / MOVEABLE ASSETS OR PRODUCTION MEANS	2 761	2 691	3 063	2 792	3 166	3 140
TOTALE UITGAWES / TOTAL EXPENDITURE	30 869	32 439	34 315	35 739	36 837	38 674

Die persentasie samestelling van top presteerders se kontantuitgawes verskil ook van die bedryfsgemiddeld. Direkte kostes by top presteerders was gedurende die drie oorsigjare ietwat hoër as dié van die bedryf, hoofsaaklik vanweë groter spandering aan bemesting. Die meganisasiekomponent is by top presteerders groter en arbeid kleiner as die bedryfsgemiddeld. Totale arbeidskoste van top presteerders is ook laer as die bedryfsgemiddeld. Gesien in die lig hiervan wil dit voorkom of die top presteerders tot 'n mate meer gemeganiseerd is ten koste van arbeid, of arbeid word meer produktief aangewend. Die ander kostekomponente toon egter nie veel verskille nie.

The percentage composition of top achievers' cash expenditure also differs from the industry average. Top achievers' direct costs were slightly higher than that of the industry during the three years under review, mainly due to greater spending on fertiliser. Top achievers' mechanisation component is bigger, while the labour component is smaller than the industry average. Total labour cost of top achievers is also below the industry average. In view of the above it seems as though the top achievers are more mechanised at the expense of labour, or labour is applied more productively. The other cost components do not differ much.

Samestelling van jaarlikse kontantuitgawes (top presteerders teenoor bedryfsgemiddeld) / Composition of annual cash expenditure (top achievers compared to industry average)



Hoewel die kostestruktuur van top presteerders van die bedryfsgemiddeld verskil wat betref samestelling en werklike randwaarde, was dit inkomste per hektaar – hoofsaaklik aangedryf deur produksie – wat in 2014 vir die vyfde agtereenvolgende jaar die aansienlike verbetering in NBI bewerkstellig het.

Die ouderdomsamestelling van wingerd oor die drie-jaar oorsigperiode toon nie wesenlike verskille nie. Beide groeperings beskik na regte oor 'n aanvaarbare ouderdomsamestelling.

Although the cost structure of top achievers differs from the industry average with regard to composition and actual rand value, it was income per hectare – mainly fuelled by production – that resulted in the considerable improvement in NFI for the fifth consecutive year in 2014.

The age composition of grapevines over the three year period under review does not differ much. For both groups the age composition is quite acceptable.

Wat doen top presteerders anders? / What sets top performers apart?

Die volgende korttermyn tegniese praktyke het oor die afgelope drie tot vyf jaar die winsgewendheid van individuele wynprodusente 'n hupstoot gegee.

Snoeimetodes

In 'n poging om produksie te verhoog, poog produsente om oogladings tydens snoei te verhoog deur die toepassing van verskillende snoeipraktyke. Die aantal oë word toegeken met inagneming van die groeikrag – geiler stokke kry dus meer of langer draers en 'n hoër oogladings. Verskillende snoeimetodes/-stelsels word ook vir verskillende wyndoelwitte toegepas.

Lowerbestuurspraktyke

Lower word bestuur om vegetatiewe groei te akkommodeer sonder verlies aan vrugbaarheid en met behoud van kwaliteit. Groot fokus word geplaas op lig in die lower en suier-, top- en blaarbreek-aksies word uitgevoer om te verhoed dat stokke te dig en onvrugbaar raak. Produsente poog ook om op arbeid te bespaar deur sekere praktyke uit te skakel of af te skaal. Só word wingerde onder andere meer toegelaat om oop te lê (sprawl) om voldoende deurlugting en beligting te verseker. Voorheen is voorkeur gegee aan vertikale lootposisionering (VSP) waar al die lote tussen die loofdrade ingedruk word en verdigting maklik kan plaasvind indien daar nie gesuier word nie.

Bemesting en besproeiing

Groeikrag het 'n groot impak op produksie en produsente pas hul bemestings- en besproeiingspraktyke volgens spesifieke wyndoelwitte toe. Premium-blokke het matige groei en drag wat in balans is, terwyl bulkwynblokke sterker groeikrag het wat 'n groter lower en drag kan akkommodeer. Besproeiing en bemesting word hierby aangepas.

Blokke met hoër produksies word dikwels geassosieer met:

- Goed gedreineerde grond
- Diep grondvoorbereiding
- Meer stikstof (N)
- Luukse watervoorsiening (nie te veel nie – risiko van versuiping).

Tekortbesproeiing ("RDI") word slegs toegepas indien die wynprys dit regverdig.

The following short-term technical practices improved the profitability of individual wine producers over the past three to five years.

Pruning methods

In an attempt to increase production, producers attempt to increase bud load during pruning by means of various pruning practices. The number of buds allocated depends on vigour – grapevines that are more vigorous have more spurs or longer bearers – in other words, a higher bud load. Moreover, different pruning methods/systems are used for different wine objectives.

Canopy management practices

Canopies are managed to accommodate vegetative growth without loss of fertility, while retaining quality. There is considerable focus on sunlight penetration within the canopy, and suckering techniques, topping and leaf removal are performed to prevent grapevine canopies from becoming too dense and infertile. Producers also attempt to save on labour by eliminating or downscaling certain practices. By allowing certain grapevines to sprawl in order to ensure sufficient aeration and light penetration, shoots do not need to be tucked into wires as required with vertical shoot positioning systems. The latter practice could be responsible for too dense canopies unless proper suckering takes place.

Fertilisation and irrigation

Vigour has a great impact on yield; therefore producers apply their fertilisation and irrigation practices according to specific wine objectives. The growth and yield in premium blocks are moderate and in balance, whereas bulk wine blocks are more vigorous in order to accommodate larger canopies and yields. Irrigation and fertilisation are adjusted accordingly.

Blocks with high yield are often associated with:

- *Well-drained soil*
- *Deep soil preparation*
- *More nitrogen (N)*
- *Abundant water provision (not too much – risk of drowning).*

Deficit irrigation ("RDI") is applied only if it is justified by the price of the wine.

Belyn praktyke met die wyndoelwit

Wingerdbestuur het tot 'n groot mate verskuif vanaf slegs gehalte teen alle koste na winsgewendheid teen die regte gehalte. Produsente belyn dus hul praktyke met die uiteindelike wyndoelwit en druiweprys. 'n Langtermynpraktyk wat vorentoe 'n groot rol gaan speel, is die gebruik van nouer plantwydtes, en spesifiek nouer rywydte, wat meer rye per hektaar gee.

Alternatiewe prieelstelsels

Die keuse van prieelstelsel het 'n baie groot impak op winsgewendheid, en hoewel nog in die beginfase, gebruik ál meer produsente alternatiewe prieelstelsels of bestuur hul bestaande stelsel(s) anders.

Alternatiewe prieelstelsels kan:

- Produksie (ton/ha) verhoog deurdat verhoogde effektiewe blaaroppervlak 'n groter oes kan rypmaak
- Arbeidskostes verlaag, byvoorbeeld ooplêstelsels teenoor VSP
- Sonligpenetrasie verbeter
- Tot meer gebalanseerde groeikrag lei
- Tot beter gehalte teen 'n hoër produksie aanleiding gee, vanweë groter effektiewe lowers.

Uitkap van nie-winsgewende blokke

Laer-produserende blokke of dié waarvan die druiwe nie meer in aanvraag is nie, word uitgekap.

Doeltreffende arbeidsbestuur

As deel van beter algemene kostebestuur, word arbeid meer doeltreffend bestuur deur onder andere te meganiseer waar moontlik en gebruik te maak van meer opgeleide arbeiders waar hande-arbeid wel benodig word.

Plant nuwe wingerde aan

Slegs winsgewende produsente plant tans nuwe wingerde aan, maar doen fyn beplanning vir beter produksies met betrekking tot die grond, kultivar, onderstok, klone, prieel, besproeiing, bemesting, snoei en lowerbestuur.

Tydsberekening van aksies

Die korrekte tydsberekening van verskillende wingerdaksies is baie belangrik – dit kan kostes bespaar en effektiwiteit verbeter. Feitlik alle aksies vereis 'n bepaalde tyd; verbeur dit en betaal die gevolge.

Align practices with the wine objective

Viticultural management has shifted to a large extent from quality alone at all costs, to profitability combined with the right quality. Producers are therefore aligning their practices with the eventual wine objective and grape price. A long-term practice that is set to play a significant role in the future, is the use of narrower plant widths, and specifically narrower row width, which gives more rows per hectare.

Alternative trellising systems

The choice of trellis system has an enormous impact on profitability, and although it is early days yet, more and more producers are using alternative trellis systems, or manage their existing system(s) differently.

Alternative trellis systems can:

- *Increase yield (ton/ha), as a larger effective leaf surface area is able to ripen a larger crop*
- *Reduce labour costs, for example sprawling systems versus vertical positioning*
- *Improve sunlight penetration*
- *Result in more balanced vigour*
- *Result in improved quality and higher yield, due to bigger effective canopies.*

Uprooting of non-profitable blocks

Blocks with low yields, or blocks with grapes that are no longer in demand, are uprooted.

Efficient labour management

As part of improved general cost management, labour is managed more efficiently by means of mechanisation, inter alia, where possible, and where manual labour is required, by making use of more skilled labourers.

Plant new vineyards

Only producers who make a profit are currently planting new vineyards, following meticulous planning for improved yields with regard to the soil, cultivar, rootstock, clones, trellis, irrigation, fertilisation, pruning and canopy management.

Timing of actions

Correct timing of various vineyard activities can go a long way to reducing costs and increasing the effectiveness of operations, where late action often comes with extra costs. Just about every activity has it's time; miss it and it will cost you.

Teikeninkomste (2014-oes) / Target income (2014 harvest)

Dit is van uiterste belang dat produsente en ander rolspelers in die wynbedryf weet wat die teikeninkomste per hektaar moet wees om te verseker dat redelike en aanvaarbare ekonomiese opbrengste gerealiseer word. Om die teikeninkomste te bepaal word die totale produksiekoste, 'n aanvaarbare ondernemersloon, asook 'n realistiese opbrengs op kapitaalbelegging in berekening gebring. Sodoende word die teikeninkomste per hektaar bepaal, wat na gelang van verskillende produksies aangepas moet word om teikenpryse vir spesifieke produkte te bepaal. Hierdie syfers is slegs 'n gemiddelde teikeninkomste per distrik ten opsigte van Produksieplan-deelnemers en die ideaal is dat elke produsent sy eie individuele teikeninkomste bepaal na gelang van sy plaasgrootte, kostestruktuur, ens.

It is important that producers and other role players are informed of what their target income per hectare should be to ensure that reasonable and acceptable economic yields are obtained. Total production cost, entrepreneurial remuneration and a realistic return on capital investment are all taken into account to determine the total target income. After the target income per hectare has been calculated, it should be divided according to varying levels of production in order to determine target prices for specific products. The target income guidelines shown here represent the average for all the participants of the Production Plan per district and producers should ideally calculate their individual target income according to their own cost structure, farm size, etc.

TEIKENINKOMSTE RIGLYNE PER HEKTAAR (2014) / TARGET INCOME GUIDELINES PER HECTARE (2014)

DISTRIK / DISTRICT	Stellenbosch	Paarl	Robertson	Breedekloof	Olifants Riv(i)er	Worcester	Orange Riv(i)er	Klein Karoo	Bedryf / Industry	Malmesbury
Plaasgrootte / Farm size (ha)	40	40	40	40	40	40	40	40	40	70
	R/ha									
Totale kontantuitgawes **Total cash expenditures**	**36 637**	**25 207**	**27 193**	**27 481**	**29 806**	**28 691**	**31 249**	**24 086**	**29 235**	**19 936**
Voorsiening vir vervanging Provision for renewal	9 296	8 058	9 771	9 706	11 601	9 564	8 056	9 354	9 439	7 109
Teikeninkomste na produksiekoste **Target income after production cost**	**45 933**	**33 265**	**36 964**	**37 187**	**41 406**	**38 255**	**39 305**	**33 440**	**38 674**	**27 045**
Rente op belegging (vestigingskoste – R138 000/ha) Interest on investment (establishment cost – R138 000/ha)	11 040	11 040	11 040	11 040	11 040	11 040	11 040	11 040	11 040	8 480
Teikeninkomste voor ondernemingsloon **Target income before entrepreneurial remuneration**	**56 973**	**44 305**	**48 004**	**48 227**	**52 446**	**49 295**	**50 345**	**44 480**	**49 714**	**35 525**
Ondernemingsloon (R34 000/maand) Entrepreneurial remuneration (R34 000/month)	10 200	10 200	10 200	10 200	10 200	10 200	10 200	10 200	10 200	5 815
Teikeninkomste per ha **Target income per ha**	**67 173**	**54 505**	**58 204**	**58 427**	**62 646**	**59 495**	**60 545**	**54 680**	**59 914**	**41 339**

TEIKENINKOMSTE RIGLYNE PER TON (2014) / TARGET INCOME GUIDELINES PER TON (2014)

Produksie per hektaar / Yield per hectare	R/ton									
5	13 435	10 901	11 641	11 685	12 529	11 899	12 109	10 936	11 983	8 268
8	8 397	6 813	7 276	7 303	7 831	7 437	7 568	6 835	7 489	5 167
10	6 717	5 451	5 820	5 843	6 265	5 950	6 055	5 468	5 991	4 134
12	5 598	4 542	4 850	4 869	5 221	4 958	5 045	4 557	4 993	3 445
15	4 478	3 634	3 880	3 895	4 176	3 966	4 036	3 645	3 994	2 756
20	3 359	2 725	2 910	2 921	3 132	2 975	3 027	2 734	2 996	2 067
25	2 687	2 180	2 328	2 337	2 506	2 380	2 422	2 187	2 397	1 654
30	2 239	1 817	1 940	1 948	2 088	1 983	2 018	1 823	1 997	1 378

Arbeidsriglyne / Labour guidelines

Arbeidsnorme / Labour norms

Arbeid is verreweg die grootste komponent van die wyndruifprodusent se jaarlikse kostes. Daarom is die effektiewe bestuur van die arbeidsmag op die plaas baie belangrik. In die volgende tabel is arbeidsnorme vir sekere aksies saamgevat wat die wyndruifprodusent sal help met die beplanning, bestuur van, en begroting vir arbeid – beide permanent en seisoenaal – deur die jaar.

Labour is by far the largest component of wine grape producers' annual expenditure. Therefore efficient management of the labour corps on the farm is of utmost importance. The following table includes labour norms for specific actions that will assist the wine grape producer to plan, manage and budget for labour – both permanent and seasonal – throughout the year.

ARBEIDSNORME / LABOUR NORMS		
Tipe aksie / Type of action	Man-ure per hektaar / Man hours per hectare	Vir eie gebruik / For own use
Wingerd uittrek / Vineyard uproot		
Bosstok / Bush vines	40 - 55	
Opleiwingerd / Trellised vineyards	1100 - 1400	
Skoonmaak van grond / Field clearing	23 - 30	
Skoonmaak van grond (trekker) / Field clearing (tractor)	25 - 35	
Verwyder ou stokke / Uproot old vines	23 - 30	
Wegry van stokke / Remove vines from site	25 - 35	
Wingerdvestiging (alle aktiwiteite) / Establishment (all activities)		
Jaar 1 / Year 1	900 - 1300	
Jaar 2 / Year 2	1000 - 2400	
Jaar 3 / Year 3	1000 - 1500	
Wingerdvestiging (gespesifiseerde aktiwiteite) / Establishment (specified activities)		
Pale plant / Plant posts	320 - 380	
Draadspan / Strain wires	70 - 90	
Besproeiing installeer / Install irrigation	170 - 200	
Opleistelsel oprig (medium tot groot) / Erect trellis systems (medium to large)	1200 - 1700	
Saai van dekgewas / Sow cover crop seed	3 - 5	
Plant van stokke / Plant vines	160 - 185	
Lê van dekplastiek / Lay plastic covering	24 - 30	
Groenlootontwikkeling / Green shoot development	230 - 300	
Winterloot op raamwerk / Winter cane on framework	110 - 125	
Oesbeheer / Crop control	65 - 80	
Ander aktiwiteite / Other activities		
Voorsnoei vir oplei / Pre-prune for trellising	30 - 37	
Skoonsnoei vir bosstok / Clear pruning for bush vines	86 - 160	
Skoonsnoei vir oplei / Clear pruning for trellising	105 - 120	
Stompsnoei vir bosstok / Blunt pruning for bush vines	45 - 55	
Stompsnoei vir oplei / Blunt pruning for trellising	42 - 62	
Gesamentlike snoei (skoon en stomp) / Collective pruning (blunt and clear)	90 - 145	
Suier intensief / Intensive offset	45 - 80	
Suier ekstensief / Extensive offset	24 - 45	
Lote deursteek / Plant shoots	20 - 36	
Top van lote / Top shoots	15 - 25	
Blare uitbreek / Remove leaves	20 - 30	
Oesbeheer / Crop control	65 - 80	
Oes van bosstok (man-ure per ton) / Harvest of bush vines (man hours per ton)	11 - 15	
Oes van oplei (man-ure per ton) / Harvest of trellis (man hours per ton)	9 - 11	

ARBEIDSNORME / LABOUR NORMS		
Tipe aksie / Type of action	Man-ure per hektaar / Man hours per hectare	Vir eie gebruik / For own use
Besproeiing in seisoen / Irrigation in season	20 - 35	
Plaagbeheer (trekker) / Pest control (tractor)	60 - 75	
Somerloofaksie / Summer foliage action	230 - 320	
Skoffel / Hand cultivate	25 - 40	

Minimum loon / Minimum wage

Minimumloonkoers vanaf 1 Maart 2015 tot 29 Februarie 2016 is soos volg:

The minimum wage from 1 March 2015 until 29 February 2016 is as follows:

Uurlikse loon / Hourly wage	R13.37 per uur / per hour
Daaglikse loon / Daily wage	R120.32 per dag / per day
Weeklikse loon / Weekly wage	R601.61 per week
Maandelikse loon / Monthly wage	R2 606.78 per maand / per month

Vestigingskoste / Establishment cost

Die vestiging van wingerd is 'n langtermyn, kapitaal-intensiewe besluit waarmee die produsent vir meer as 20 jaar moet saamleef. Dit is dus krities dat alle aspekte rondom so 'n besluit deeglik besin moet word alvorens dit geneem of uitgevoer word.

The establishment of vineyard is a long-term, capital-intensive decision, which will have an effect on the producer for the next 20 years or more. It is therefore critical that all aspects surrounding the matter are thoroughly considered before the decision is made or implemented.

Grondvoorbereiding / Soil preparation

Dit is wenslik om die volgende prosedures te volg ten einde 'n eenmalige, korrekte voorbereiding vir die meerjarige wingerd daar te stel.

(In samewerking met Braham Oberholzer, VinPro-grondkundige).

The following procedures are recommended to ensure once-off, correct soil preparation for the perennial grapevine.

(In collaboration with Braham Oberholzer, VinPro soil scientist).

Grondontledings

Chemiese regstellings, soos die uitstrooi van die regte hoeveelheid kalk vir die regstel van die grond se pH en fosforstatus, gaan gepaard met grondvoorbereiding. In die meeste gevalle lei grond wat bekalk is tot 'n pH van 6 tot 'n betekenisvolle verhoging in wortelmassas van onderstokke.

Soil analyses

Chemical adjustments such as the application of the right amount of lime to adjust the soil's pH and phosphorus status, go hand in hand with soil preparation. In most instances soil that had been limed to a pH of 6 led to a significant increase in the root mass of rootstocks.

Grondprofiel-inspeksie

Die maak van profielgate vir grondklassifikasie is nodig sodat beoordeel kan word watter bewerkingsmetode nodig sal wees. Grondverskuiwingsmaatskappye werk vandag baie nou saam met grondkundiges en dring dikwels aan by produsente dat grondkundiges eers gronde moet besigtig of klassifiseer. Netjiese profielgate wat strek tot 1 500 mm en selfs dieper bied goeie aanwysers vir besluitneming.

Soil profile inspection

It is necessary to create profile pits for soil classification, in order to determine the required cultivation method. Nowadays there is excellent collaboration between earthmovers and soil scientists, the former often urging producers to have a soil scientist view or classify the soil beforehand. Neat profile pits up to a depth of 1 500 mm and deeper are very good indicators in decision-making.

Implementkeuse / Implement selection

Wieltrekkers is lankal nie meer die oplossing vir diep grondbewerking nie, omdat kontak met die grondoppervlak te min is, genoegsame krag op die grond ontbreek en die wielglip moontlik grondkompaksie bevorder. Kruiptrekkers is die enigste kragbron wat suksesvol gebruik kan word, aangesien dit meer krag na die grond verplaas met minder kompaksie weens groter kontak tussen die rusperbande en die grondoppervlak.

Tipe vermenging

Tans is die gebruik van slootgrawers, bekend as spitdol, 'n gemaklike opsie om te oorweeg. Daar is egter min gronde wat uitstekend gepas is tot die gebruik van die spitdol; daarom word groot masjiene eerder aanbeveel. Indien lae voorkom, weens onder andere drastiese tekstuurverskille (dupleksgronde), moet versigtig omgegaan word met 'n slootgrawer wat lae vermeng, en sal 'n skuifmengdol wat lae in posisie hou, beter gepas wees.

'n Skeurploeg en skuifmengdol se aanvoorwydte – die wydte tussen die implement se skare – moet ook voor die tyd bepaal word, hoofsaaklik weens koste-implikasies en die nodigheid daarvan. Indien groot lense onversteurde grond tussen die aanvoorwydtes vermy wil word, sal hierdie keuse oordeelkundig gemaak moet word. Die lense kan gewoonlik met 'n kruisaksie verklein word. Indien daar tot dieptes van 900 mm bewerk word, moet die aanvoor twee-derdes opneem – dus 600 mm.

Tydperk van grondvoorbereiding

Die tydperk van grondvoorbereiding is baie belangrik. In té droë grond sal groot kluite, veral op die oppervlakte, breek wat 'n ongewenste situasie skep wanneer ingewerk word met dolaksies. Die grondklimaat is byvoorbeeld geskik vir bewerking wanneer 'n balletjie grond gerol kan word en met geringe druk uitmekaar kan val. Klimaat en kalkbehoefte sal dan bepaal of die grond gekruisdol moet word of anders net 'n enkele aksie sal benodig. Die vorming van groot kluite kan beperk word deur benatting van die grond vir vier ure met sprinkelbesproeiing in die orde van ± 25 mm water en 'n toelating van 48 – 72 uur daarna vir uitdroging.

Implement selection

Tractors are no longer suitable for deep soil preparation, as their soil surface contact is insufficient, there is not sufficient power available on the soil and if used, slipping wheels could add to soil compaction. Bulldozers are the only source of power that can be used successfully, as they displace more power to the soil with less compaction due to the larger contact area of the caterpillar tyres on the soil's surface.

Type of mix

Currently the use of digger loaders, known as "spit" delve, is a good option to consider. However, there are not many soils that are totally suited to the use of the "spit" delve; therefore large machines are preferred. If layers occur due to, inter alia, drastic differences in texture (duplex soils), a digger loader should be used with caution, since it mixes layers, and one would prefer a finger mix delve plough, which keeps layers in position.

The furrow width – the width between the plough-shares – of a ripper and finger mix delve plough needs to be determined well in advance, mainly due to cost implications and the necessity thereof. If you want to avoid large lenses of undisturbed soil between the furrow widths, this will have to be a carefully considered decision. Lenses can usually be reduced with a cross action. If vines are planted up to a depth of 900 mm, the furrow should be take up two-thirds – in other words 600 mm.

Period of soil preparation

The period of soil preparation is of utmost importance. In excessively dry soils, large clods will break, especially on the surface, which creates an undesirable situation when the soil is trenched. The soil climate is, for example, most optimal for cultivation when a ball of soil can be rolled and falls apart with the slightest of pressure. Climate and lime requirements will determine whether the soil should be cross-delved or alternatively require a single action. The formation of large clods can be limited if the soil is wetted for four hours with sprinkler irrigation at ± 25 mm water, followed by a drying period of 48 - 72 hours.

Opsomming

Die volgende moet in gedagte gehou word:

- Oormatige bewerking kan lei tot struktuurvernietiging en die grond, wanneer droog, sal tot poeierstof bewerk wees.
- Té wye aanvoorwydtes lei tot swak vermenging met groot onaangeraakte grondbanke/-lense.
- Die bewerkingsrigting moet korrek gekies word met die oog op ondergrondse dreinering.
- Die grondklimaat moet korrek wees – 'n té droë klimaat lei tot groot kluite en 'n té nat klimaat smeer die ondergrond.

Gereelde evaluering van grondvoorbereiding is onontbeerlik. Profielgate moet gereeld gemaak word (hou slootgrawer byderhand), sodat vordering en kwaliteit deur kundiges beoordeel kan word.

Die koste van grondvoorbereiding

Die moontlike kostes van verskillende grondvoorbereidingsaksies word in die volgende tabel opgesom. Let wel dat hierdie slegs riglyne is en dat die kostes sal wissel afhangende van grondtipe, implement-tipe en die spesifieke aksies wat deur die produsent verlang word. Die produsent moet verder self vervoerkostes in berekening bring volgens sy/haar eie situasie.

Summary

The following should be kept in mind at all times:

- *Excessive tillage can result in destruction of the structure and the soil, when dry, will have been tilled to a powdery matter.*
- *Excessively wide furrow widths result in poor mixing with large untouched soil banks/lenses.*
- *Cultivation row should be selected correctly with a view to drain the subsoil.*
- *The soil climate should be correct – a too dry climate will lead to large clods and a too wet climate will smear the subsoil.*

Regular evaluation of soil preparation is essential. That means creating regular profile pits (keep trencher handy), so that progress and quality may be judged by the experts.

Cost of soil preparation

The potential costs of certain soil preparation actions are summarised in the following table. Please note that these are only guidelines and that the actual costs will differ depending on soil type, implement type and the specific actions required by the producer. Furthermore, the producer must calculate the transport cost according to his/her own situation.

TIPE BEWERKING TYPE OF ACTION	DROË KOSTE DRY COSTS (R/HA)		DIESELVERBRUIK DIESEL USAGE	
	Caterpillar D8 / Komatsu D155	Caterpillar D9 / Komatsu D275	Caterpillar D8 / Komatsu D155	Caterpillar D9 / Komatsu D275
Rip maklike grond (wye aanvoorwydtes) Rip easy soil (wide furrow width)	R6 300	R7 350	37%	45%
Rip moeilike grond (nou aanvoorwydtes) Rip difficult terrain and soil (narrow furrow widths)	R8 400	R9 450	48%	62%
Rip en kruis maklike grond (wye aanvoorwydtes) Rip and cross easy soil (wide furrow width)	R10 500	R14 700	44%	40%
Rip en kruis moeilike grond (nou aanvoorwydtes) Rip and cross difficult terrain and soil (narrow furrow width)	R14 700	R19 950	43%	40%
Diep meng- en skuifdolploeg (sonder rip) Deep mix and delve plough (without rip)	R14 175	R17 325	44%	40%
Rip en kruisdol (nou aanvoorwydte) Rip and cross delve (narrow furrow width)	R16 800	R23 100	45%	40%
Enkeltoon rip en 3 toon kruis-mengrip Single blade rip and 3 blade cross-mix rip	R7 875	R6 300	50%	55%
Spitdol vol oppervlakte (25 ton slootgrawer) Spit delve full area (25 ton excavator)	R17 850/ha		35%	
Spitdol net op rye en opert (25 ton slootgrawer) Spit delve only on rows and ridging (25 ton excavator)	R9 450/ha		40%	
Rye opert met bulldozer (D5-D6 Cat) Ridging of rows with bulldozer (D5-D6 Cat)	R4 200/ha		26%	
Ontbossing (D8 Cat) Deforestation (D8 Cat)	R4 200 - 6 300/ha		30%	
Wingerd uitrip met vlerk (D8 Cat) Remove vines with wing (D8 Cat)	R3 150/ha		40%	
Slootgrawer (CAT 22 ton) – werkstempo afhangend van grondtipe Diggerloader (Cat 22 ton) – work tempo dependent on soil type	R525/h		45l/h	

Koste van prieelstelsels / Cost of trellis systems

Die koste van prieelstelsels word bereken deur die nuutste pryse (BTW uitgesluit) vanaf verskeie verskaffers van pale, draad en ander materiaal te verkry. Die gemiddelde pryse word in 'n teoretiese model ingevoeg om die koste van verskillende prieelstelsels met verskillende paallengtes, paalspasiërings, ens te bepaal. Dit bly dus teoretiese bedrae en kan van werklike kostes verskil. Vir 'n meer akkurate kosteberekening van prieelstelselkoste, kontak die samestellers.

Vir vertikale prieelstelsels is die pale in 6 m-vakke geplant en vir die alternatiewe stelsels is die vakke 7.5 m. Kontak die samestellers gerus om u unieke prieelstelselkoste te bepaal met verskillende vaklengtes, paallengtes en -diktes.

The cost of a trellis system is calculated by obtaining the latest prices (VAT excluded) for the poles, wire and other materials from a number of suppliers. These prices are entered into a theoretical model to calculate the cost of various trellis systems with different pole lengths, pole spacings, etc. These are therefore theoretical costs and may differ from actual costs. For a more accurate cost calculation of different trellis systems, please contact the compilers.

For the vertical trellis systems a pole spacing of 6 m is used and 7.5 m for alternative trellis systems. Feel free to contact the compilers to calculate your unique trellis system cost with different pole types and spacing.

ALTERNATIEWE PRIEELSTELSELS / ALTERNATIVE TRELLIS SYSTEMS

Tipe stelsel Type of system	Paal Pole	Ryspasiëring / Row spacing (m)				
		2.1	2.5	2.75	3	3.3
Skuinskap – 1.5 m kappaal Slanting trellis – 1.5 m slanting pole	2.4 m (50 - 75)	–	–	50 040	44 662	40 614
Skuinskap – 1.8 m kappaal Slanting trellis – 1.8 m slanting pole	2.4 m (50 - 75)	–	–	58 652	53 775	48 898
Gewelstelsel – 2.1 m paal Gable system – 2.1 m pole	2.1 m (75 - 100)	–	–	88 374	81 228	73 793
Fabrieksdak – 2.1 m paal Factory roof – 2.1 m pole	2.1 m (75 - 100)	–	–	69 926	63 497	59 438
U-stelsel U-system	2.1 m (75 - 100)	–	–		82 801	73 291
Draadgewel Wire gable	2.1 m (50 - 75)	–	–	59 393		
Lierstelsel Lyre system	2.4 m (100 - 125)	–	–	–	99 395	–
Scott Henry	2.7 m (75 - 100)	65 592	55 865	50 284	46 105	41 925
Grobbelaar	2.1 m (75 - 100)		76 385	70 684	64 983	62 211
T-kap T-system	2.4 m (75 - 100)		68 911	63 770	58 628	56 127

Daar mag soms verwarring voorkom tussen die benamings en konstruksies van verskillende vertikale prieelstelsels. Ten einde enige verwarring uit te skakel word 'n skematiese voorstelling van die stelsels voorsien met die voorgestelde benamings en afkortings.

There may be some confusion regarding the names and constructions of different vertical trellis systems. To eliminate any confusion, a schematic representation of the systems is provided, with their names and abbreviations.

VERTIKALE PRIEELSTELSELS / VERTICAL TRELLIS SYSTEMS

Prieelstelsel / Trellis system	Binne Paal Inner Pole	Ryspasiëring / Row spacing																		
		1.8	1.9	2	2.1	2.2	2.3	2.4	2.5	2.6	2.75	2.8	2.9	3	3.1	3.2	3.3
Eendraad heining One strand hedge	1.2 m (50 -75)	22 866	21 620	20 795	19 548	18 723	17 881	17 056	16 635	15 810	14 985	14 564	14 143	13 739	13 318	12 897	12 493
Tweedraad heining Two strand hedge	1.2 m (50 -75)	24 682	23 336	22 445	21 100	20 209	19 301	18 410	17 956	17 065	16 174	15 720	15 266	14 829	14 375	13 921	13 483
Driedraad heining Three strand hedge	2.1 m (75 - 100)	66 754	63 115	60 707	57 067	54 659	52 196	49 788	48 556	46 148	43 740	42 509	41 277	40 101	38 869	37 637	36 461
Vierdraad heining Four strand hedge	2.1 m (75 - 100)	68 570	64 831	62 358	58 619	56 145	53 615	51 142	49 877	47 403	44 929	43 664	42 399	41 190	39 925	38 661	37 452
Vyfdraad heining Five strand hedge	2.4 m (50 - 75)	58 064	54 903	52 808	49 646	47 551	45 418	43 323	42 257	40 162	39 095	37 001	35 934	34 906	33 839	32 773	31 744
Perold	1.8 m (100 - 125)	71 752	67 839	65 251	61 339	58 751	56 102	53 514	52 189	49 602	47 014	45 689	44 364	43 102	41 777	40 452	39 189
Dubbel Perold Double Perold	1.8 m (100 - 125)	74 460	70 399	67 713	63 653	60 967	58 219	55 533	54 159	51 473	48 787	47 413	46 038	44 726	43 352	41 978	40 666
Skuifbare Perold Movable Perold	2.1 m (100 - 125)	83 884	79 309	76 284	71 709	68 684	65 585	62 560	61 011	57 985	54 960	53 411	51 861	50 386	48 836	47 287	45 811
Vierdraad verlengde Perold Four strand extended Perold	2.1 m (125 - 150)	104 955	99 230	95 447	89 722	85 939	82 055	78 272	76 330	72 547	68 764	66 822	64 880	63 039	61 097	59 155	57 314
Vyfdraad verlengde Perold Five strand extended Perold	2.1 m (125 - 150)	103 806	98 145	94 405	88 745	85 005	81 164	77 424	75 503	71 763	68 023	66 103	64 182	62 363	60 442	58 522	56 702
Vyfdraad skuifbare verlengde Perold Movable five strand extended Perold	2.1 m (100 - 125)	84 840	80 215	77 156	72 531	69 472	66 340	63 281	61 715	58 656	55 597	54 031	52 465	50 972	49 406	47 840	46 347
Sesdraad verlengde Perold Six strand extended Perold	2.4 m (100 - 125)	94 512	89 359	85 952	80 799	77 392	73 900	70 493	68 747	65 340	61 933	60 187	58 441	56 780	55 034	53 288	51 627
Vyfdraad verlengde dubbel Perold Five strand extended double Perold	2.1 m (100 - 125)	85 732	81 058	77 967	73 293	70 202	67 037	63 946	62 364	59 272	56 181	54 599	53 016	51 507	49 925	48 343	46 834
Sesdraad dubbel verlengde Perold Six strand double extended Perold	2.4 m (100 - 125)	98 112	92 763	89 225	83 876	80 338	76 715	73 177	71 365	67 828	64 290	62 478	60 667	58 941	57 129	55 317	53 591
Vyfdraad dubbel verlengde Perold Five strand double extended Perold	2.4 m (100 - 125)	96 297	91 046	87 575	82 324	78 853	75 295	71 824	70 045	66 573	63 102	61 323	59 544	57 851	56 072	54 294	52 601
Sesdraad verlengde dubbel Perold Six strand extended double Perold	2.4 m (100 - 125)	99 005	93 607	90 036	84 638	81 068	77 412	73 842	72 014	68 444	64 874	63 046	61 218	59 476	57 648	55 820	54 078
Sewedraad verlengde dubbel Perold Seven strand extended double Perold	2.7 m (100 - 125)	112 823	106 671	102 602	96 450	92 381	88 214	84 145	82 062	77 993	73 924	71 841	69 757	67 772	65 688	63 605	61 620
Sewedraad dubbel verlengde Perold Seven strand double extended Perold	2.7 m (100 - 125)	111 931	105 827	101 791	95 687	91 651	87 516	83 480	81 413	77 376	73 340	71 273	69 206	67 237	65 169	63 102	61 133
Smart Dyson	2.4 m (100 - 125)	–	–	–	–	–	–	73 177	71 365	67 828	64 290	62 478	60 667	58 941	57 129	55 317	53 591
Meganiese stelsel (High Wire) Mechanical trellis (High Wire)	1.8 m (100 - 125)	–	–	–	–	–	–	48 967	47 753	45 388	43 022	41 808	40 594	39 442	38 228	37 014	35 862

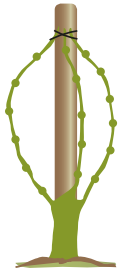
PRIEELSTELSELS / TRELLIS SYSTEMS

Kordondraad/ Cordon wire — Loofdraad/ Canopy wire

BOSSTOK (GOBLET)
BUSH VINE

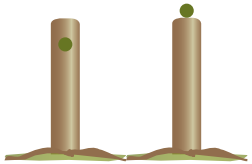
BOS / BV

STOK-BY-PAALTJIE
POSTED VINE



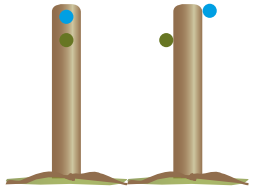
SBP / PV

EENDRAAD HEINING
ONE-STRAND HEDGE



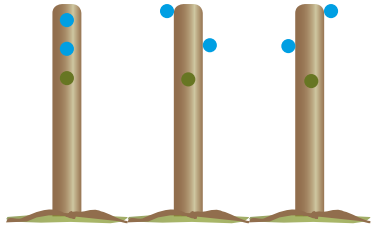
1H

TWEEDRAAD HEINING
TWO-STRAND HEDGE



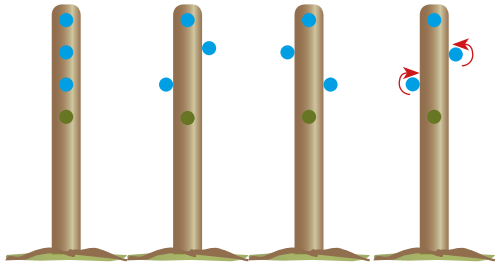
2H

DRIEDRAAD HEINING
THREE-STRAND HEDGE



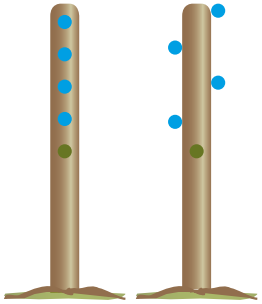
3H

VIERDRAAD HEINING
FOUR-STRAND HEDGE



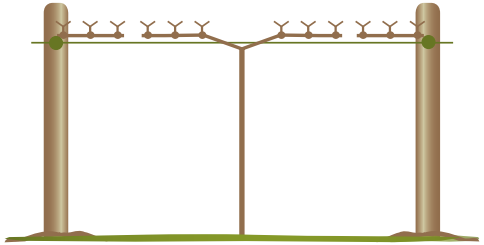
4H

VYFDRAAD HEINING
FIVE-STRAND HEDGE



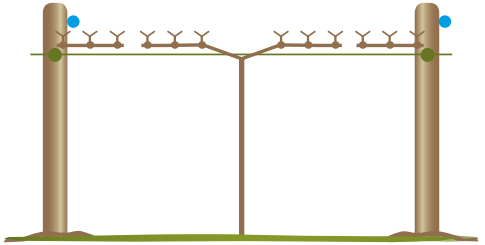
5H

EENDRAAD HEINING (MEGANIES SNOEI)
ONE-STRAND HEDGE (MECHANICAL PRUNING) "HIGH WIRE"



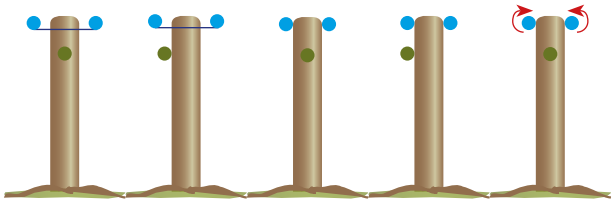
1HM

TWEEDRAAD HEINING (MEGANIES SNOEI)
TWO-STRAND HEDGE (MECHANICAL PRUNING)



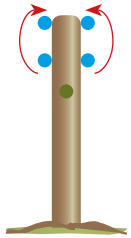
2HM

PEROLD



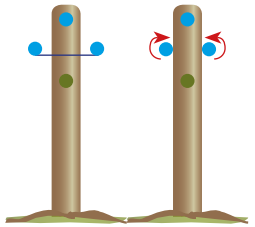
P

SKUIFBARE PEROLD
MOVEABLE PEROLD



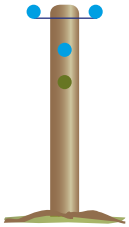
SP / MP

VIERDRAAD VERLENGDE PEROLD
FOUR-STRAND LENGTHENED PEROLD



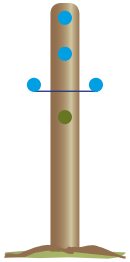
4VP / 4LP

OMGEKEERDE VERLENGDE PEROLD
INVERTED LENGTHENED PEROLD



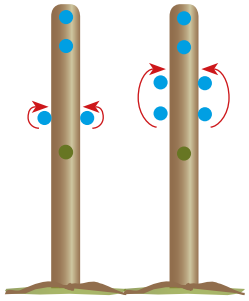
OVP / ILP

VYFDRAAD VERLENGDE PEROLD
FIVE-STRAND LENGTHENED PEROLD



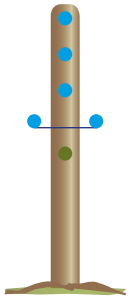
5VP / 5LP

SKUIFBARE VYFDRAAD VERLENGDE PEROLD
MOVABLE FIVE-STRAND LENGTHENED PEROLD



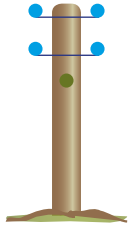
S5VP / M5LP

SESDRAAD VERLENGDE PEROLD
SIX-STRAND LENGTHENED PEROLD



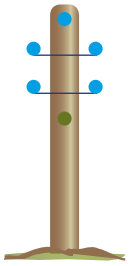
6VP /6LP

VYFDRAAD DUBBEL VERLENGDE PEROLD
FIVE-STRAND DOUBLE LENGTHENED PEROLD



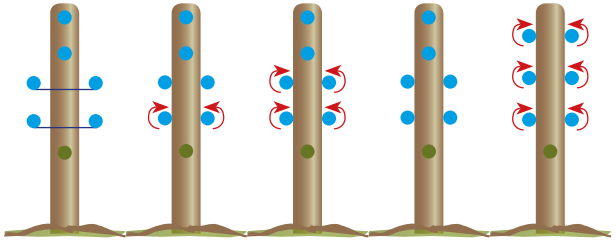
5DVP / 5DLP

SESDRAAD DUBBEL VERLENGDE PEROLD
SIX-STRAND DOUBLE LENGTH-ENED PEROLD



6DVP / 6DLP

SEWEDRAAD DUBBEL VERLENGDE PEROLD
SEVEN-STRAND DOUBLE LENGTHENED PEROLD



7DVP / 7DLP

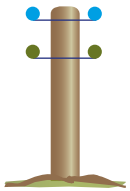
Saamgestel in samewerking met

SAWIS

PRIEELSTELSELS / TRELLIS SYSTEMS

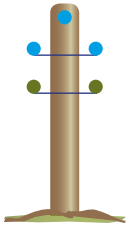
Kordondraad/ Cordon wire — Loofdraad/ Canopy wire

DUBBEL PEROLD
DOUBLE PEROLD



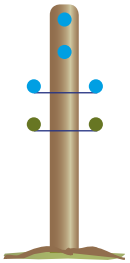
DP / DP

VYFDRAAD VERLENGDE DUBBEL PEROLD
FIVE-STRAND LENGTHENED DOUBLE PEROLD



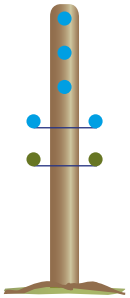
5VDP / 5LDP

SESDRAAD VERLENGDE DUBBEL PEROLD
SIX-STRAND LENGTHENED DOUBLE PEROLD



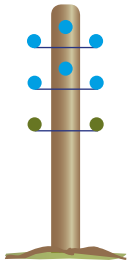
6VDP / 6LDP

SEWEDRAAD VERLENGDE DUBBEL PEROLD
SEVEN-STRAND LENGTHENED DOUBLE PEROLD



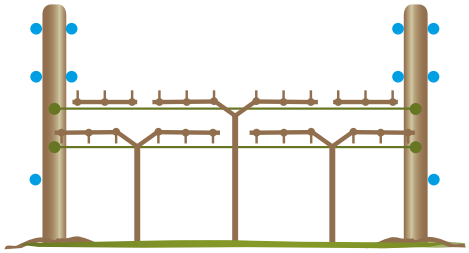
7VDP / 7LDP

DUBBEL VERLENGDE DUBBEL PEROLD
DOUBLE LENGTHENED DOUBLE PEROLD

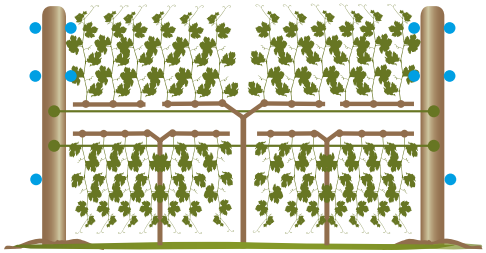


DVDP / DLDP

SCOTT-HENRY
SCOTT-HENRY

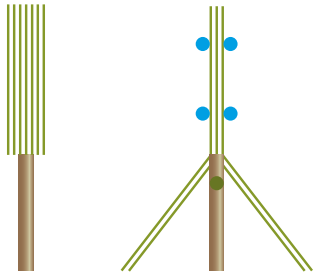


SH



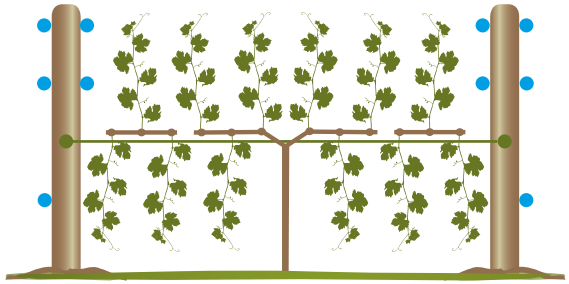
SH

BALLETROK
BALLERINA



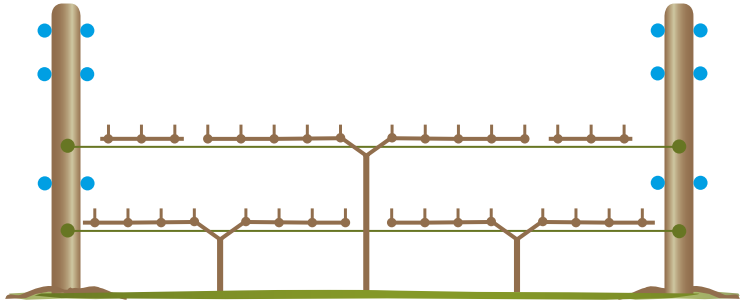
BAL

SMART-DYSON
SMART-DYSON



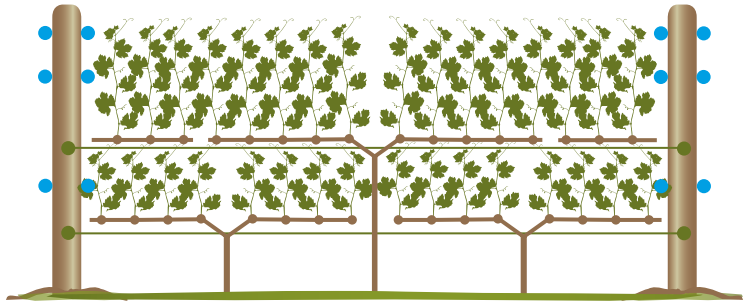
SD

RUAKURA DUBBEL VLAK PRIEEL
RUAKURA TWO TIER TRELLIS



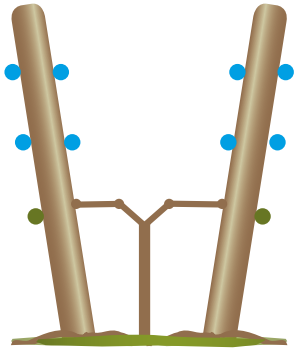
2K2T

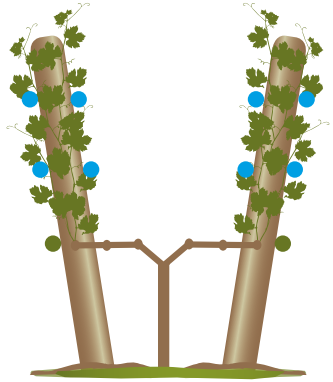
RUAKURA DUBBEL VLAK PRIEEL
RUAKURA TWO TIER TRELLIS



2K2T

LIER-STELSEL
LYRE TRELLIS





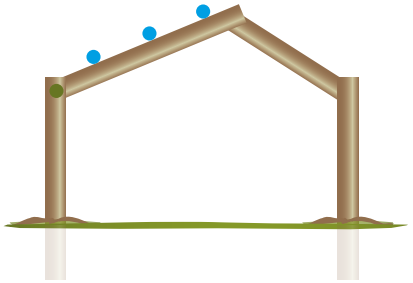
LYR

Saamgestel in samewerking met SAWIS

Kordondraad/ Cordon wire

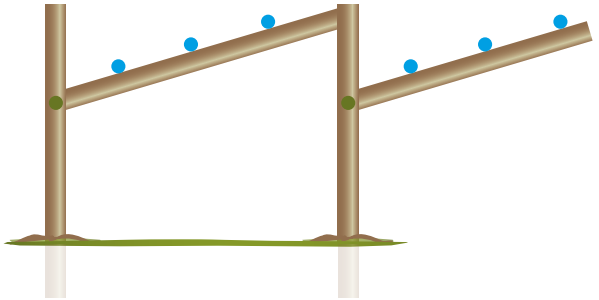
Loofdraad/ Canopy wire

FABRIEKSDAK PRIEEL
FACTORY ROOF TRELLIS



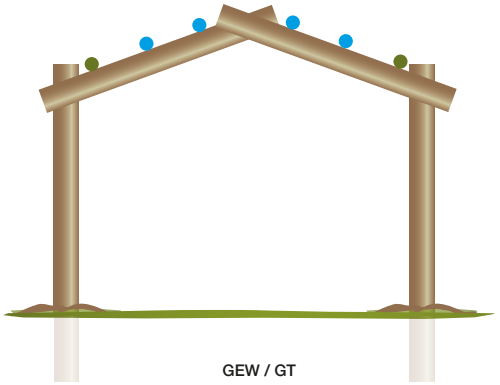
FAB / FT

TIROOL PRIEEL
TRENTINA TRELLIS



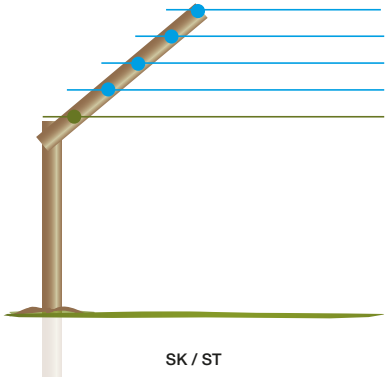
TIR / TT

GEWELSTELSEL (DUBBEL SKUINSPRIEEL) - ENKEL / DUBBEL KORDON
GABLE TRELLIS (DOUBLE SLANTING TRELLIS) - SINGLE CORDON / DOUBLE CORDON



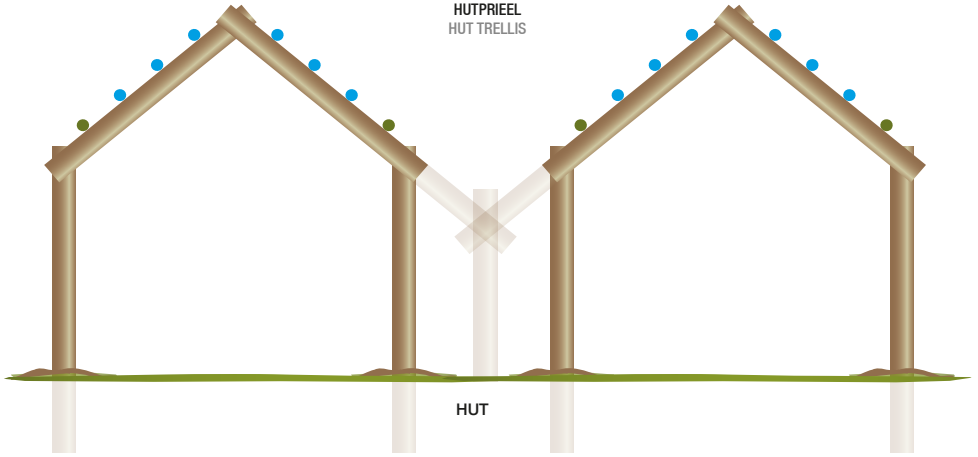
GEW / GT

SKUINSKAP PRIEEL
SLANTING TRELLIS



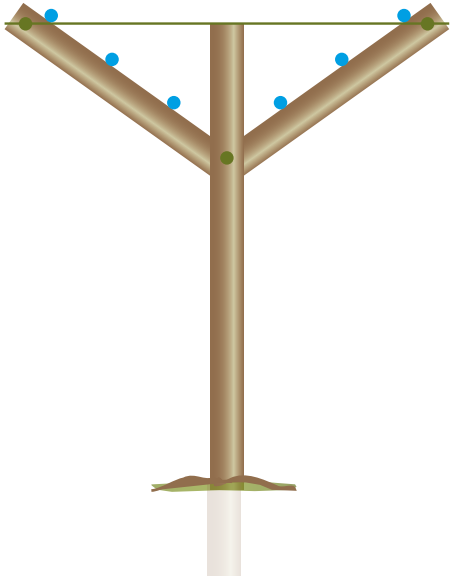
SK / ST

HUTPRIEEL
HUT TRELLIS



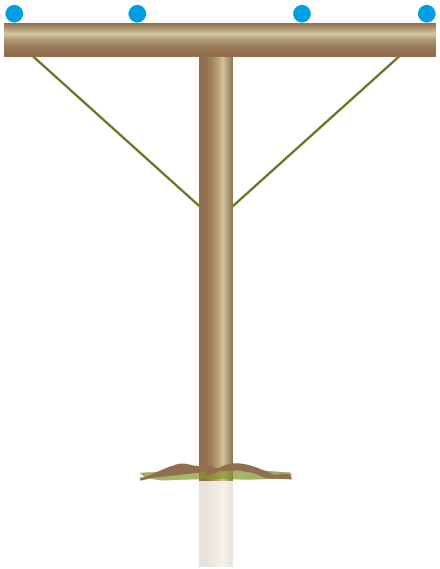
HUT

GENEVA DUBBELGORDYN
GENEVA DOUBLE CURTAIN



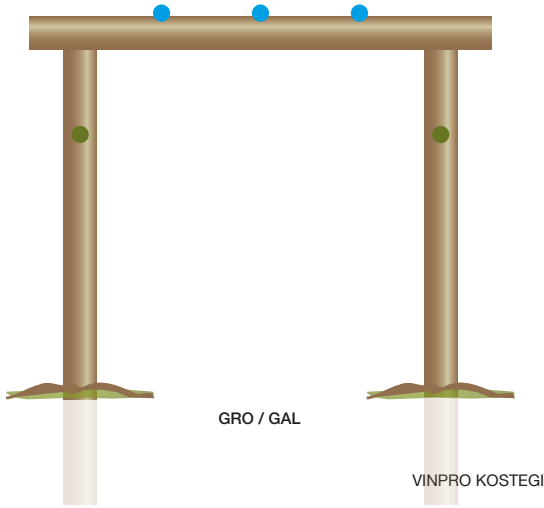
GDC

T-KAP
T-TRELLIS



TS

GROBBELAAR OF GALG
GROBBELAAR OR GALLOW



GRO / GAL

Saamgestel in samewerking met

SAWIS

Besproeiing / Irrigation

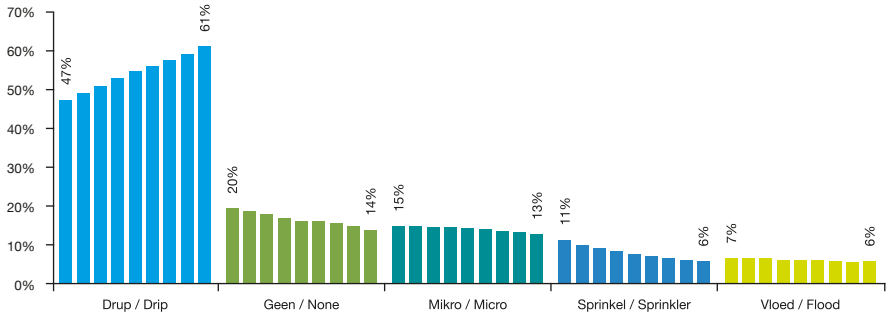
Ongeveer 61% van die totale wyndruif wingerdstand van Suid-Afrika word tans deur middel van drupbesproeiing besproei. Ander vorme van besproeiing (droëland ingesluit) het drasties afgeneem sedert 2005.

Die koste van verskillende besproeiingstelsels word saamgevat in die meegaande tabel. Hierdie algemene riglyne sluit slegs die bogrondse materiaal en sublyne – wat sal wissel na gelang van verskillende blokuitlegte – in die blok in.

Approximately 61% of the total area under wine grape vineyards in South Africa currently receives drip irrigation. Other forms of irrigation (dryland included) have decreased drastically since 2005.

The cost of various irrigation systems are seen in the accompanying table. These general guidelines only include the material installed above the soil, as well as sub-pipelines – which will differ according to various block layouts – in the block.

Besproeiingstipes / Irrigation types (2005 - 2013)



KOSTE VAN BESPROEIINGSTELSELS / COST OF IRRIGATION SYSTEMS												
Stelsel System	Ryspasiëring / Row spacing (m)											
	1.80	1.90	2.00	2.10	2.20	2.30	2.40	2.50	2.60	2.75	3.00	3.30
Drup 0.6 m Gekompenseerd Drip 0.6 m Compensated	37 575	35 525	34 159	32 109	30 743	29 377	28 010	27 327	25 961	24 594	22 545	20 495
Drup 0.6 m Nie-gekompenseerd Drip 0.6 m Non-compensated	26 208	24 778	23 825	22 396	21 443	20 490	19 537	19 060	18 107	17 154	15 725	14 295
Drup 0.75 m Gekompenseerd Drip 0.75 m Compensated	33 807	31 963	30 733	28 889	27 660	26 431	25 201	24 587	23 357	22 128	20 284	18 440
Drup 0.75 m Nie-gekompenseerd Drip 0.75 m Non-compensated	24 382	23 052	22 165	20 835	19 949	19 062	18 175	17 732	16 846	15 959	14 629	13 299
Drup 1.0 m Gekompenseerd Drip 1.0 m Compensated	30 038	28 400	27 308	25 669	24 577	23 485	22 392	21 846	20 754	19 662	18 023	16 385
Drup 1.0 m Nie-gekompenseerd Drip 1.0 m Non-compensated	23 469	22 188	21 335	20 055	19 202	18 348	17 495	17 068	16 215	15 361	14 081	12 801
Mikro (straalspuit) – direk op poli-pyp Micro (jet spray) – directly on poly-pipe	36 903	34 890	33 548	31 535	30 193	28 852	27 510	26 839	25 497	24 155	22 142	20 129
Mikro (roteerder) – op pen met sagte pypie Micro (rotate) – on pen with soft pipe	42 507	40 188	38 642	36 324	34 778	33 232	31 687	30 914	29 368	27 822	25 504	23 185
Permanente sprinkel (12 m x 12.5 m) Permanent sprinklers (12 m x 12.5 m)	23 272	23 272	23 272	23 272	23 272	23 272	23 272	23 272	23 272	23 272	23 272	23 272

Ander nuttige inligting / Other useful information

AANTAL STOKKE PER HEKTAAR / VINES PER HECTARE										
Plantafstand in ry (m) Plant distance in row (m)	Ryspasiëring / Row spacing (m)									
	1.80	1.90	2.00	2.10	2.40	2.50	2.75	2.80	3.00	3.30
1.00	5 500	5 200	5 000	4 700	4 100	4 000	3 600	3 500	3 300	3 000
1.20	4 583	4 333	4 167	3 917	3 417	3 333	3 000	2 917	2 750	2 500
1.50	3 667	3 467	3 333	3 133	2 733	2 667	2 400	2 333	2 200	2 000
1.80	3 056	2 889	2 778	2 611	2 278	2 222	2 000	1 944	1 833	1 667
2.00	2 750	2 600	2 500	2 350	2 050	2 000	1 800	1 750	1 650	1 500

Ryspasiëring (m) Row spacing (m)	Aantal rye/ha Rows/ha
1.80	55
1.90	52
2.00	50
2.10	47
2.40	41
2.50	40
2.75	36
2.80	35
3.00	33
3.30	30

STOKKIEPRYSE (SLEGS RIGLYNE) / VINE PRICES (ONLY GUIDELINES)	(Per stokkie / Per vine)
Standaard wit en rooi op P1103, R110, R99 Standard white and red on P1103, R110, R99	R11,79
Standaard wit en rooi op 101-14, SO4, Rug140 Standard white and red on 101-14, S04, Rug140	R11,90
Colombar, Chardonnay, Sémillon, SA Riesling, Shiraz, Pinot Noir, Muskadel op Ramsey, 101/14 Colombar, Chardonnay, Sémillon, SA Riesling, Shiraz, Pinot Noir, Muscadel on Ramsey, 101/14	R13,76
Standaard wit en rooi op Ramsey, 143B Standard white and red on Ramsey, 143B	R13,65
Standaard wit en rooi op US8-7 Standard white and red on US8-7	R13,76
Sultana op Ramsey Sultana on Ramsey	R19,11
Makstok Rooted scion	R8,95

Koste van meganisasie / Cost of mechanisation

Hierdie kosteriglyne help produsente om die loopkostes van sekere wingerdmasjinerie te bepaal. Dit kan ook gebruik word om te bepaal of sekere implemente vervang moet word al dan nie.

Die besit en gebruik van enige implement gaan gepaard met 'n koste. Hierdie koste bestaan uit twee komponente, naamlik veranderlike koste en vaste koste. Die vaste koste bly onveranderd, of die masjien gebruik word al dan nie. Vaste koste sluit rente (geleentheidskoste), waardevermindering, versekering en lisensiëring in.

Die veranderlike koste word bepaal deur die aantal ure wat die masjien/implement gebruik word deur die jaar. Dit sluit brandstof, herstelwerk, onderhoud en bande in.

These guidelines assist producers in determining the running costs of specific vineyard machinery. It can also be used to determine whether implements need to be replaced.

The ownership and use of any implement or machine involves a cost to the producer. This cost consists of two components, namely fixed cost and variable cost. The fixed cost relates to ownership of the machine, whether it is used or not. This includes depreciation, licensing and insurance, as well as an interest component (opportunity cost).

The variable cost is mainly determined by the total number of hours the implement is used throughout the year. This includes fuel, repair, maintenance and tyres.

Metodiek / Methodology

Dit is onmoontlik om die loopkoste 100% akkuraat te bepaal, maar die volgende metodiek word redelik algemeen gebruik. Dit sluit sekere aannames in wat in samewerking met handelaars aangepas is en die loopkoste meer toepaslik maak tot die wynbedryf.

Operateurs word nie in berekening gebring nie en produsente moet self daardie komponent bybring. Alle kostes is uitgedruk in rand per uur (uitgesluit bakkies en vragmotors). Indien die koste per hektaar benodig word, kan die volgende formule gebruik word:

rand per hektaar =
(koste in rand per uur) ÷
(hoeveelheid hektaar per uur bewerk)

It is not possible to calculate the running cost of implements 100% accurately; however the following methodology is commonly used. It includes certain assumptions which have been modified, in collaboration with dealerships, to be more suited to the wine industry.

Operators are not included in the running cost and should be included by producers. All costs are in rand per hour (except trucks and pick-ups). If the cost per hectare is required, the following equation can be used:

rand per hectare =
(cost in rand per hour) ÷
(hectares per hour cultivated)

Waardevermindering: Depreciation:	(Aankoopwaarde – skrootwaarde) ÷ leeftyd (Purchase value – salvage value) ÷ lifetime
Versekering & lisensie: Licence & insurance:	1 % van gemiddelde belegging ÷ ure per jaar 1 % of average investment ÷ hours per annum
Rentekoste: Interest cost:	8 % van gemiddelde belegging 8 % of average investment
Herstel & onderhoud: Repair & maintenance:	Spesifieke % van aankoopprys ÷ leeftyd Specific % of purchase value ÷ leeftyd
Brandstof: Fuel:	Bereken met dieselprys van R13,00 Calculated with diesel price of R13,00

4 X 2 TREKKER / TRACTOR

pK hP	kW kW	Aankoopprys Purchase value	Depresiasie Depreciation	Versekering & lisensie Licence & insurance	Rente Interest	Totale vaste koste Total fixed cost	Herstel & onderhoud Repair & maintenance	Brandstof / Fuel			Totale veranderlike koste / Total variable cost			Totale loopkoste / Total running cost		
								Lae krag Low power	Med krag Med power	Vol krag High power	Lae krag Low power	Med krag Med power	Vol krag High power	Lae krag Low power	Med krag Med power	Vol krag High power
		R	R/h	R/h	R/h	R/h	R/h	R/h	R/h	R/h	R/h	R/h	R/h	R/h	R/h	R/h
43	32	174 903	13	1	9	23	12	58	66	75	70	77	87	93	100	109
52	39	213 163	16	1	11	28	14	71	80	91	85	94	105	113	122	133
55	41	269 412	20	1	13	35	18	75	84	96	93	102	114	128	137	149
60	45	360 258	27	2	18	47	24	82	92	105	106	116	129	153	163	176
63	47	376 270	28	2	19	49	25	86	96	110	111	121	135	160	170	184
68	51	336 638	25	2	17	44	22	93	104	119	115	127	142	159	171	186
71	53	349 840	26	2	17	45	23	96	109	124	120	132	147	165	177	193
75	56	390 350	29	2	19	51	26	102	115	131	128	141	157	179	191	208
82	61	425 203	32	2	21	55	28	111	125	143	139	153	171	195	209	226
84	63	483 981	36	3	24	63	32	115	129	147	147	161	180	210	224	243
92	69	530 075	40	3	26	69	35	126	141	161	161	177	197	230	246	266
95	71	545 439	41	3	27	71	36	129	145	166	166	182	203	236	253	273

4 X 4 TREKKER / TRACTOR

pK hP	kW kW	Aankoopprys Purchase value	Depresiasie Depreciation	Versekering & lisensie Licence & insurance	Rente Interest	Totale vaste koste Total fixed cost	Herstel & onderhoud Repair & maintenance	Brandstof / Fuel			Totale veranderlike koste / Total variable cost			Totale loopkoste / Total running cost		
								Lae krag Low power	Med krag Med power	Vol krag High power	Lae krag Low power	Med krag Med power	Vol krag High power	Lae krag Low power	Med krag Med power	Vol krag High power
		R	R/h	R/h	R/h	R/h	R/h	R/h	R/h	R/h	R/h	R/h	R/h	R/h	R/h	R/h
43	32	218 338	16	1	11	**28**	15	58	66	75	73	80	89	**101**	**108**	**118**
52	39	266 099	20	1	13	**35**	18	71	80	91	89	98	109	**123**	**132**	**144**
55	41	314 735	24	2	16	**41**	21	75	84	96	96	105	117	**137**	**146**	**158**
60	45	336 219	25	2	17	**44**	22	82	92	105	104	115	128	**148**	**158**	**171**
63	47	351 162	26	2	17	**46**	23	86	96	110	109	120	133	**155**	**165**	**179**
68	51	404 079	30	2	20	**53**	27	93	104	119	120	131	146	**172**	**184**	**199**
71	53	419 926	31	2	21	**55**	28	96	109	124	124	137	152	**179**	**191**	**207**
75	56	426 719	32	2	21	**55**	28	102	115	131	130	143	159	**186**	**199**	**215**
82	61	464 819	35	3	23	**60**	31	111	125	143	142	156	174	**202**	**216**	**234**
84	63	474 752	36	3	24	**62**	32	115	129	147	146	161	179	**208**	**222**	**241**
92	69	519 966	39	3	26	**68**	35	126	141	161	160	176	196	**228**	**244**	**264**
95	71	535 038	40	3	26	**70**	36	129	145	166	165	181	202	**234**	**251**	**271**

SELFAANGEDREWE PARSMASJIEN / SELF-PROPELLED HARVESTER

Aankoopprys / Purchase price: R3 400 000

Tonne gepars Tons harvest	Jaarlikse gebruik Annual usage	Waarde-vermindering Depre-ciation	Versekering & lisensie Licence & insurance	Rente Interest	Totale vaste koste Total fixed cost	Herstel & onderhoud Repair & maintenance	Brandstof Fuel	Veranderlike koste Variable cost	Totale koste Total cost
Ton	h	R/h	R/h	R/h	R/h	R/h	R/h	R/h	R/h
1 000	91	612	206	1 851	2 669	238	169	407	3 076
1 250	114	612	165	1 481	2 258	238	169	407	2 665
1 500	136	612	137	1 234	1 983	238	169	407	2 390
1 750	159	612	118	1 058	1 787	238	169	407	2 194
2 000	182	612	103	926	1 641	238	169	407	2 048
2 250	205	612	91	823	1 526	238	169	407	1 933
2 500	227	612	82	741	1 435	238	169	407	1 842
2 750	250	612	75	673	1 360	238	169	407	1 767
3 500	318	612	59	529	1 200	238	169	407	1 607
4 000	364	612	51	463	1 126	238	169	407	1 533

SLEEP PARSMASJIEN / TRAILED HARVESTER

Purchase value: R1 400 000

Tonne gepars Tons harvest	Jaarlikse gebruik Annual usage	Waarde-vermindering Depreciation	Versekering & lisensie Licence & insurance	Rente Interest	Totale vaste koste Total fixed cost	Herstel & onderhoud Repair & maintenance	Veranderlike koste Variable cost	Totale koste Total cost
Ton	h	R/h	R/h	R/h	R/h	R/h	R/h	R/h
500	71	252	108	970	1 330	98	98	1 428
750	107	252	72	647	971	98	98	1 069
1 000	143	252	54	485	791	98	98	889
1 250	179	252	43	388	683	98	98	781
1 500	214	252	36	323	611	98	98	709
1 750	250	252	31	277	560	98	98	658
2 000	286	252	27	243	522	98	98	620
2 200	314	252	25	221	497	98	98	595
2 400	343	252	22	202	477	98	98	575
3 000	429	252	18	162	432	98	98	530

SPUITPOMPE / SPRAYPUMPS

Model	Aankoop-prys Purchase value	Jaarlikse gebruik Annual usage	Waarde-verminde-ring Depreciation	Rente Interest	Totale vaste koste Total fixed cost	Herstel & onderhoud Repair & maintenance	Totale koste sonder rente Total cost excl interest	Totale koste Total cost
	R	h	R/h	R/h	R/h	R/h	R/h	R/h
Bankiespuit / Berm sprayer	46 269	280	28	8	36	11	39	47
Onkruidspuit / Weed sprayer	31 050	280	19	5	24	7	26	31
Blower 1 ry /row (Hoë volume / High volume)	101 667	280	61	18	79	24	85	103
Nozzle 1 ry / row (Lae volume / Low volume)	149 333	280	90	26	116	35	124	151
Nozzle 2 ry / row (Lae volume / Low volume)	229 500	280	138	41	178	54	191	232
Nozzle 3 ry / row (Lae volume / Low volume)	293 000	280	176	52	228	68	244	296

SLEEPWAENS / TRAILERS

Model	Aankoop-prys Purchase value	Jaarlikse gebruik Annual usage	Waarde-vermindering Depreciation	Rente Interest	Verseke-ring & lisensie Licence & insurance	Totale vaste koste Total fixed cost	Herstel & onderhoud Repair & mainte-nance	Bande Tyres	Verander-like koste Variable cost	Totale koste Total cost
	R	h	R/h	R/h	R/h	R/h	R/h	R/h	R/h	R/h
2-wiel / 2-wheel 2.5 ton	45 000	500	4.05	4.46	3.01	11.51	1.80	0.41	2.21	13.72
2-wiel / 2-wheel 4 ton	41 750	500	3.76	4.13	2.94	10.83	1.67	0.66	2.33	13.16
2-wiel / 2-wheel 6 ton	62 500	500	5.63	6.19	3.36	15.17	2.50	0.66	3.16	18.33
4-wiel / 4-wheel 6 ton	92 000	500	8.28	9.11	3.95	21.33	3.68	1.33	5.01	26.34
4-wiel / 4-wheel 8 ton	101 000	500	9.09	10.00	4.13	23.21	4.04	1.33	5.37	28.58
4-wiel / 4-wheel 10 ton	110 000	500	9.90	10.89	4.31	25.10	4.40	3.15	7.55	32.65
Lugremme / Air brakes 10 ton	178 000	500	16.02	17.62	5.67	39.31	7.12	4.26	11.38	50.69
Lugremme / Air brakes 15 ton	185 000	500	16.65	18.32	5.81	40.77	7.40	4.26	11.66	52.43

ANDER IMPLEMENTE / OTHER IMPLEMENTS

Model	Aankoop-prys Purchase value	Jaarlikse gebruik Annual usage	Waarde-vermindering Depreciation	Rente Interest	Totale vaste koste Total fixed cost	Herstel & onderhoud Repair & maintenance	Totale koste sonder rente Total cost excl interest	Totale koste Total cost
	R	h	R/h	R/h	R/h	R/h	R/h	R/h
Topmasjien (1 ry) / Trimmer (1 row)	186 000	200	112	46	158	43	155	201
Ontblaarder / Leaf remover	199 000	200	119	49	169	46	166	215
Mulching	72 200	200	43	18	61	17	60	78
Bankieskoffel / Mechanical weeders	189 720	200	114	47	161	44	158	205
Krag eg / Power plow	98 430	200	89	24	113	34	123	147
Bossieslaner / Slasher	24 773	200	22	6	28	9	31	37
Snoeimasjien (1 ry) / Pruner (1 row)	261 397	200	235	65	300	91	327	391
Snoeimasjien (halwe ry) / Pruner (half row)	212 000	200	191	52	243	74	265	317

BAKKIES / PICK-UPS

Model	Aankoop prys BTW uitgesluit Purchase price VAT excluded	Jaarlikse gebruik Annual usage	Leeftyd Lifetime	Waarde-vermindering Depreciation	Versekering & lisensie Licence & insurance	Rente Interest	Totale vaste koste Total fixed cost	Herstel & onderhoud Repair & maintenance	Totale koste (brandstof uitgesluit) Total cost (fuel excluded)
	R	km	km	R/km	R/km	R/km	R/km	R/km	R/km
Isuzu									
KB 250 Fleetside	202 530	30 000	210 000	0.87	0.22	0.33	1.42	0.82	**2.24**
KB 250 D-TEQ Fleetside	221 622	30 000	210 000	0.95	0.24	0.37	1.56	0.90	**2.46**
KB 250 D-TEQ LE 4X4	300 226	30 000	210 000	1.29	0.33	0.50	2.11	1.22	**3.33**
KB 300 D-TEQ LX	294 292	30 000	210 000	1.26	0.32	0.49	2.07	1.19	**3.26**
KB 300 D-TEQ Extended cab LX	331 788	30 000	210 000	1.42	0.36	0.55	2.33	1.34	**3.68**
Toyota									
2.5 D-4D	205 110	30 000	210 000	0.88	0.23	0.34	1.44	0.83	**2.27**
2.5 D-4D SRX	250 948	30 000	210 000	1.08	0.28	0.41	1.77	1.02	**2.78**
2.5 D-4D SRX 4X4	300 140	30 000	210 000	1.29	0.33	0.50	2.11	1.21	**3.33**
3.0 D-4D Raider	302 720	30 000	210 000	1.30	0.33	0.50	2.13	1.23	**3.36**
3.0 D-4D Xtra cab Raider	328 176	30 000	210 000	1.41	0.36	0.54	2.31	1.33	**3.64**
Land Cruiser 4.2D Bakkie	433 182	30 000	210 000	1.86	0.48	0.71	3.05	1.75	**4.80**
Ford									
Ranger 2.2 High Rider XL	214 914	30 000	210 000	0.92	0.24	0.35	1.51	0.87	**2.38**
Ranger 2.2 4X4 XL	269 954	30 000	210 000	1.16	0.30	0.45	1.90	1.09	**2.99**
Ranger 2.2 High Rider XLS	270 814	30 000	210 000	1.16	0.30	0.45	1.91	1.10	**3.00**
Ranger 2.2 4X4 XLS	318 114	30 000	210 000	1.36	0.35	0.52	2.24	1.29	**3.53**
Ranger 3.2 SuperCab Hi-Raider XLS	332 734	30 000	210 000	1.43	0.37	0.55	2.34	1.35	**3.69**
Nissan									
NP300 2.5 TDi FLEET	186 792	30 000	210 000	0.80	0.21	0.31	1.31	0.76	**2.07**
NP300 2.5 TDi 4X4	251 034	30 000	210 000	1.08	0.28	0.41	1.77	1.02	**2.78**
NP300 Hi-Rider 2.5TDi 4X2	222 396	30 000	210 000	0.95	0.24	0.37	1.56	0.90	**2.46**
Navara 2.5dCi KingCab XE	303 752	30 000	210 000	1.30	0.33	0.50	2.14	1.23	**3.37**
Patrol 4.2TD Bakkie	426 818	30 000	210 000	1.83	0.47	0.70	3.00	1.73	**4.73**

BAKKIES / PICK-UPS									
Model	Aankoop prys BTW uitgesluit Purchase price VAT excluded	Jaarlikse gebruik Annual usage	Leeftyd Lifetime	Waarde-vermindering Depreciation	Versekering & lisensie Licence & insurance	Rente Interest	Totale vaste koste Total fixed cost	Herstel & onderhoud Repair & maintenance	Totale koste (brandstof uitgesluit) Total cost (fuel excluded)
	R	km	km	R/km	R/km	R/km	R/km	R/km	R/km
Mitsubishi									
Triton 2.5DI-D GL	176 214	30 000	210 000	0.76	0.19	0.29	1.24	0.71	**1.95**
Triton 2.5DI-D GLX	210 614	30 000	210 000	0.90	0.23	0.35	1.48	0.85	**2.33**
Triton 3.2DI-D Clubcab	257 914	30 000	210 000	1.11	0.28	0.43	1.81	1.04	**2.86**
Volkswagen									
Amarok 2.0TDI	236 242	30 000	210 000	1.01	0.26	0.39	1.66	0.96	**2.62**
Amarok 2.0TDI 4-Motion	282 682	30 000	210 000	1.21	0.31	0.47	1.99	1.14	**3.13**
Amarok 2.0BiTDI Trendline	317 000	30 000	210 000	1.36	0.35	0.52	2.23	1.28	**3.51**

VRAGMOTORS / TRUCKS												
Model	Aankoop prys Purchase price	Jaarlikse gebruik Annual usage	Leeftyd Lifetime	Waarde-vermindering Depreciation	Versekering & lisensie Licence & insurance	Rente Interest	Totale vaste koste Total fixed cost	Brandstof / Fuel		Herstel & onderhoud Repair & maintenance	Veranderlike koste Variable cost	Totale koste Total cost
								Verbuik Consumption	Koste Cost			
	R	km	km	R/km	R/km	R/km	R/km	km/L	R/km	R/km	R/km	R/km
Enkel dryf-as / Single differential												
3 Ton	308 000	35 000	300 000	0.92	0.29	0.44	1.65	6.67	1.95	0.87	2.82	**4.47**
4 Ton	337 500	35 000	300 000	1.01	0.32	0.48	1.81	6.67	1.95	0.96	2.91	**4.71**
6 Ton	452 500	40 000	300 000	1.36	0.37	0.56	2.29	4.00	3.25	1.28	4.53	**6.82**
7 Ton	533 500	60 000	300 000	1.60	0.29	0.44	2.33	3.57	3.64	1.51	5.15	**7.49**
8 Ton	599 500	60 000	300 000	1.80	0.33	0.49	2.62	3.33	3.90	1.70	5.60	**8.23**
Dubbel dryf-as / Double differential												
14 Ton	980 000	70 000	300 000	2.94	0.46	0.69	4.10	2.50	5.20	2.78	7.98	**12.07**
Dubbel dryf-perd / Double differential horse												
25 Ton	1 144 000	70 000	700 000	1.47	0.54	0.81	2.82	2.08	6.25	1.39	7.64	**10.46**

Notas / Notes

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