

INPUT COST MONITOR: Cost of wine grape production and producer profitability – 2012 season *March 2013*



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1. Introduction and survey

Over the past nine years, VinPro's agricultural economics division, with the support of Winetech, the National Agricultural Marketing Council (NAMC), Standard Bank, Absa, Land Bank, FNB, Nedbank and more recently Capital Harvest, have been conducting financial analyses in all nine wine regions in order to determine the cost of cultivating wine grapes, as well as the financial position of wine grape producers.

Although the latest findings (2012 production year) still indicate that the "average primary wine producer" remains caught in a cost prize squeeze, there are without any doubt producers who succeed in performing very well despite very difficult times and conditions – these are the producers who ensure ongoing maintenance of the necessary raw materials, despite a smaller vineyard production surface.

Participation in the 2012 production plan consisted of 255 farming units, distributed across all nine wine regions. Altogether 700 producers and role players in the industry attended the 45 study group sessions, where economic and other relevant information was shared with participants in support of long-term sustainable wine grape production. The sample currently consists of 22 895 ha (23 % of the total South African surface planted to wine grapes in 2011), which produce 338 812 tons (24 % of the total South African crop in 2012). Of these 67 % represented white and 33 % red grapes, and 57 % of the tons were harvested mechanically.

This report represents mainly industry average figures and is furthermore based on a review of the most important findings over the past nine harvests – the emphasis, though, is mainly on the most recent harvest (2012). The Malmesbury district is evaluated separately throughout and does not form part of the industry average figures – the study group in question consists of a large component of dryland vineyards, which require different production, cost and capital structures. The evaluations are not cultivar and/or block specific – wine grapes (bearing and non-bearing) are evaluated as an entity. Most of the farming enterprises that are evaluated differ in respect of farm size, cultivar composition and diversification in respect of other industry branches in the various regions. Figures are calculated by determining the weighted average of all participants – these producers have predominantly good to above-average managerial ability.

2. Trends in the South African Wine Value Chain

Despite a reduction in the total surface planted to wine grapes in South Africa, there is still growth in production. The total wine grape crop increased by more than 12 %, from 1 233 689 tons in 2003 to 1 395 158 tons (estimated 29/08/2012) in 2012 – whereas in recent years the surface planted to wine grapes has been reduced by 1 568 ha to 100 568 ha (excluding Sultanas). It is also very interesting to see how the SA wine industry has transformed itself totally over the past 25 years from an industry that was production-driven, in particular brandy, distilling wine and raw spirits, to a focused wine-producing industry. In 1987, 58 % of the total crop was used to make brandy – representing 34 % of producer income – today less than 10 % of the total crop is used to make brandy, while more than 70 % of the crop is used to make wine – this represents 80 % of producer income.

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There are currently 3 527 primary wine producers in the SA wine industry (a decrease from 4 515 in 1999), most of whom deliver and market their grapes to 52 so-called producer cellars (a decrease from 69 in 1999). The aforementioned cellars produce or receive between 70 and 80 % of the total wine crop. Most of the wine produced by these cellars is sold in bulk to one or more of 57 wholesalers, who in turn are represented by a few large role players and a number of smaller role players. The balance of the total crop is produced by 505 private wine cellars and 25 producing wholesalers.

Primary wine producers are very fragmented. Their bargaining power is very limited, they are price takers and too fragmented to integrate lower down the value chain in order to obtain representation or increase their bargaining power. The following table and graph illustrate certain values, as well as indices, using 2004 as the base year, to show how the financial position of producers has deteriorated in recent years and what has happened in the rest of the value chain – inter alia as a result of their very limited bargaining power:

Table 1: Trends in the SA Wine Value Chain since 2004

Per 750 ml @ 10% alc/vol for Total Wine	2004	2005	2006	2007	2008	2009	2010	2011	2012	Change (R/750ml) 2004-2012	% Change 2004-2012	% Change ave per year
Average RSP - Total Wine	R 10.10	R 11.31	R 12.05	R 12.32	R 12.88	R 13.82	R 16.07	R 17.30	R 18.19	R 8.09	80%	10%
Average RSP - Brandy	R 50.78	R 55.95	R 59.43	R 66.03	R 71.31	R 79.35	R 83.60	R 90.17	R 99.68	R 48.91	96%	12%
Excise - Wine	R 0.88	R 1.06	R 1.19	R 1.29	R 1.37	R 1.49	R 1.61	R 1.74	R 1.88	R 1.00	114%	14%
Excise - Brandy	R 14.48	R 16.17	R 17.81	R 19.67	R 21.84	R 25.05	R 27.28	R 30.00	R 36.00	R 21.53	149%	19%
Ave Bulk Wine price - All varieties	R 2.66	R 2.54	R 2.54	R 2.51	R 2.56	R 2.88	R 3.10	R 3.19	R 3.30	R 0.64	24%	3%
Ave Producer Cellars Grape price - All Varieties	R 1.56	R 1.49	R 1.46	R 1.54	R 1.63	R 2.06	R 1.94	R 1.95	R 2.04	R 0.47	30%	4%
Ave Non Producer Cellars Grape price - All Varieties	R 4.43	R 3.85	R 3.35	R 3.18	R 3.40	R 4.20	R 4.23	R 4.07	R 4.21	-R 0.22	-5%	-1%
Total Annual Production cost - VinPro	R 1.55	R 1.60	R 1.49	R 1.52	R 1.55	R 1.83	R 2.08	R 2.17	R 2.05	R 0.49	32%	4%
Total Annual Producer Cellar cost - Bulk Wine - PWC	R 0.52	R 0.69	R 0.62	R 0.74	R 0.78	R 0.87	R 1.04	R 1.03	R 1.08	R 0.56	107%	13%
Net Farming Income	R 1.00	R 0.45	R 0.40	R 0.37	R 0.39	R 0.43	R 0.27	R 0.38	R 0.54	-R 0.46	-46%	-6%

Note: Ave Bulk Wine price for 2012 = Jan - Oct. 2010 & 2011 Ave Producer Cellar Grape prices are preliminary - 2012 Ave Producer Cellar Grape price is estimated. Source: PricewaterhouseCoopers

Note: 2012 Annual Producer Cellar cost for Bulk Wine - Estimated. Source: PricewaterhouseCoopers

Source: Vinpro, 2012

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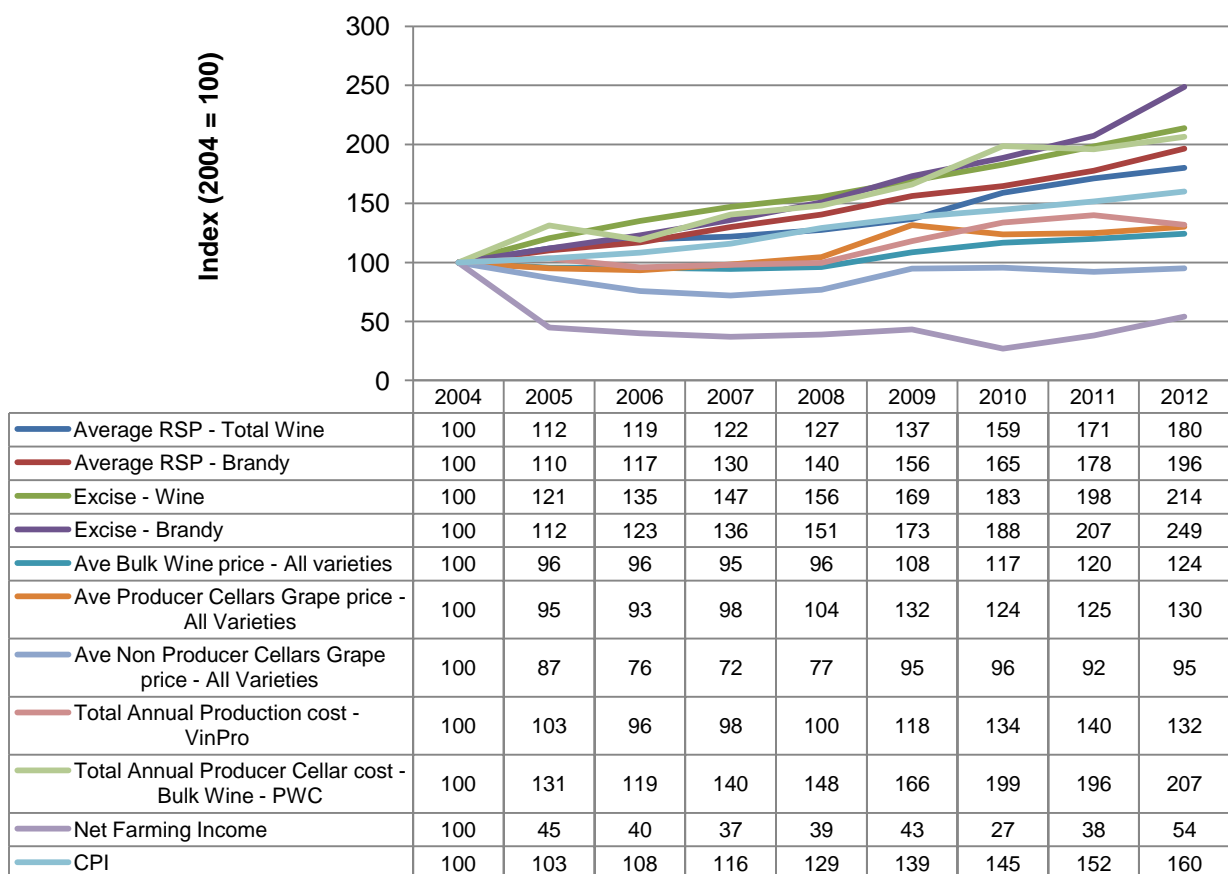


Figure 1: Trends in the SA Wine Value Chain since 2004 – Index, allowing for CPI

NB: Average Bulk wine price for 2012 = Jan - Oct. 2010 & 2011 Average Producer Cellar Grape Prices are Provisional - 2012 Average Producer Cellar Grape Price is estimate.

Source: SAWIS

The following assumptions can be made:

- The average retail price of wine, excise and cellar cost increased above inflation for the nine year period under review
- The average price of bulk wine and producer cellar grape prices did not keep up with inflation and in the case of non-producer cellar grape prices, trends were even negative
- Production cost at farm level increased in line with inflation, despite drastic cuts in costs by producers. This statistic confirms that top quality producers can be found in the industry. On the other hand, some producers cut costs to the bone as a result of cash flow problems, which could also explain why the increase in production cost was less than expected.

The above-mentioned points and accompanying statistics confirm the fact that producers are only price takers, with no or very little bargaining power. This also illustrates and explains why the net farming income for the period under review decreased by almost 50 % for each bottle of

wine produced. Furthermore, we are justified in arguing that said increases in the value chain are undoubtedly passed down to the producer, who gets the worst deal of all.

3. The cost of wine grape production

Annual total production cost – excluding tax, interest and entrepreneurial remuneration – consists of two components, namely cash expenditure and provision for replacement. The industry average total production cost increased by 6 % to R32 439 per ha in 2012.

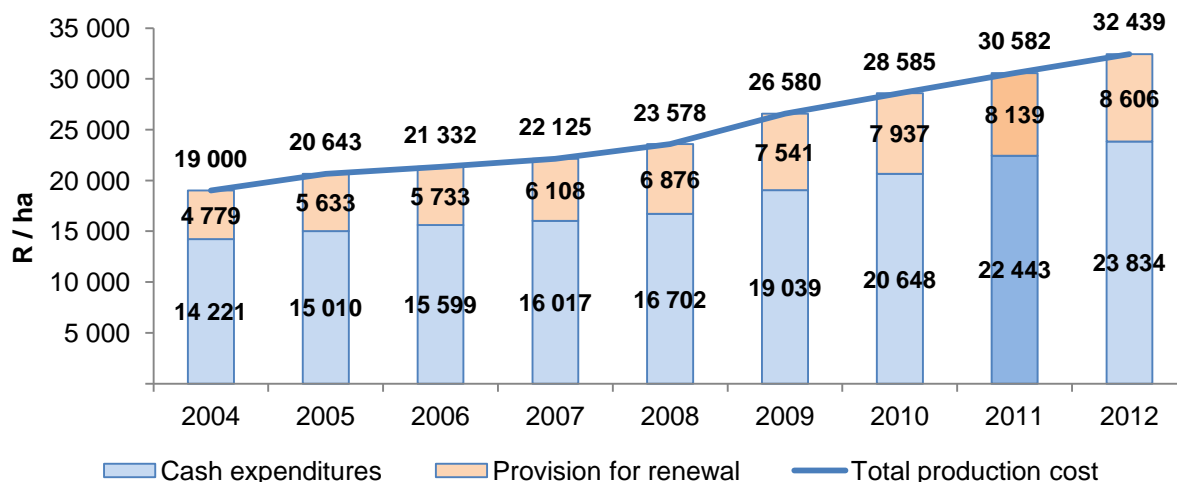


Figure 2: Total annual production cost – Industry average

Source: Vinpro, 2012

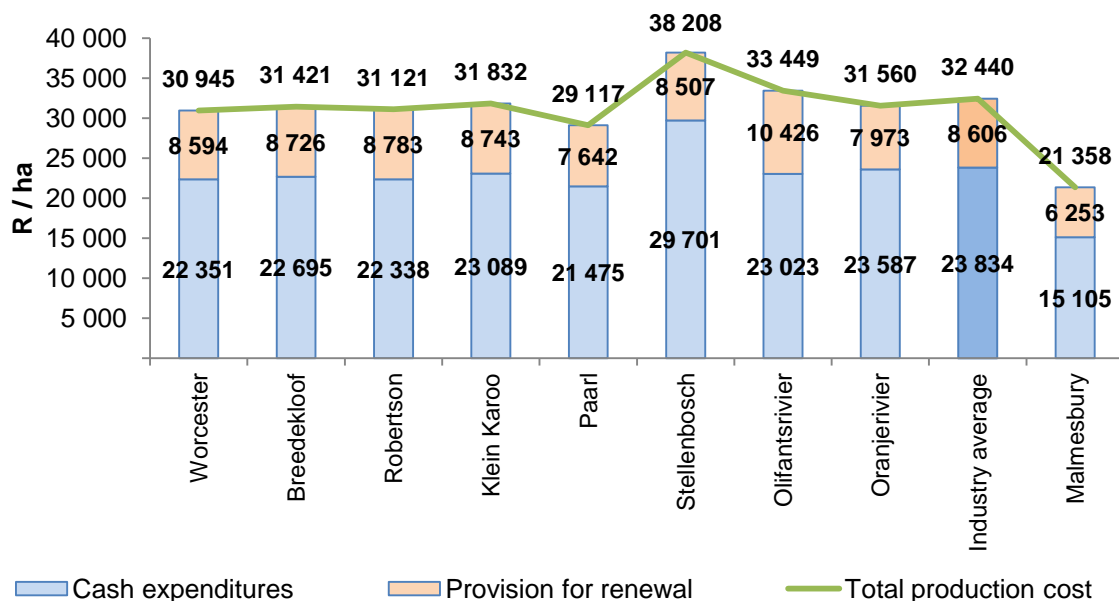


Figure 3: Total annual production cost per district – 2012 production year

Source: Vinpro, 2012

Cash expenditure

Cash expenditure is categorised as direct cost, labour, mechanisation, fixed improvements and general expenses. Total cash expenditure shows a 6 % increase from 2011 to R23 834/ha in the 2012 production year.

The increase is mainly due to a slightly bigger 2012 crop, as well as exceptionally high increases in the cost of electricity and fuel. Most of the other cost components increased more or less in line with inflation.

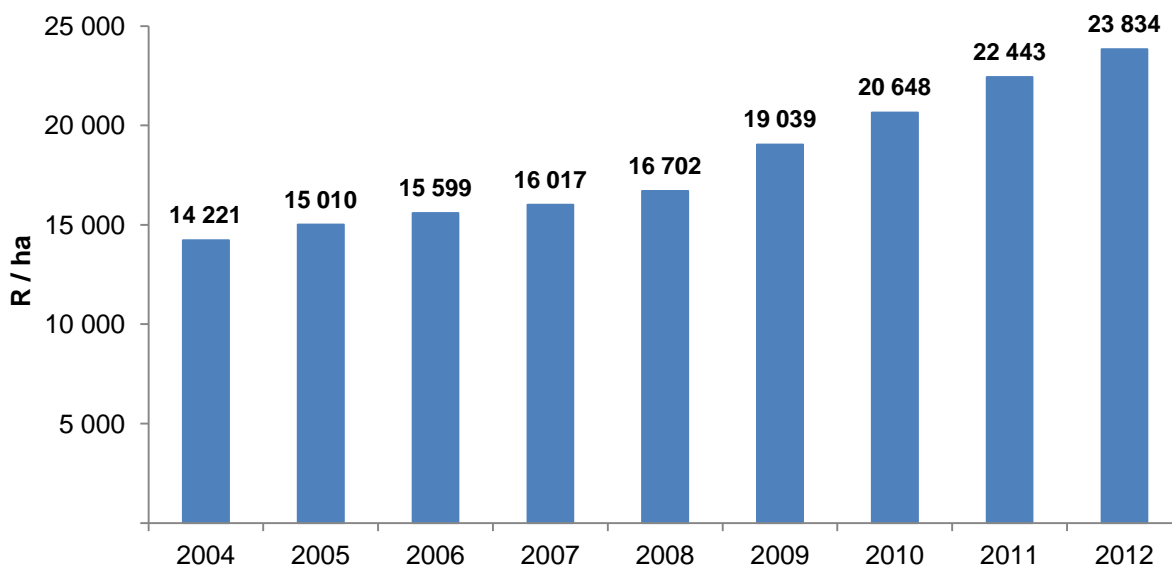


Figure 4: Annual cash expenditure – Industry average

Source: Vinpro, 2012

The following four graphs illustrate the movement in respect of approximately 80 % of the annual expenditure over the past nine years:

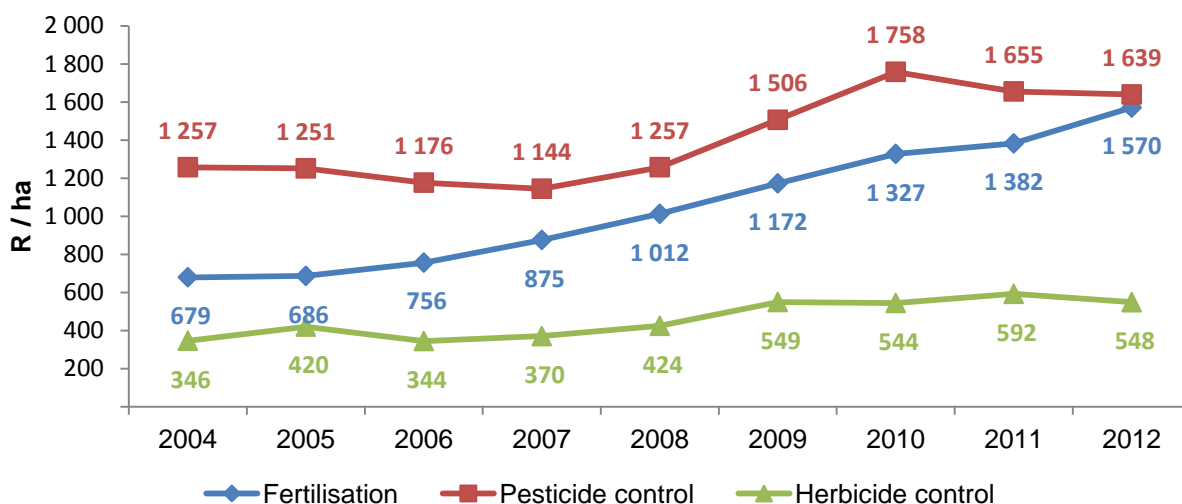


Figure 5: Movement of direct costs – Industry average

Source: Vinpro, 2012

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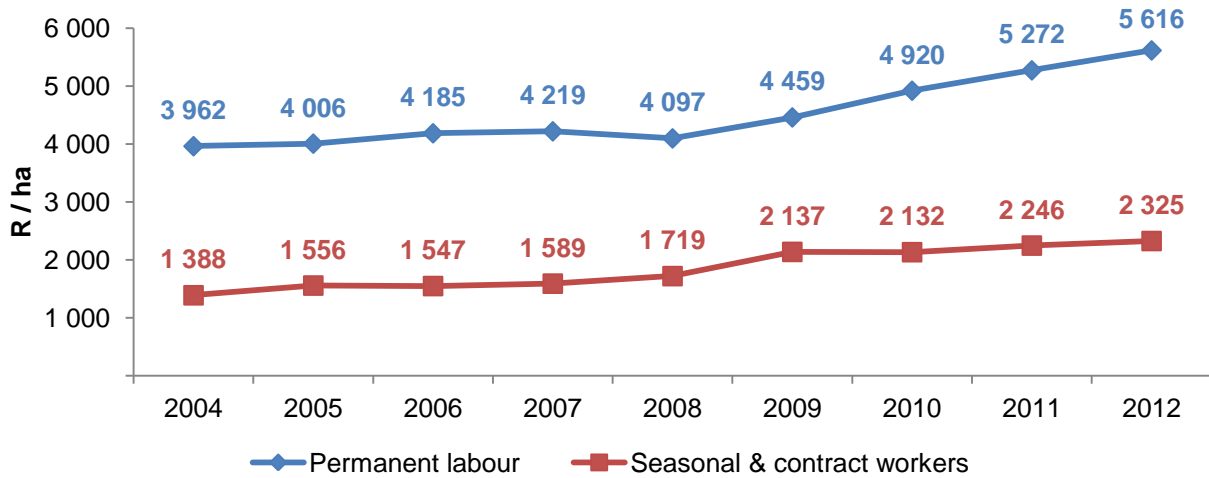


Figure 6: Movement of labour cost – Industry average

Source: Vinpro, 2012

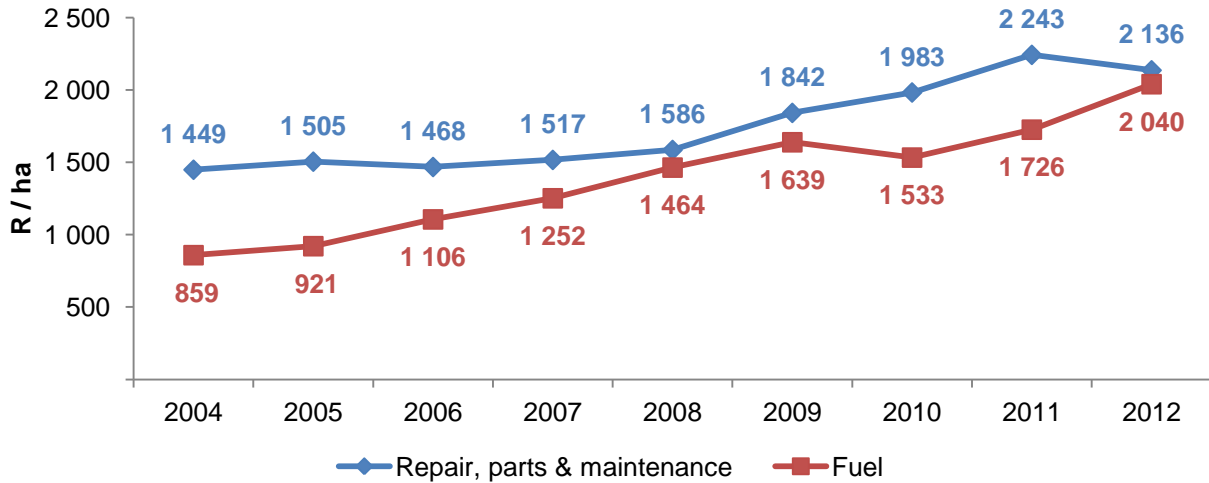


Figure 7: Movement of mechanisation cost – Industry average

Source: Vinpro, 2012

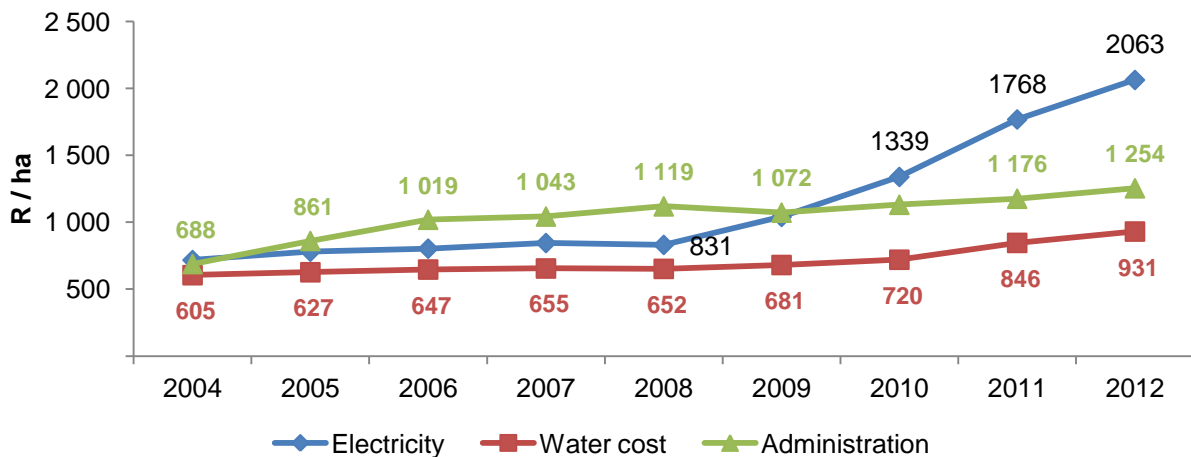


Figure 8: Movement of general costs – Industry average

Source: Vinpro, 2012

The composition of cash expenditure since 2004 remained largely unchanged, with labour still representing the biggest component – 40 % in the 2012 production year. Mechanisation, direct cost, general expenses and fixed improvements represent 20 %, 19 %, 17 % and 4 % respectively of cash expenditure. Although differences occur from year to year, the trend is nevertheless that all components have become more expensive relative to each other.

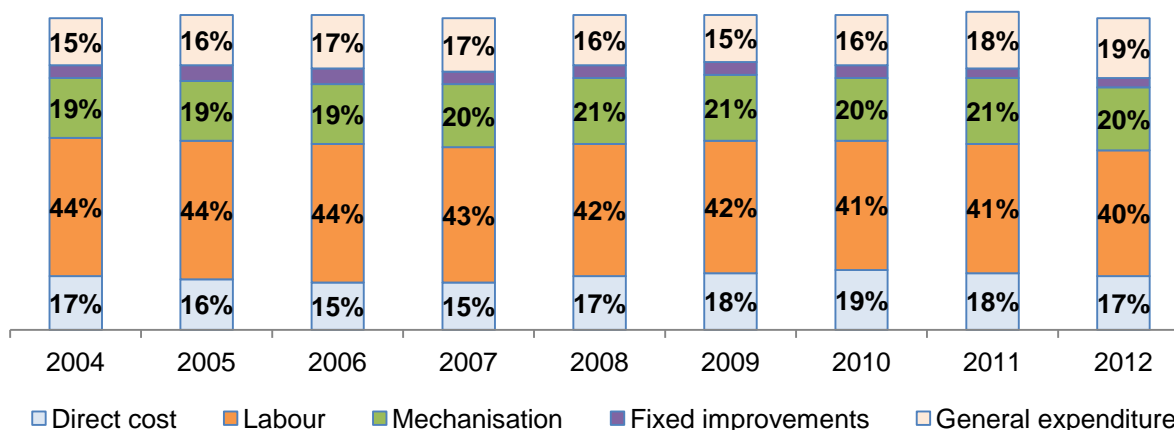


Figure 9: Percentage composition of annual cash expenditure – Industry average
 Source: Vinpro, 2012

Provision for replacement

The production process uses not only what is purchased annually in order to produce a crop – machinery and implements are also required. Over a period of time, tractors, machinery and other means of production are “consumed”. Even vineyards and buildings deteriorate and have to be replaced. The “deterioration” and “consumption” of such items are part and parcel of the costs of the production process.

Taking into account the fact that the purchase value of an item has to be replaced in the course of its lifetime, as well as the fluctuating nature of inflation, sufficient provision has to be made for replacement. By using the principle of ‘provision for replacement’, a bigger amount is recovered than in the case of ‘depreciation’. To a certain extent this addresses the problem of rectilinear depreciation in value and ensures that the running concern is maintained.

When calculating provision for replacement, items are written off against replacement value over various periods:

Buildings	60 years
Vineyards	20 years
Moveable assets/means of production	7–15 years

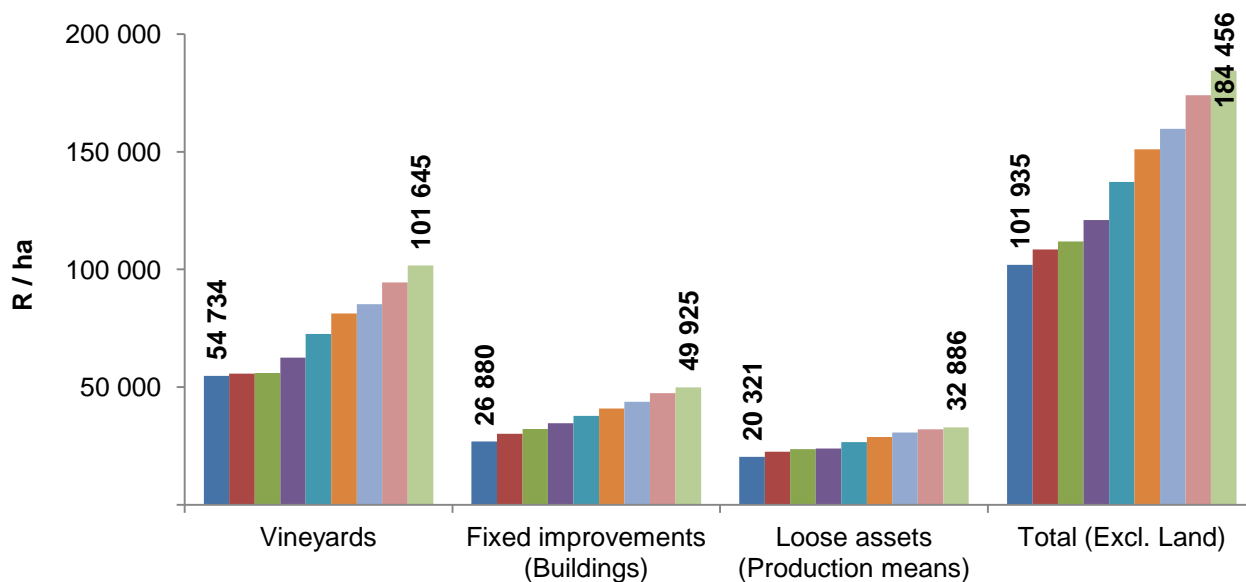


Figure 10: Replacement value of capital structure – Industry average 2004 - 2012
 Source: Vinpro, 2012

Total provision for replacement amounted to R8 606/ha in the 2012 production year – an increase of 6 % compared with 2011.

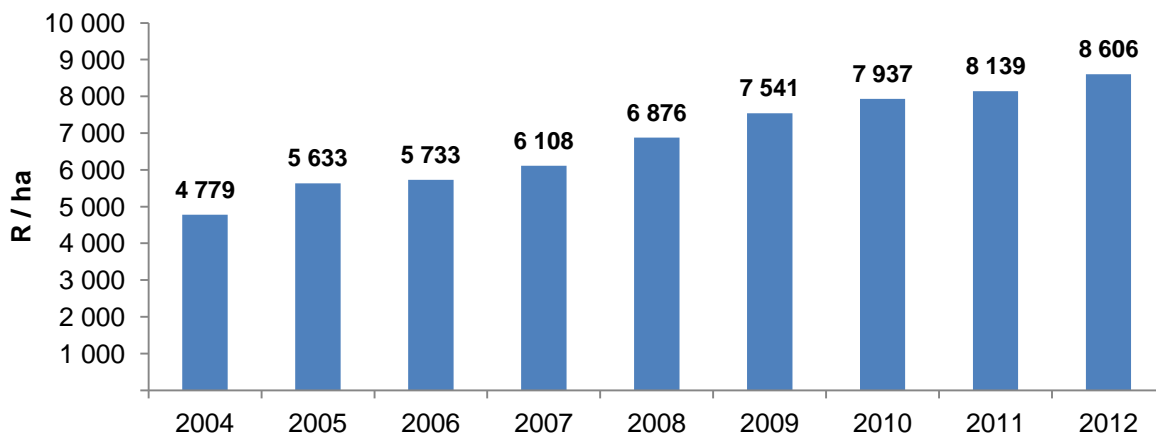


Figure 11: Annual provision for replacement – Industry average
 Source: Vinpro, 2012

4. Production structure

The average farm size for the study groups currently comprises 86 ha planted to wine grapes (other branches of agriculture are not taken into account here). The average production – bearing and non-bearing hectares – amounted to 16.98 tons/ha for the 2012 production year.

The impact of increased yield on the break-even price of total production cost in rand per ton is considerable. Although total production cost increased by 6 % per ha since 2011, the breakeven point in terms of rand per ton decreased from R2 028/ton to R1 910/ton. In other words, the first R1 910 that the producer receives for a ton of grapes from the 2012 harvest, should be used for

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total production cost – no entrepreneurial remuneration, interest or tax has been taken into account. This decrease can be ascribed mainly to the bigger 2012 crop for the entire industry. Note that certain districts had a smaller crop, resulting in a negative impact on their break-even price.

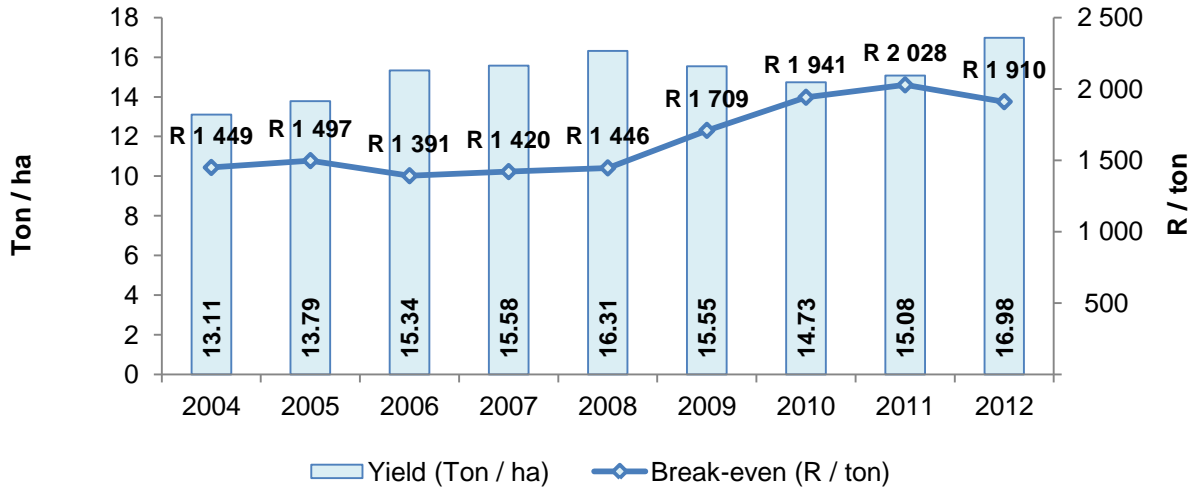


Figure 12: Influence of Yield on break-even of total production cost – Industry average
Source: Vinpro, 2012

Average production varies tremendously among the various districts, while the total production cost in rand per hectare does not differ significantly. The above-mentioned differences in production cause the break-even price in respect of total production cost per ton to differ immensely among the various districts.

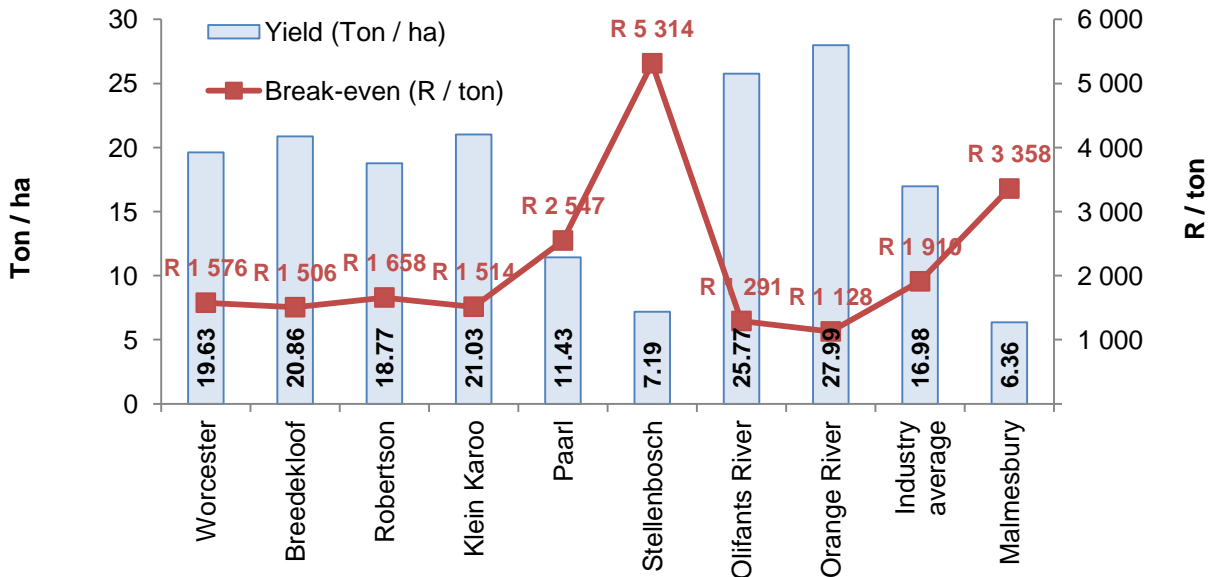


Figure 13: Production and break-even per district (2012 harvest)
Source: Vinpro, 2012

The age composition of participants' vineyards has definitely deteriorated since 2004. More than 15 % of the surface planted to grapevines is older than 20 years and 12 % of the grapevines in the sample are three years old and younger. The deterioration in the age composition can be clearly observed since 2004 – an obvious indication that producers are neglecting their capital maintenance in an effort to survive financially.

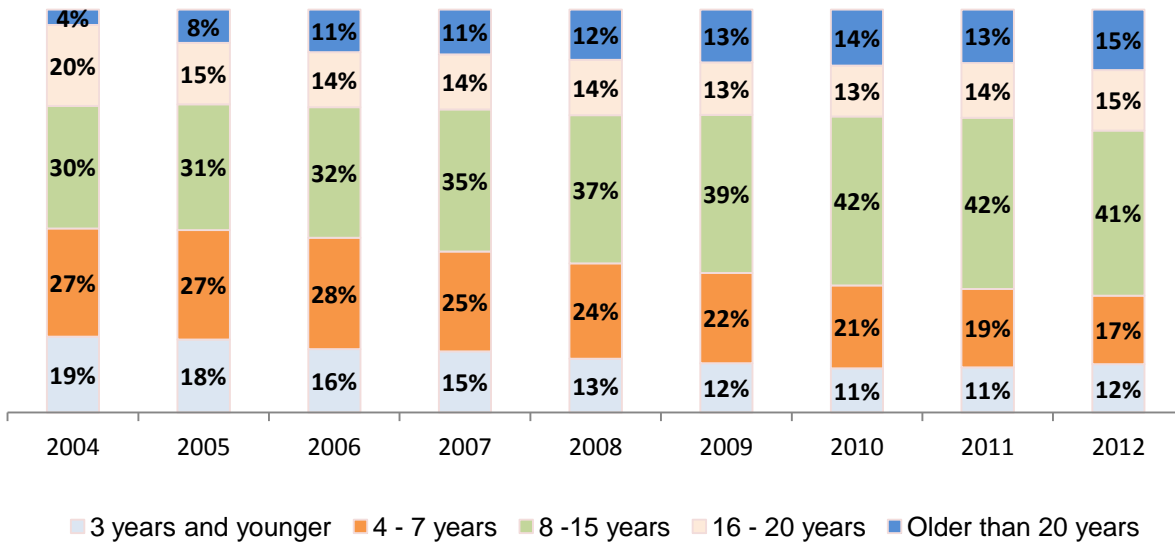


Figure 14: Age composition – Industry average
 Source: Vinpro, 2012

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Table 2: Production cost of grapevines per district

PRODUCTION COST FOR WINE GRAPES - COST AS RAND PER HECTARE (2012 HARVEST)										
Weight	19.36%	18.84%	16.49%	14.53%	11.55%	9.95%	6.15%	3.13%	100.00%	
DISTRICT	Stellenbosch	Paarl	Robertson	Breedekloof	Olifants River	Worcester	Orange River	Klein Karoo	Average	Malmesbury
COST STRUCTURE	R / ha	R / ha	R / ha	R / ha	R / ha	R / ha	R / ha	R / ha	R / ha	R / ha
DIRECT COST										
SEED	168	88	32	126	61	56	26	642	107	98
FERTILIZER	640	756	1712	1237	1782	1629	1166	1685	1221	834
ORGANIC MATERIAL	17	189	141	683	274	301	179	267	242	62
PESTICIDE CONTROL	1931	1574	1608	1864	1452	1749	726	1470	1639	1454
HERBICIDE CONTROL	566	463	642	690	364	685	423	301	548	403
REPAIR & BINDING MATERIAL	479	436	384	370	284	377	155	665	393	160
Subtotal	3802	3505	4520	4970	4217	4796	2675	5030	4150	3011
LABOUR #										
SUPERVISION	3199	1271	1664	1551	868	1417	1114	653	1689	574
PERMANENT LABOUR	7745	5452	4382	5323	4854	5536	5251	5066	5616	2932
SEASONAL LABOUR & CONTRACT WORK	4120	2779	1574	1208	1227	853	4773	1553	2325	2682
Subtotal	15065	9503	7620	8082	6949	7806	11138	7273	9630	6188
MECHANISATION										
FUEL	2029	1824	1747	2135	2210	2020	2809	2446	2040	1469
REPAIR, PARTS & MAINTENANCE	2587	1661	2456	2063	2152	2003	1952	1574	2136	1236
LISENCES AND INSURANCE	386	369	393	479	714	496	608	395	460	308
TRANSPORT HIRED	152	437	171	203	318	69	98	410	232	688
Subtotal	5153	4291	4767	4880	5394	4588	5466	4825	4868	3702
FIXED IMPROVEMENTS										
REPAIR AND MAINTENANCE	712	458	501	577	253	442	302	236	490	326
INSURANCE	189	168	218	265	292	266	328	223	230	139
Subtotal	901	625	719	842	546	708	630	459	720	465
GENERAL EXPENDITURES										
ELECTRICITY	1507	1681	2819	2524	2419	2128	1199	1851	2063	552
WATER COSTS	824	538	906	191	1930	1236	1237	2276	931	356
LAND-, PROPERTY- & MUN TAXES	406	170	137	175	273	134	152	179	218	94
ADMINISTRATION *	2044	1161	850	1031	1297	955	1091	1197	1254	738
Subtotal	4781	3550	4712	3921	5918	4453	3678	5503	4466	1740
TOTAL CASH EXPENDITURES	29701	21475	22338	22695	23023	22351	23587	23089	23834	15105
PROVISION FOR REPLACEMENT										
VINEYARDS	4951	5132	5120	5166	4807	5290	5122	5286	5082	4254
FIXED IMPROVEMENTS	1094	611	870	861	972	781	427	651	832	433
LOOSE ASSETS or PRODUCTION MEANS	2463	1900	2793	2699	4467	2523	2424	2805	2691	1565
TOTAL EXPENDITURES	38209	29117	31121	31421	33269	30945	31560	31833	32439	21358
AVERAGE AREA PLANTED (HA)										
AREA IRRIGATED (%)	87%	93%	100%	100%	100%	100%	100%	100%	96%	39%
AVERAGE AGE COMPOSITION (%)										
3 YEARS & YOUNGER	10.02	10.81	13.39	12.07	11.05	13.88	11.55	15.68	11.80	7.03
BETWEEN 4 & 7 YEARS	14.15	14.83	20.81	15.41	15.47	22.15	24.67	19.33	17.32	14.94
BETWEEN 8 & 15 YEARS	40.94	49.00	36.76	42.58	40.23	34.03	41.03	39.78	41.21	61.19
BETWEEN 16 & 20 YEARS	13.02	13.62	16.23	16.19	19.60	14.47	11.59	15.34	15.01	11.32
OLDER THAN 20 YEARS	21.86	11.74	12.81	13.74	13.65	15.46	11.16	9.86	14.66	5.53
AVERAGE YIELD (TON PER HA)	7.19	11.43	18.77	20.86	25.77	19.63	27.99	21.03	16.98	6.36
CASH EXPENDITURES (RAND PER TON)	4131	1879	1190	1088	893	1139	843	1098	1404	2375
TOTAL EXPENDITURES (RAND PER TON)	5314	2547	1658	1506	1291	1576	1128	1514	1910	3358
# Included: Provident fund, UIF, medical, protected clothes, clothing, bonus, ransom, workman's compensation comission, etc.										
* Included: Banking costs, bookkeeping fees, membership fees, security, computer maintenance, professional fees, training / courses, postage, telephone, stationary, irrigation monitoring and										

Source: Vinpro, 2012

Profitability

The profitability, in other words Net Farming Income (NFI), is calculated as total income (R/ton x Ton/ha) *minus* total production cost. The latter consists of cash expenditure and provision for replacement, but excludes entrepreneurial remuneration, interest obligations and tax. Total income is based on the proven, or anticipated, income from a specific harvest and the time value of money is not taken into account. The impact of a bigger or smaller crop can be calculated with greater accuracy, but while producers receive their income at different stages, it is practically impossible to calculate the time value. "Remember, however, that cost is also incurred over a period of time."

Although the total income per hectare – which is determined by price and production – has shown slight increases since 2005, enormous increases in costs caused the NFI to deteriorate dramatically between 2004 and 2012. As a guideline for economically sustainable production, the average income and NFI for the 2012 production year should in fact have realised R51 000 and R18 600 per hectare respectively. Over the past eight years, the average income was consistently lower than the target income guidelines. Producers still find themselves caught in a "cost price squeeze" and in some instances in recent years income has been lower than the

cost of producing grapes. Many producers are forced to remove replacement of grapevines and capital structure from their cash flow budget – which means they are farming on Gross Margin (GM) and not on NFI.

Table 3: Industry average statement of income and expenditure

INCOME & EXPENDITURE STATEMENT	2004	2005	2006	2007	2008	2009	2010	2011	2012
Average price per ton (Rand)	2383	1916	1763	1766	1807	2113	2192	2383	2416
Average yield per hectare (tons)	13	14	15	16	16	16	15	15	17
TOTAL INCOME (R / ha)	31236	26424	27043	27513	29479	32857	32281	35943	41023
Direct costs (R / ha)	2459	2426	2391	2482	2855	3463	3920	3992	4150
Labour (R / ha)	6317	6590	6878	6949	6956	7905	8477	9111	9630
Mechanisation (R / ha)	2667	2852	3004	3219	3533	4022	4142	4633	4868
Other overheads (R / ha)	2778	3142	3326	3367	3357	3649	4108	4706	5186
ANNUAL CASH EXPENDITURES	14221	15010	15599	16017	16702	19039	20648	22443	23834
GROSS MARGIN (R / ha)	17015	11414	11444	11496	12777	13818	11633	13500	17189
Provision for replacement (R / ha)	4779	5633	5733	6108	6876	7541	7937	8140	8606
NET FARMING INCOME (R / ha)	12236	5781	5711	5388	5901	6277	3696	5360	8583
Return on investment (ROI)	8.36%	2.71%	2.51%	2.04%	2.03%	1.86%	0.28%	0.95%	2.28%

Source: Vinpro, 2012

5. Top performers

Although the industry average financial situation of producers does not look good, performers can still be found despite difficult times. The result of the top 50 performers in the industry – excluding Malmesbury – realised a gross income and NFI of R55 235/ha (industry average R41 023/ha) and R24 366/ha (industry average R8 606/ha) respectively for the 2012 production year – for the third consecutive year this is in line with and even better than the VinPro guideline for economic sustainability. The average farm size of the top 50 for 2010, 2011 and 2012 amounted to 61 ha, 72 ha and 84 ha wine grapes respectively – the industry average was 79 ha, 84 ha and 86 ha.

Table 4: Statement of income and expenditure of top performers

TOP 50: INCOME & EXPENDITURE STATEMENT	2010	2011	2012
Average price per ton (Rand)	2056	2348	2475
Average yield per hectare (tons)	22	20	22
TOTAL INCOME (R / ha)	44601	47225	55235
minus			
Direct costs (R / ha)	4039	4140	4530
Labour (R / ha)	7265	7412	7937
Mechanisation (R / ha)	4193	4341	4543
Other overheads (R / ha)	3876	4643	5044
ANNUAL CASH EXPENDITURES	19373	20536	22054
GROSS MARGIN (R / ha)	25228	26688	33181
minus			
Provision for replacement (R / ha)	8269	8324	8815
NETTO BOERDERY INKOMSTE (R / ha)	16959	18364	24366
Return on investment (ROI)	7.17%	7.39%	9.30%

Source: Vinpro, 2012

The top performers are spread across all nine wine districts, but most occur in the higher production areas.

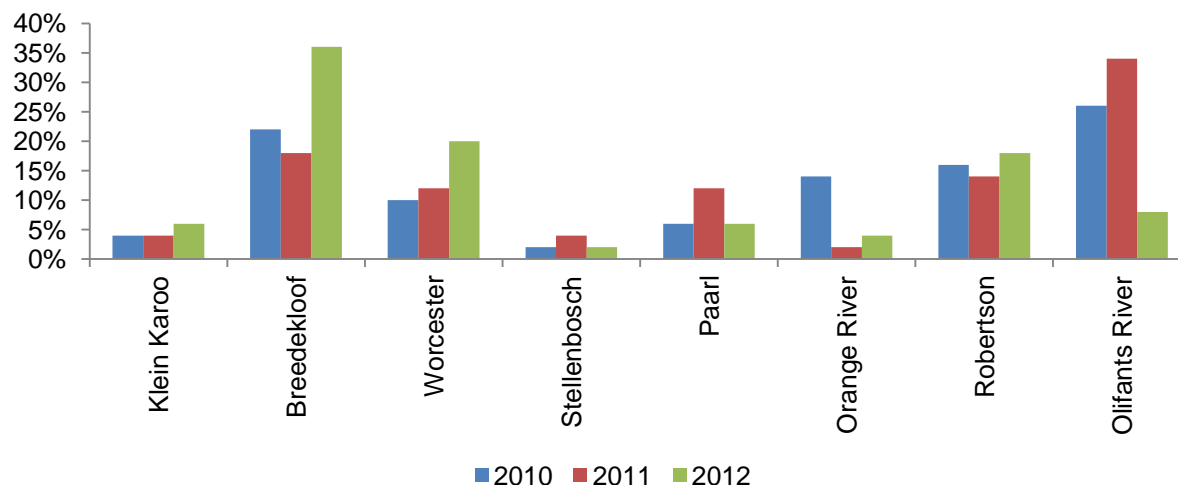


Figure 15: Distribution of top performers in the respective districts

Source: Vinpro, 2012

The noteworthy improvement in NFI, as with the 2010 and 2011 findings, can once again be ascribed to considerably higher production, namely 22.31 tons/ha compared to the industry average of 16.98 tons/ha – 31 % higher. The average price of R2 475/ton realised by top performers is 2 % higher than the industry average of R2 416/ton.

Top performers' annual cash expenditure (R22 054/ha) is at least 7 % lower than that of the industry (R23 834/ha), while the provision for replacement of the top performers (R8 815/ha) is 2 % higher than the industry average (R8 606/ha). Total production cost of the top performers amounts to R30 869/ha compared to the industry average of R32 439/ha, which is 5 % lower.

INPUT COST MONITOR: Cost of wine grape production and producer profitability – 2012 season
March 2013

Table 5: Production cost comparison between top performers and industry average

PRODUCTION COST FOR WINE GRAPES - COST AS RAND PER HECTARE						
	Top 50 2010 R/ha	Industry 2010 R/ha	Top 50 2011 R/ha	Industry 2011 R/ha	Top 50 2012 R/ha	Industry 2012 R/ha
DIRECT COST	4039	3921	4140	3992	4530	4150
SEED	41	77	65	97	84	107
FERTILIZER	1166	1017	1155	1061	1393	1221
ORGANIC MATERIAL	289	233	346	225	417	242
PESTICIDE CONTROL	1737	1758	1661	1655	1661	1639
HERBICIDE CONTROL	550	544	541	592	552	548
REPAIR & BINDING MATERIAL	257	292	373	362	422	393
LABOUR	7265	8477	7412	9111	7937	9630
SUPERVISION	1244	1425	1140	1593	1568	1689
PERMANENT LABOUR	4690	4920	4728	5272	5092	5616
SEASONAL LABOUR & CONTRACT WORK	1331	2132	1544	2246	1278	2325
MECHANISATION	4193	4142	4341	4633	4543	4868
FUEL	1553	1533	1599	1726	1820	2040
REPAIR, PARTS & MAINTENANCE	1936	1983	1976	2243	2059	2136
LISENCES AND INSURANCE	456	419	507	422	464	460
TRANSPORT HIRED	248	207	260	242	199	232
FIXED IMPROVEMENTS	602	741	517	707	715	720
REPAIR AND MAINTENANCE	392	540	296	486	488	490
INSURANCE	210	201	221	221	227	230
GENERAL EXPENDITURES	3273	3367	4125	3999	4328	4466
ELECTRICITY	1312	1339	1777	1768	2269	2063
WATER COSTS	790	720	1060	846	861	931
LAND-, PROPERTY- & MUN TAXES	175	177	223	209	172	218
ADMINISTRATION	997	1131	1066	1176	1026	1254
TOTAL CASH EXPENDITURES	19373	20648	20537	22443	22054	23834
PROVISION FOR REPLACEMENT	8269	7937	8324	8140	8815	8606
VINEYARDS	4304	4263	4714	4725	5143	5082
FIXED IMPROVEMENTS	752	730	774	791	910	832
LOOSE ASSETS or PRODUCTION MEANS	3213	2944	2835	2623	2761	2691
TOTAL EXPENDITURES	27641	28585	28860	30582	30869	32439

Source: Vinpro, 2012

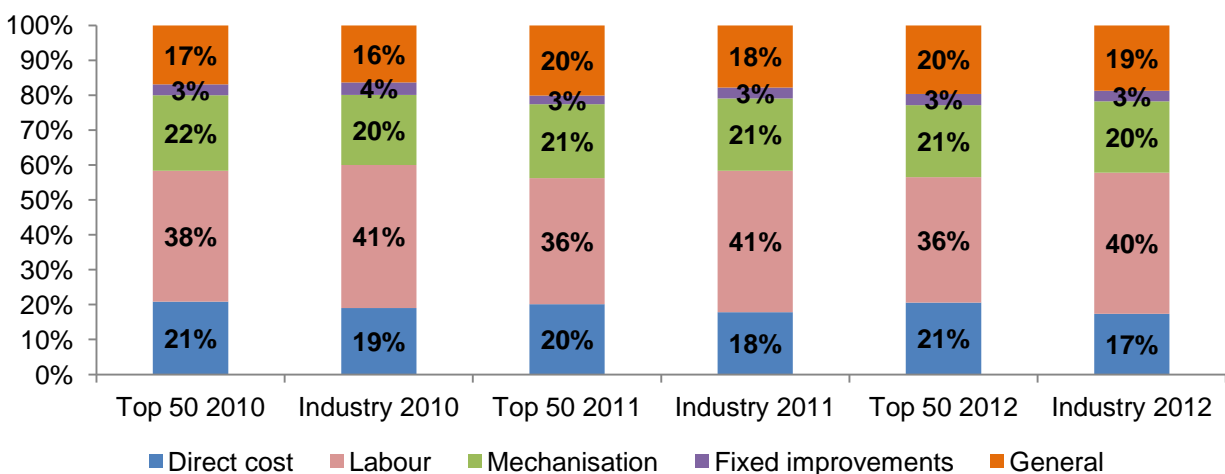


Figure 16: Percentage composition of annual cash expenditure – top performers compared to industry average

Source: Vinpro, 2012

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

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

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

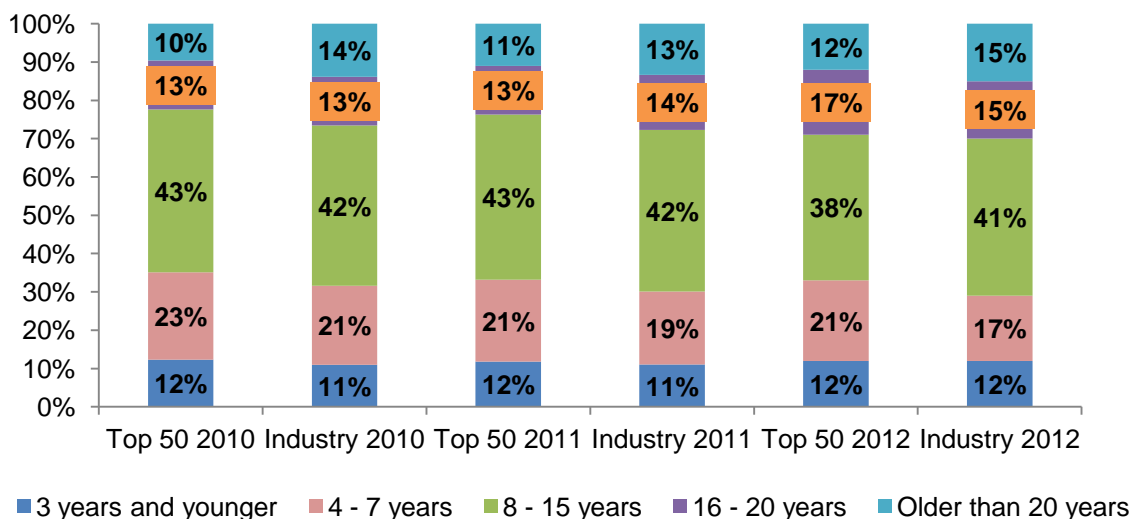


Figure 17: Age composition – top performers compared to the industry

Source: Vinpro, 2012

Table 6: Statement of income and expenditure of the best third, industry average and bottom third

INDUSTRY - 2012 HARVEST	Top Third	Average	Bottom Third
Production per ha	22.31	16.98	9.69
Income per ton	R2 475	R2 416	R3 233
Income per ha	R55 235	R41 023	R31 331
Production cost per ha	R30 869	R32 440	R38 649
NFI per ha	R24 366	R8 583	-R7 318
ROI	9.30%	2.28%	-4.86%
Annual Production cost			
Cash expenditures	R22 054	R23 834	R29 751
Provision for renewal	R8 815	R8 606	R8 898
Total Production cost	R30 869	R32 440	R38 649

Source: Vinpro, 2012

What are the most important matters (short term/technical) that stand out over the past 3-5 years and helped to improve the profitability of producers (individuals)?

NB: In collaboration with top performers, as well as various viticulturists in the industry.

Pruning methods

In the hope of increasing 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, suckering techniques, topping and leaf removal in order to prevent grapevine canopies from becoming too dense and infertile. Producers attempt to save on labour by eliminating or down-scaling 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 impacts largely on yield, therefore producers apply their fertilisation and irrigation practices according to specific wine objectives. Premium blocks have moderate growth and yield, and a balance between the two, whereas “bulk wine blocks” are more vigorous in order to accommodate bigger canopies and yield. Irrigation and fertilisation are adjusted accordingly.

Blocks with high yield often have:

- well-drained soil
- deep soil preparation

- more nitrogen (N)
- abundant water (not too much – risk of drowning).

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

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 (specifically narrower row width = more rows per ha).

Alternative trellising systems

The choice of trellising system impacts enormously on profitability, and although it is early days yet, more and more producers are using alternative trellising systems, or manage their existing system(s) differently.

Alternative trellising systems can:

- increase yield (ton/ha) – increase effective leaf surface area, able of ripening a bigger crop
- reduce labour costs – e.g. sprawling systems vs. 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. An enormous amount of planning focusing on improved yields goes into the soil, cultivar, rootstock, clones, trellis, irrigation, fertilisation, pruning and canopy management.

6. Summary

The industry average total production cost increased by 6 % to R32 439 per hectare between 2011 and 2012. The increase is largely due to a slightly bigger 2012 crop, as well as exceptionally high increases in the cost of electricity and fuel. Most of the other cost components increased more or less in line with inflation.

Although the total income per hectare – which is determined by price and production – has shown slight increases since 2005, enormous increases in cost caused the NFI to deteriorate dramatically between 2004 and 2012. Producers still find themselves caught in a “cost prize squeeze” and in some instances in recent years income has been lower than the cost of producing grapes.

There are undoubtedly producers who manage to perform well, despite very difficult times and conditions – these are the producers who ensure that the necessary raw materials are maintained, despite production taking place on a smaller surface.