



VINPRO PRODUCTION PLAN SURVEY The 2017 vintage

THE FINANCIAL SUSTAINABILITY OF PRIMARY GRAPE PRODUCERS IMPACTED NEGATIVELY BY THE INITIATION OF THE DROUGHT CONDITIONS, WITH POSITIVE SHORT TERM PROSPECT AS WORLD WINE SUPPLY TIGHTEN.

ACCORDING TO THE LATEST VINPRO PRODUCTION PLAN SURVEY, PRIMARY WINE GRAPE PRODUCERS' ARE STILL UNDER FINANCIAL PRESSURE AS THE DROUGHT SPREADS AND PRODUCTION COST INFLATION GRIPS FIRMLY ON ALREADY DWINDLING MARGINS. **BY ANDRIES VAN ZYL & PIETER VAN NIEKERK**



In 2017 the Vinpro Production Plan survey was conducted for the 14th consecutive year in the wine industry. The findings show that although the average producer are still not on sustainable income levels, the most profitable producers are gaining margin in all 10 producing regions, however the unprofitable bottom third are increasing for the third consecutive year, a further increase is expected if the current drought conditions prolong. With tightening global wine supply there is an opportunity for Brand SA to re-position itself in the market, ensuring a much needed structural correction along the wine value chain.

INTRODUCTION

In 2017 Vinpro Agricultural Economics conducted a comprehensive analysis across all 10 wine districts. The project is financially supported by Winetech, the National Agricultural Marketing Council (NAMC), Standard Bank, Absa, Land Bank, FNB and Nedbank, this ensures a free of charge financial management analysis for any primary wine grape producer. The primary objective is to provide an on-farm financial analysis of each participant's farming unit, benchmarking it with the regional average, breaking down the report in: the production structure, cost structure and profitability per enterprise and cultivar.

Altogether 249 (an 6% increase year on year) farming units from all 10 wine districts participated in the 2017 Production Plan survey. In 2017 the sample consisted of 22 550 ha (24% of the total South African area planted to wine grapes in 2016), producing 370 022 tons (26% of the total South African crop in 2017). The sample consisted of 65% white- and 35% were red wine grapes, of the total 63% was harvested mechanically, a slight decrease year on year (YoY), with the smaller harvest directly impacting towards this trend.

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. Regarding income, distinction is made between different wine grape cultivars. The greater majority of participants are diversified and varies with regard to production size. The report represents industry average figures, calculated by determining the weighted average of all participants. The Swartland district is always evaluated separately, as this study group cultivates a large component of its vineyards dry land (without irrigation) and/or with only supplementary irrigation. This requires an alternative production, cost and capital structure.

THE 2017 HARVEST

The South African wine grape harvest was slightly larger following a dry

season and consumers can look forward to exceptional wines from the 2017 vintage. The total harvest was at 1 434 328 tonnes, 2.1% larger YoY and was initially expected to be smaller. "A decrease was expected due to the second consecutive very dry, hot season. However, cooler nights throughout the growing season and the absence of significant heatwaves during harvest time buffered the effect of the drought to some extent," says Francois Viljoen, manager of Vinpro's Viticulture Consultation Service.

The Swartland and Paarl regions obtained much larger crops following sharp declines in 2016. Robertson's production was close to the record harvest, while Olifants River and Bredekloof increased somewhat following small crops during the previous year. Slightly smaller yields were noted in the Northern Cape, Stellenbosch and Worcester and a much smaller harvest in the Klein Karoo.

The total vintage – juice and concentrate for non-alcoholic purposes, wine for brandy and distilling wine included – is expected to amount to 1 112 million litres, calculated at an average recovery of 775 litres per ton of grapes.

THE COST OF WINE GRAPE PRODUCTION

The annual financial capacity needed in preparation for the 2017 vintage comprised of cash items and provision for renewal, excluding all tax, interest and entrepreneurial obligations. In comparison to the 2016 the industry average total production cost (excluding dry land vineyards – Swartland) increased by 7% to R47 513/ha YoY. As the biggest trend driving unsustainable income the last decade, primary grape producers absorbed a doubling of production cost, for the period from 2008 to 2017.

CASH EXPENDITURE

Cash expenditure is specified as direct cost, labour, mechanisation, fixed improvements and general expenses. Total cash expenditure had an above inflation increase to

R36 554/ha in the 2017 production year.

The increase is driven mainly by the direct costs – fertilisers, pesticides and herbicides, with a 13% increase year on year. This can be attributed to the weakening of the rand during this period, due to the fact that many of the direct inputs for vine cultivation are imported. Secondly the 9% year on year increase in administration cost, is concerning as primary producers have limited influence in these cost items. In many instances high capital outlays are needed to negate a cost saving component.

The cost component differs among the 10 production regions areas due to terroir and production practice differences. Precision cost management, with a balance between consumer demand and input requirement for each block, aligned with product quality, remains critical in cycles of above-inflationary increases in costs. Once again wine grape production cost inflation was higher than the average South African economy inflation.

PROVISION FOR RENEWAL

Annual production cost is not only limited to cash expenditure; capital items are also depleted over time, with the renewal of such items deemed critical to ensure long term sustainable production. By calculating relevant replacement values of tractors, tools, other means of production, vineyards and buildings, a realistic and practical non cash flow provision is indicated. 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 linear depreciation in value for tax purposes.

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

Fixed improvements (excluding the main dwelling) – 60 years

Vineyards and other long term crops – 20 years

Moveable assets/production means – 7 - 15 years

MECHANICALLY HARVESTED

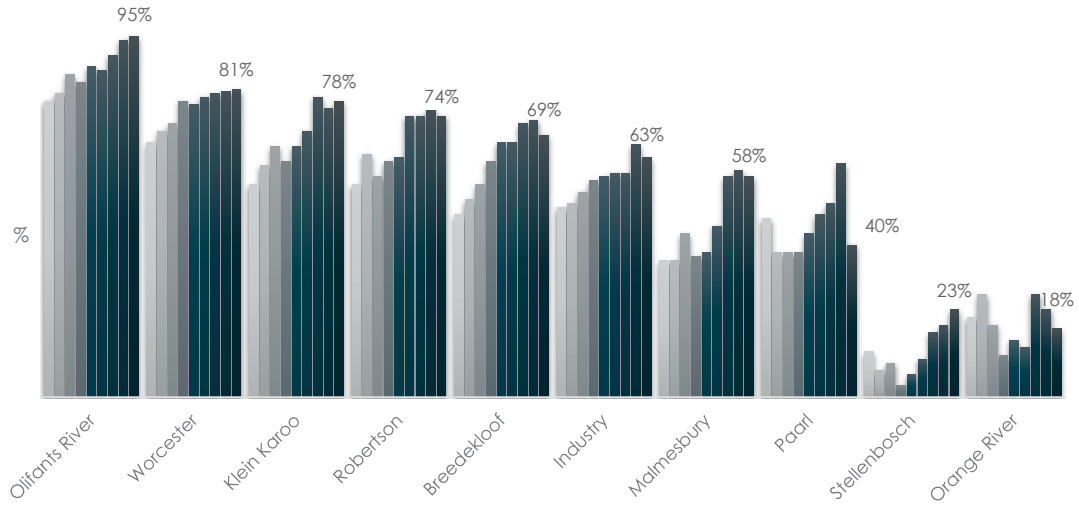


FIGURE 1. Tonnes harvested mechanically per district.

TOTAL PRODUCTION COST

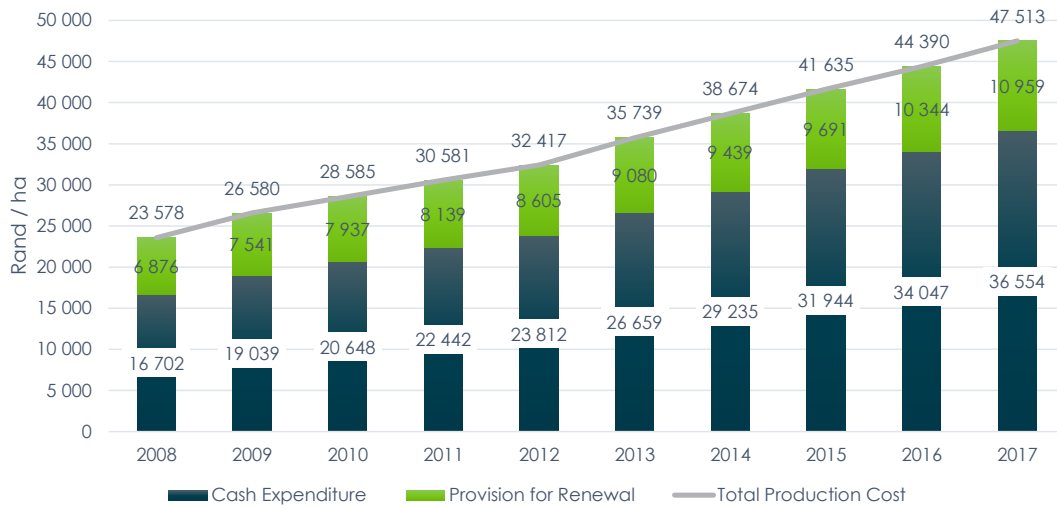


FIGURE 2. Total industry average production cost.

DIRECT COST

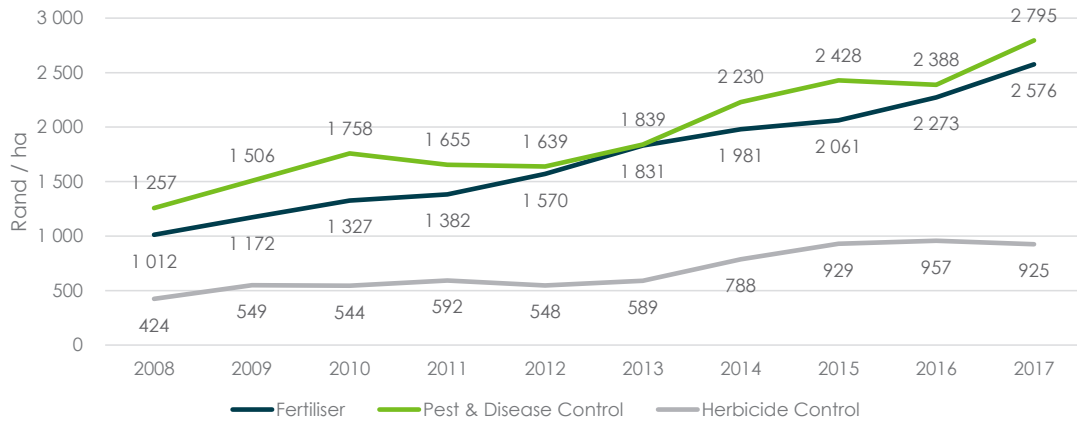


FIGURE 3. Movement of direct cost – industry average.

TABLE 1. Production cost of wine grapes per district – 2017 harvest.

| Industry average | Stellenbosch | Paarl | Robertson | Breedekloof |
|---|--------------------|---------------|---------------|---------------|
| COST STRUCTURE | RAND PER HA | | | |
| DIRECT COST | | | | |
| SEED | 226 | 144 | 56 | 101 |
| FERTILISER | 1 004 | 1 440 | 3 136 | 2 354 |
| ORGANIC MATERIAL | 60 | 24 | 125 | 1 066 |
| PESTICIDE CONTROL | 3 223 | 2 144 | 3 468 | 3 089 |
| HERBICIDE CONTROL | 1 124 | 807 | 1 242 | 949 |
| REPAIR AND BINDING MATERIAL | 562 | 316 | 601 | 463 |
| Subtotal | 6 198 | 4 875 | 8 629 | 8 022 |
| LABOUR | | | | |
| SUPERVISION | 2 515 | 1 225 | 1 955 | 2 992 |
| PERMANENT LABOUR | 11 898 | 8 713 | 7 426 | 9 244 |
| SEASONAL LABOUR AND CONTRACT WORK | 5 246 | 4 289 | 4 081 | 1 398 |
| Subtotal | 19 659 | 14 227 | 13 462 | 13 634 |
| MECHANISATION | | | | |
| FUEL | 2 216 | 1 829 | 2 332 | 2 320 |
| REPAIR, PARTS AND MAINTENANCE | 3 687 | 2 309 | 4 335 | 2 970 |
| LISENCES AND INSURANCE | 624 | 650 | 558 | 778 |
| TRANSPORT HIRED | 271 | 522 | 790 | 182 |
| Subtotal | 6 797 | 5 310 | 8 015 | 6 250 |
| FIXED IMPROVEMENTS | | | | |
| REPAIR AND MAINTENANCE | 1 637 | 523 | 808 | 1 217 |
| INSURANCE | 386 | 345 | 192 | 374 |
| Subtotal | 2 023 | 867 | 1 000 | 1 590 |
| GENERAL EXPENDITURE | | | | |
| ELECTRICITY | 2 036 | 2 057 | 3 943 | 3 837 |
| WATER COSTS | 912 | 983 | 1 046 | 292 |
| LAND-, PROPERTY- AND MUNICIPAL TAXES | 413 | 474 | 424 | 212 |
| ADMINISTRATION | 2 898 | 1 184 | 1 448 | 1 214 |
| Subtotal | 6 258 | 4 698 | 6 862 | 5 555 |
| TOTAL CASH EXPENDITURE | 40 935 | 29 977 | 37 968 | 35 051 |
| PROVISION FOR RENEWAL | 10 477 | 9 438 | 10 969 | 10 962 |
| VINEYARDS | 5 973 | 6 111 | 5 933 | 6 233 |
| FIXED IMPROVEMENTS | 1 165 | 788 | 975 | 992 |
| LOOSE ASSETS OR PRODUCTION MEANS | 3 340 | 2 539 | 4 061 | 3 737 |
| TOTAL EXPENDITURE | 51 411 | 39 415 | 48 937 | 46 013 |
| AVERAGE AREA PLANTED (HA) | 105 | 101 | 99 | 121 |
| AREA IRRIGATED (%) | 90% | 90% | 100% | 100% |
| AVERAGE AGE COMPOSITION (%) | | | | |
| 3 YEARS AND YOUNGER | 6.71 | 9.45 | 14.76 | 11.11 |
| BETWEEN 4 AND 7 YEARS | 8.70 | 14.42 | 19.16 | 17.81 |
| BETWEEN 8 AND 15 YEARS | 32.65 | 38.57 | 34.04 | 30.71 |
| BETWEEN 16 AND 20 YEARS | 27.10 | 26.37 | 20.28 | 20.28 |
| OLDER THAN 20 YEARS | 24.38 | 11.12 | 11.79 | 20.08 |
| AVERAGE YIELD (TON PER HA) | 8.78 | 11.07 | 21.61 | 20.45 |
| CASH EXPENDITURE (RAND PER TON) | 4 662 | 2 708 | 1 757 | 1 714 |
| TOTAL EXPENDITURE (RAND PER TON) | 5 856 | 3 561 | 2 265 | 2 250 |

| Olifants River | Worcester | Orange River | Klein Karoo | Cape South Coast | Durbanville | Industry Average | Swartland |
|--------------------|---------------|---------------|---------------|------------------|---------------|------------------|---------------|
| RAND PER HA | | | | | | | |
| 10 | 158 | 62 | 97 | 299 | 449 | 123 | 203 |
| 2 643 | 2 896 | 2 924 | 2 142 | 913 | 1 376 | 2 116 | 1 229 |
| 609 | 286 | 113 | 360 | 701 | – | 337 | 44 |
| 2 120 | 2 600 | 1 649 | 2 100 | 4 855 | 2 679 | 2 795 | 2 207 |
| 460 | 1 147 | 683 | 363 | 871 | 2 038 | 925 | 691 |
| 229 | 919 | 321 | 294 | 112 | 448 | 461 | 123 |
| 6 071 | 8 006 | 5 752 | 5 355 | 7 750 | 6 990 | 6 757 | 4 497 |
| 1 795 | 1 992 | 2 317 | 703 | 2 659 | 826 | 2 074 | 1 061 |
| 8 361 | 9 604 | 10 635 | 7 640 | 10 045 | 12 559 | 9 321 | 5 416 |
| 1 354 | 1 677 | 8 720 | 422 | 8 902 | 7 101 | 3 686 | 4 185 |
| 11 511 | 13 273 | 21 672 | 8 766 | 21 606 | 20 485 | 15 081 | 10 662 |
| 3 502 | 2 378 | 3 303 | 2 673 | 4 192 | 3 510 | 2 482 | 1 778 |
| 4 012 | 2 783 | 2 644 | 3 532 | 3 921 | 3 694 | 3 340 | 1 909 |
| 1 155 | 737 | 1 001 | 627 | 1 330 | 1 064 | 758 | 543 |
| 471 | 357 | 288 | 119 | 902 | – | 434 | 1 072 |
| 9 140 | 6 255 | 7 236 | 6 951 | 10 345 | 8 268 | 7 014 | 5 303 |
| 436 | 851 | 1 203 | 624 | 1 207 | 685 | 959 | 683 |
| 490 | 367 | 330 | 242 | 213 | 232 | 344 | 283 |
| 926 | 1 217 | 1 533 | 866 | 1 420 | 917 | 1 303 | 966 |
| 3 917 | 3 680 | 2 418 | 2 303 | 2 749 | 2 038 | 3 034 | 831 |
| 2 719 | 1 750 | 1 339 | 2 264 | 287 | 1 837 | 1 178 | 589 |
| 499 | 291 | 281 | 183 | 329 | 684 | 379 | 144 |
| 1 984 | 1 355 | 2 207 | 1 215 | 4 164 | 4 404 | 1 809 | 708 |
| 9 119 | 7 076 | 6 244 | 5 966 | 7 529 | 8 964 | 6 400 | 2 272 |
| 36 767 | 35 828 | 42 437 | 27 904 | 48 651 | 45 624 | 36 554 | 23 700 |
| 12 711 | 11 587 | 10 319 | 11 088 | 15 200 | 11 648 | 10 959 | 8 678 |
| 5 719 | 6 265 | 6 214 | 6 254 | 6 178 | 5 733 | 6 052 | 5 435 |
| 1 318 | 1 714 | 678 | 718 | 2 858 | 795 | 1 116 | 741 |
| 5 674 | 3 609 | 3 427 | 4 115 | 6 163 | 5 119 | 3 791 | 2 503 |
| 49 477 | 47 414 | 52 755 | 38 991 | 63 850 | 57 272 | 47 513 | 32 378 |
| 64 | 87 | 22 | 55 | 34 | 119 | 91 | 161 |
| 100% | 100% | 100% | 100% | 89% | 60% | 96% | 40% |
| 9.08 | 17.03 | 22.44 | 19.37 | 4.17 | 6.17 | 11.42 | 6.51 |
| 13.91 | 19.73 | 9.89 | 19.51 | 3.92 | 9.59 | 14.58 | 7.42 |
| 32.40 | 33.84 | 26.09 | 33.90 | 61.26 | 34.67 | 34.34 | 40.25 |
| 23.71 | 17.60 | 23.66 | 19.09 | 29.96 | 28.54 | 23.32 | 28.25 |
| 22.09 | 11.79 | 18.32 | 8.93 | 0.70 | 21.03 | 16.44 | 16.37 |
| 26.98 | 21.25 | 28.73 | 21.64 | 8.47 | 8.96 | 17.68 | 7.18 |
| 1 363 | 1 686 | 1 477 | 1 289 | 5 744 | 5 092 | 2 067 | 3 301 |
| 1 834 | 2 231 | 1 836 | 1 802 | 7 538 | 6 392 | 2 687 | 4 509 |

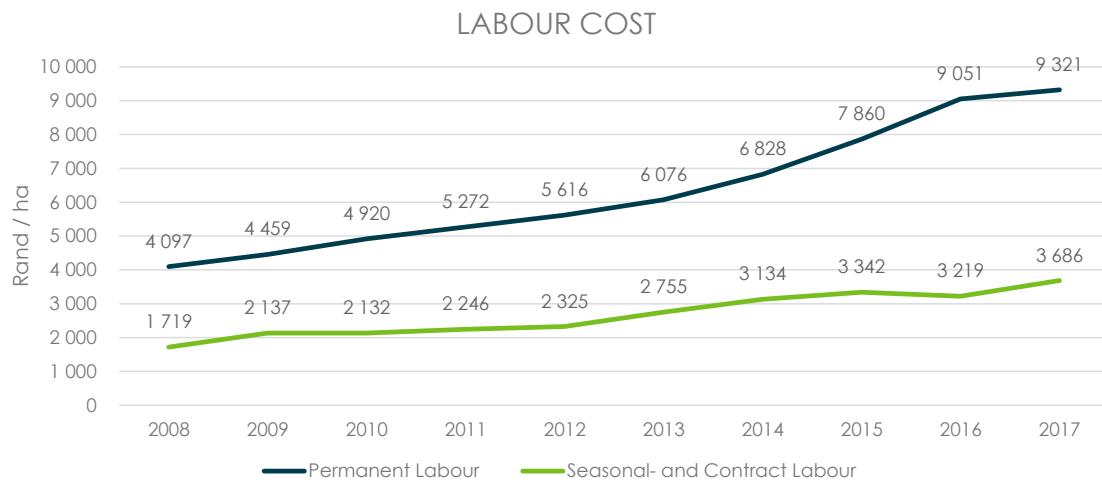


FIGURE 4. Movement of labour cost – industry average.

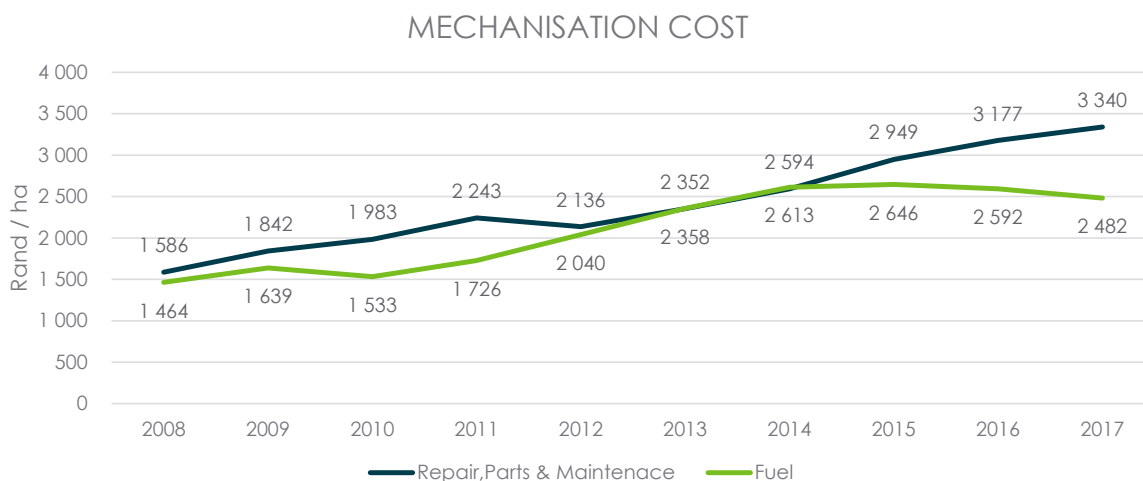


FIGURE 5. Movement of mechanisation cost – industry average.

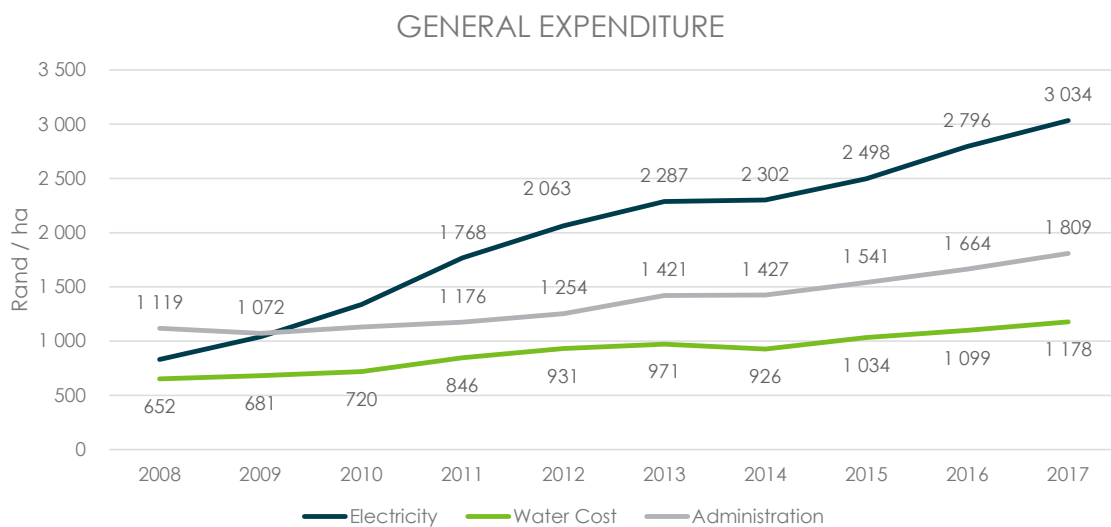


FIGURE 6. Movement of general expenditure – industry average.

COMPOSITION OF ANNUAL CASH EXPENDITURE

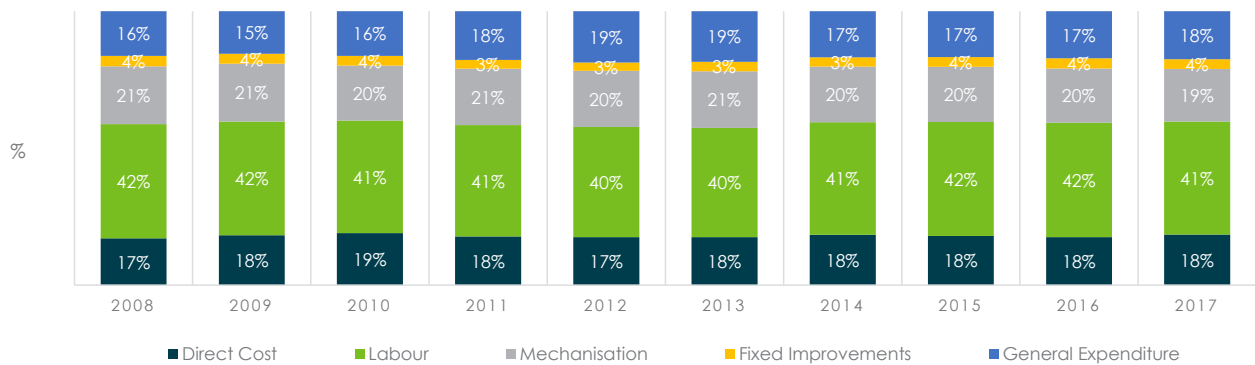


FIGURE 7. Percentage composition of annual cash expenditure – industry average.

AREA UNDER VINES PER PARTICIPANTS



FIGURE 8. Hectares planted to grapevines per participant (bearing and non-bearing hectares) – industry average.

TON / HA

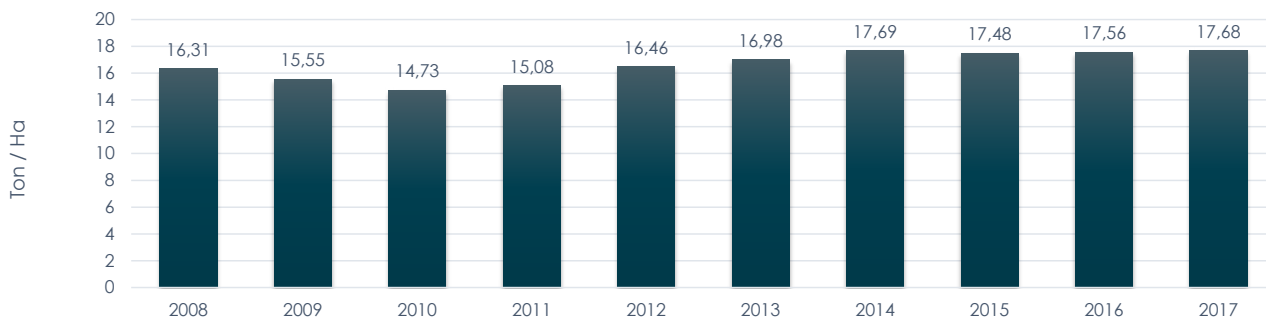


FIGURE 9. Average yield (bearing and non-bearing hectares) – industry average.

Total provision for renewal amounted to R10 959/ha in the 2017 production year – a 6% increase from 2016. It is positive to see that participants still have the means to replace capital items, however the ageing vineyard status is concerning, an indication of how rapidly producers are diversifying away from wine grape production towards more profitable agricultural crops.

More than 16% of the plantings are older than 20 years and 11% of the grapevines in the survey are three years

and younger. The general norm is that 15% of grapevines should be three years and younger and the component older than 20 years should not be more than 15%.

PRODUCTION STRUCTURE

The average surface planted to wine grapes was 91 ha – the other enterprises are not taken into account. Economies of scale have been impacting on many agriculture commodities, depending on where producers

AVERAGE YIELDS: WHITE CULTIVARS

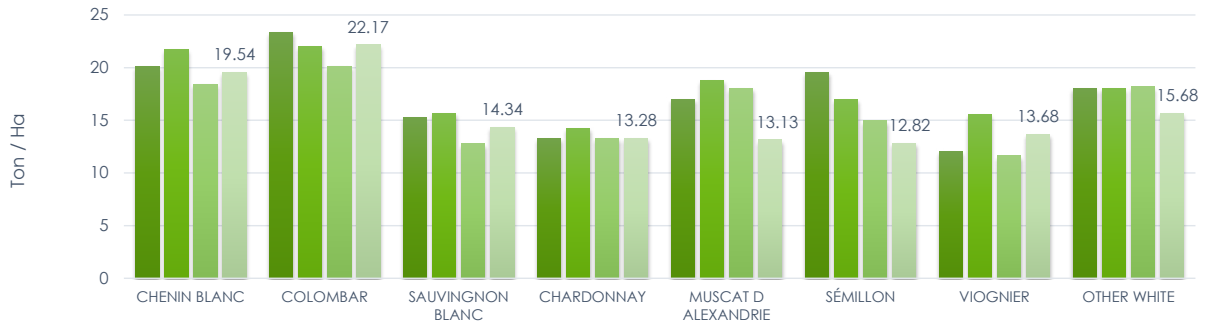


FIGURE 10. Average yield white (bearing and non-bearing hectares) – industry average.

AVERAGE YIELDS: RED CULTIVARS

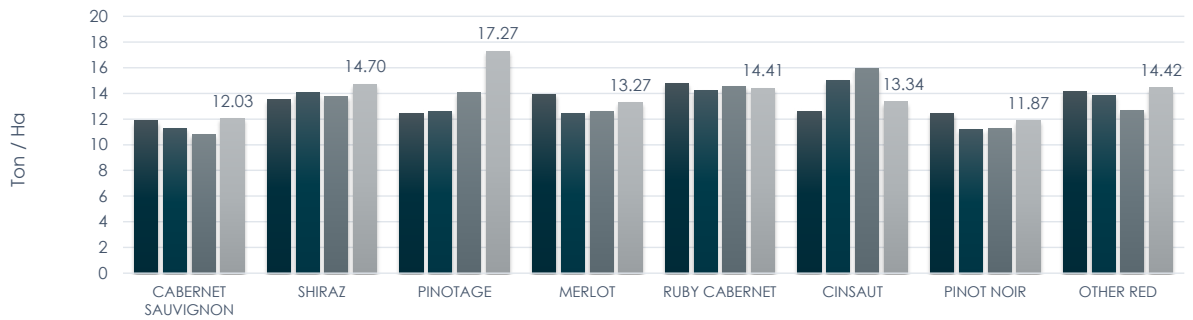


FIGURE 11. Average yield red (bearing and non-bearing hectares) – industry average.

BREAK-EVEN PER TON

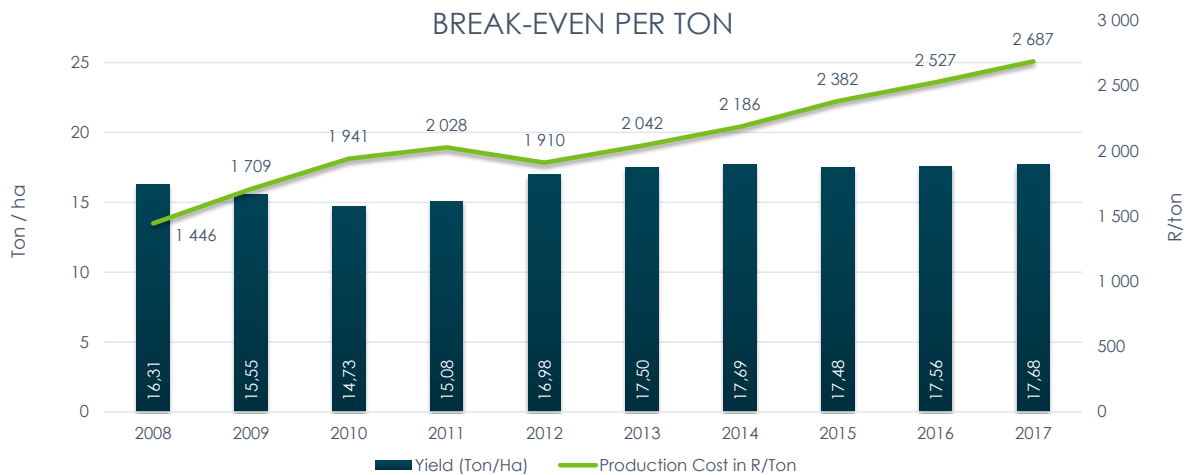


FIGURE 12. Influence of production on break-even of total production cost – industry average.

are locked into the value chain. This may differ in rationale from business to business and districts. In many cases the increased bargaining power with higher turnover are more common than the traditional cost saving effect on overheads. It should be well noted that many larger units actually produce wine grapes more costly than smaller very efficient units.

In the 2017 production year yields varied greatly among the different regions. The average production for bearing and

non-bearing grapevines for the 2017 production year was 17.68 ton/ha.

CULTIVAR STRUCTURE

During the 2014 production year a cultivar analysis was also conducted to indicate the production variance between the most planted white and red cultivars. This will assist producers with precision farming in the coming years by showing how the cultivars in their enterprise differ and

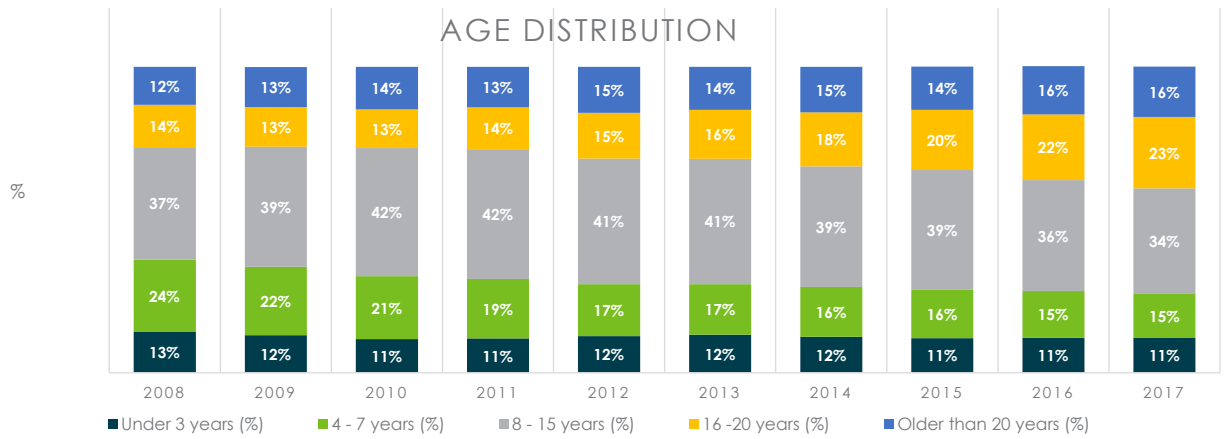


FIGURE 13. Age composition – industry average.

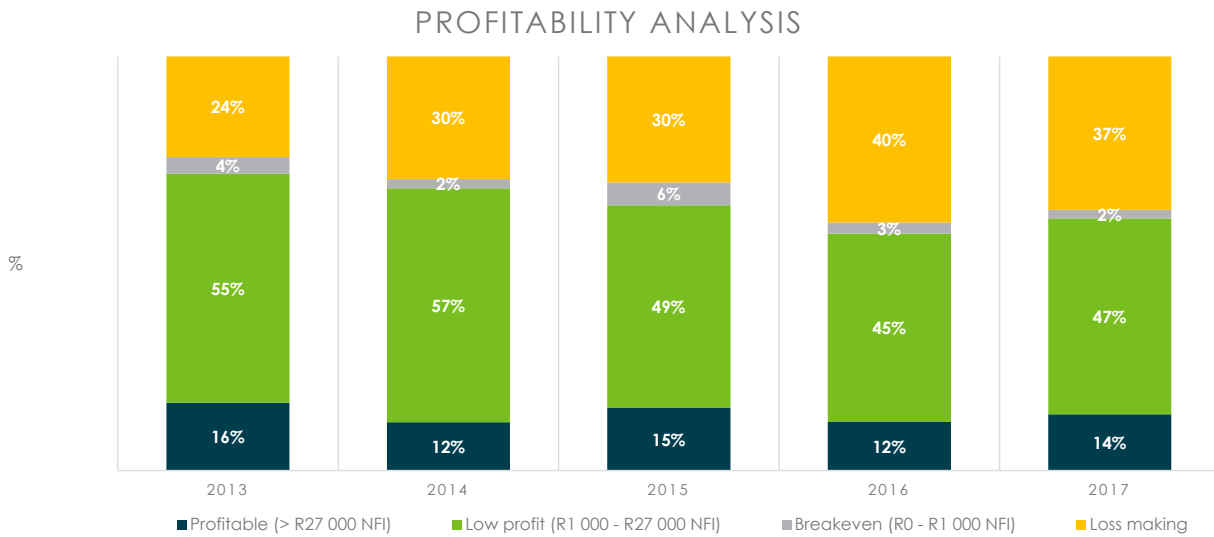


FIGURE 14. Profitability analysis (2013 - 2017) – industry average.

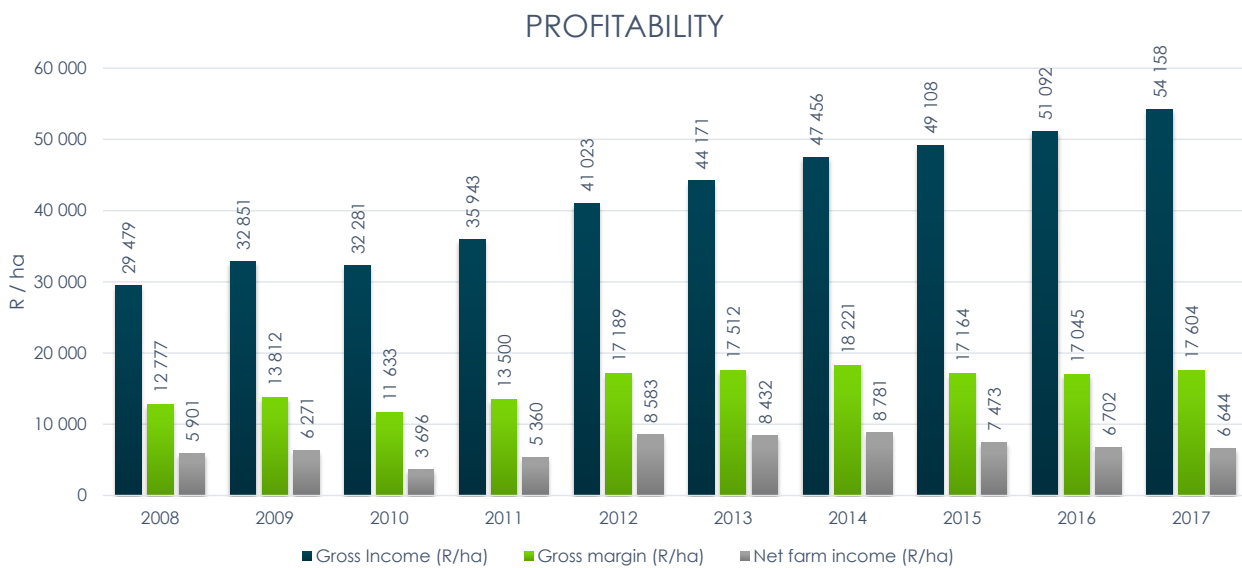


FIGURE 15. Profitability – industry average.

may contribute to greater profitability. Net profit per block calculations are critical in drought conditions, ensuring the culling of non- and low profitable blocks, producers are advised not to base financial decisions on turnover or just yield, ensure proper financial management principles are used when determining profitability.

BREAK-EVEN

In most cases agricultural commodities experiencing cycles of over supply are under pressure of cost increases with stagnant income, the majority of grape producers were coping with rising input costs and decreasing grape prices (in real terms) by increasing yields.

This ensured that the break-even price did not increase substantially, it even decreased in 2012, however with rising costs and stable average yields we have seen a year on year increase of 6% to R2 687/ton.

In other words: the first R2 687 for a ton of grapes received by the producer during the 2017 harvest, should be applied for total production cost – no entrepreneurial remuneration, interest or tax has been taken into account yet.

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.

Over the past 10 years it has been an obvious trend that producers attempt to increase average yields to counter the effect of rising costs, as well as to increase profitability, but the drought will make it very difficult in 2018.

PROFITABILITY

The profitability, in other words net farming income (NFI), is calculated as gross income (R/ton x ton/ha) minus total production cost. The latter consists of cash expenditure and provision for renewal, but excludes entrepreneurial remuneration, interest obligations and tax. The total income is calculated for a specific vintage and although the majority of producers realise their income at different stages over the financial year, depending on their business model, no time value of money is taken into account.

It is very positive to see how the gross income per hectare has increased in the last decade, predominantly driven by increasing yields, but in some cases to a less

extent by rising grape prices. For the 2017 harvest the gross income amounted to R54 158 per hectare (the average for bearing- and non-bearing vineyards in total), a 6% increase year on year. The gross margin, i.e. the cash flow effect per hectare was R17 604, only 3% more than 2016, indicating the deminishing effect of rising input costs as the cost-prize squeeze is still hampering the wine grape growers.

After provision is made for renewal, a decrease of 1% in NFI of R6 644 per hectare was achieved.

As a guideline for economically sustainable production, the average income and NFI for the 2017 production year for a 40 hectare unit should in fact have realised R71 670 and R27 280 per hectare respectively, and for a 100 hectare unit R63 750/ha and R19 360/ha. This is seen as a minimum sustainable requirement, included additionally in this calculation is opportunity cost and entrepreneurial remuneration.

Unsustainable average gross income limits producers to implement sufficient capital replacement. Consequently grapevines, buildings and moveables are beginning to exceed accepted industry norms lifespans. Alternatively resources are allocated to crops with higher NFI.

➤ – For more information, contact Andries van Zyl at andries@vinpro.co.za or Pieter van Niekerk at pieter@vinpro.co.za.

SUMMARY

With global wine supply tightening and the increased pressure of the drought, many producers will remember 2017 as a game changer, it may be either positive or negative. With the ageing and decreasing vineyard status, a sure sign of a structural shift is imminent, as local supply adjusts to meet global and local demand.